16 Social work in a digital society

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This chapter will:

- conceptualise social work as taking place within the 'digital society';
- explore how information and communication technology (ICT) impacts on the individual, families and communities;
- argue that technological change has irretrievably altered the nature of the social world and, hence, practitioners need to understand it.

Introduction

We live in a digital society which has significantly changed the information landscape affecting every aspect of our lives. The current wave of technological innovation is part of the context in which social-work students, practitioners and service users and carers operate. Technology can improve the quality of our lives and learning and can potentially enrich social-work practice, but the extent to which it does so depends on our active involvement. It will not happen without social workers moulding technology developments and uses to their own and service users' needs. However, the technology can also pose challenges and dangers.

In this chapter we outline some of the major issues when thinking about the digital society from a social-work perspective. Starting from the position of individuals or households, three issues emerge:

1. the digital divide (which can sometimes be a bridge);
2. digital literacy;
3. the new information environment.

This new information environment is also part of the new meeting place between service users and social workers which necessitates changes in social-work practice, as well as in social workers' skill sets. Finally we outline an extra digital skill social workers need, which we label 'innovation through resistance'.

Q. Think about the ways you use ICT. What are they? What issues of inequality can you identify when you think about the use of ICT?

Digital divide

To make progress in using ICT for social work and social care requires practitioners, service users and carers to be digitally literate and to have access to the technology. In 1995, the North American magazine *Newsweek* described the average internet user as politically conservative, white, male, single, native English-speaking, living in North America and a professional, manager or student. Much has changed, mainly through the widespread availability of the Internet in Western countries. Technological innovation has rarely undergone such a rapid diffusion process. Although the speed of diffusion seems to be slowing down, the community of internet users still grows.

Amidst rapid diffusion of computers and the Internet, we should remember that there are huge inequalities concerning who benefits from innovations. The digital divide surfaces at a global (Finland has more internet connections than the whole of Latin America), geo-political regional (far less computer diffusion in southern Europe than in north-west Europe) and at the household level. At each level, different dynamics play and specific solutions need to be identified. In this chapter, we focus on the latter level: households.

There are no less than seven significant socio-demographic factors that indicate social exclusion. These include:

1. income;
2. educational level;
3. gender;
4. age;
5. employment status;
6. ethnicity
7. type of household (e.g., single-parent).

Access to the Internet follows the same pattern: the higher the household income, or the younger its members, or the more Western its ethnicity, the more Internet access it will have. The only surprise is how unsurprising it is that precisely these seven variables influence internet access. There is a strong argument that the digital divide is not digital at all,

but another facet of social exclusion. As such, having access to the new media differs little from having access to health care, education or employment.

The digital divide is in permanent flux. Gender is one of the seven indicated fault lines and used to be a very strong divide. However, there has been a shift, and gender is no longer a strong indicator for access to technology. Men and women have similar levels of access to, for example, mobile phones and internet connections. While some divides narrow, others increase. Over the past five years there has been a considerable shift away from income and education level as prime factors in the digital divide towards age. While younger age groups earlier indicated high costs and opportunities elsewhere (school and work) as a significant reason not to have home internet access, older age groups cite lack of both interest and digital skills. This raises the distinction between diversity and a divide. If older people are comfortable using the old media and see no interest in acquiring access to new media, should we still define this as a digital divide or as an informed choice?

Benefiting from computers and the Internet is not only based on access but also relates to usage. It is reasonably safe to state that, on average, time spent using the Internet continues to increase. (However, one has to bear in mind that people's responses are notoriously unreliable when asked about how they spend their time, and time-diary surveys are complex and expensive.) Such developments go together with the shift from metered to unmetered access, from dial-up connections to broadband or cable. It also generates a debate on time displacement, whether the Internet is taking time from 'television time', 'social time' or 'work time'.

Finally, to understand the balance of benefits from computers and the Internet, in addition to quantity of usage, we also need to look at 'quality' of usage. It makes quite a difference to someone's quality of life whether they spend an hour online to increase their employability by e-learning new skills or to increase their social networks by catching up with old friends and 'weak ties' (Granovetter, 1983), or by playing online games, browsing pornography or chatting with unknown partners in a chat room.

Research on internet use amongst Swiss households found that its use for entertainment varied across socio-demographic groups. Less-educated people used the Internet predominantly for entertainment, while more educated people used it in a more information-oriented way (Bonfadelli, 2002). This finding also related to low-income households being surprisingly well represented among broadband users as a consequence of peer-downloading music or movies.

In attempting to 'deconstruct' internet usage, the Dutch Dialogic company has constructed a typology of usage. Their ICET-model differentiates between four categories:

1. **I**nformation gathering;
2. **C**ommunication, sending messages between people;
3. **E**ntertainment, whether online or offline, alone or multi-player;
4. **T**ransactions, such as e-banking or shopping.

While conceptually useful, no one has reliable survey data building on this classification. It is a lot easier to ask 'Do you have Internet access at home?' than to ask for what purposes it is used.

A study on educational achievements and home access to computers and the Internet highlighted why differentiating between 'quality' of usage is important (Valentine et al., 2005). The survey results indicated that girls benefited from home access and achieved higher GCSE grades than students without home access. Surprisingly, boys with home access to the Internet achieved lower GCSE grades than those without home access. The critical element was that girls tend to use the computer for homework, while boys tend to use it for gaming. This illustrates the need to look at content preferences, rather than solely looking at media access.

Digital bridges

There is a digital divide when exclusion from internet access coincides with exclusion from other resources such as education or income. Fortunately, access to technology can also be a compensation for exclusion elsewhere. Here it can form a 'digital bridge'.

Two examples illustrate technology's liberating potential. The first is where technology helps to compensate for exclusion resulting from mobility impairment. With the lack of 'access for all', people with impaired mobility can benefit from online services. These can be for work (dispersed call centres, translation work), shopping (e-commerce) or for education (off-campus e-learning). Naturally, this requires a focus on the accessibility of online services. Far too often, as with physical-access issues, online services are not designed to cope with users with functional impairments, needing to use screen readers for example. There is an inclusion-exclusion paradox here, with technology having the potential to include those with functional impairments, but current use often not capitalising on this (Steyaert, 2005).

The second example is where people reduce loneliness through technology. The literature discusses whether usage of the Internet reduces or increases loneliness. While Kraut and his colleagues initially said that engaging with the Internet increases loneliness, their later results showed mixed effects: those rich in social contacts benefit from technology; those with poor social networks see little benefit when using the Internet; those who tend to be extrovert gain from using the Internet; those who tend to be introvert don't (Kraut et al. 1998 and 2002). There are, however, certain groups of people who are extroverts but still face loneliness. In Eindhoven, in the Netherlands, an experiment was carried out with older people experiencing loneliness because of chronic illness. By providing them with computers, broadband internet access and training and support, feelings of loneliness dropped. This was because, for some participants, it was lack of mobility rather than being introverted that was causing weak social networks. This illustrates when technology can play an important role and is one reason why it is important for social workers to understand its potential for service users and carers.

Digital literacy

The digital revolution has reached the stage where people need technological literacy to participate fully in society. The range of possibilities for engaging electronically with society continues to grow whether in social interactions such as keeping in touch with

friends through e-mails and text messaging, accessing formal or informal learning opportunities, working in the office (word-processing, presentations) or consuming goods and services (e-tourism, e-banking, e-shopping).

The need for updated skills in the wake of the diffusion of new technologies is not new and is certainly not specific to computer technology. When the bicycle was introduced, people had to learn how to cycle. Even when the telephone was introduced, Bell trained women in the USA to make short and factual calls rather than holding long social conversations (Fischer, 1992). Telephones were, after all, intended for short business communications.

Following a similar pattern, the same is happening with current waves of innovations, especially computer and internet technology. Public-sector initiatives to support digital literacy include computer-technology centres and training courses organised through public libraries or community centres. Education at primary, secondary and tertiary levels has also encompassed digital literacy within its formal curriculum.

Q. What skills do you think you need to use ICT? Which do you already have?

Digital literacy differs in some ways from traditional literacy. In order to clarify the concept of digital literacy, we distinguish three forms of skills: instrumental, structural and strategic (Steyaert, 2000).

Instrumental

Instrumental skills refer to dealing with the technology, knowing how to use a keyboard and mouse and more complex manipulations such as sending an e-mail with an attached file, using word-processing, database and spreadsheet applications, searching the Internet or downloading and installing software. Such instrumental skills can be considered equivalent to reading skills in printed media. The European Computer Driving Licence (ECDL) initiative is an example of learning and testing instrumental skills. This level of skill has been embedded into the social-work degree. In England and Scotland, social-work students must have passed the ECDL or its equivalent, whilst in Wales they must meet the ICT skills set out in the ECDL. This requirement is likely to be reviewed in 2006 and may be modified (Holt and Rafferty, 2005).

Structural

Structural skills refer to the ability to use the (new) structures in which information is contained. This would be analogous in traditional printed media skills to using the index in a book or knowing how to find a book in the library. In the new media, the 'old' skills are complemented by others such as making use of hyperlinks or knowing how to undertake searches. It also involves assessing information found, not relying on others' quality checks. Information on the Internet can be past its 'use-by' date or of dubious origin, and the

reader needs to be aware of this. A useful tool for social-work educators and learners is the online tutorial *Internet for Social Workers* (at <http://www.vts.rdn.ac.uk/tutorial/social-worker>).

Strategic

Strategic skills refer to more strategic uses of information and include the ability to proactively seek information, the ability to critically analyse available information and act on it and the continuous scanning of the environment for information relevant to work or personal life, sometimes referred to as organised serendipity. These skills become more critical in society as the information landscape permeates our daily activities, but they are not essentially digital. They are very similar for non-digital media and have a strong relationship to media literacy. They are relevant to developing a research-minded approach to social-work learning and practice. The online resource Research Mindedness in Social Work and Social Care explores this further (at <http://www.resmind.swap.ac.uk>).

Q. Which skills do you need to develop?

The new information and communication environment

A schema for considering the role of ICT in relation to individuals, families, groups or communities is to consider whether the technology is being used to replace other means of doing the same thing (first wave), such as sending an e-mail instead of posting a letter, to enhance the activity by using a particular technological means (second wave), such as sending a text message to a number of people at the same time, or in a transformative fashion, by enabling people to engage in activities they could not otherwise do (third wave). For instance, communities were once defined by geographical boundaries and social interaction within those boundaries, but a good example of third-wave technology is the ability for communities of interest to come together through the Internet. We can see this clearly in relation to health issues, where a diagnosis of ill health sees us going to Google to find out more information. We will find research papers that are difficult to understand, information written by professionals for lay consumption, as on 'NHS Direct', but also bulletin boards and chat rooms where we can contact others experiencing the same illness, sometimes with professionals as part of the community. Josefsson (2003) investigated health-based online communities and found that patients 'need to get informed and to interact with others in the same situation'. Josefsson (2003) cited Mittman and Cain (2001) who described this type of community-building for patients and caregivers as being one of the leading-edge applications associated with future health-care use of the Internet. In the UK, Hardey (1999: 820) concluded that, 'the Internet forms the site of a new struggle over expertise in health that will transform the relationship between the health professions

and their clients'. If these findings are true for health care, surely they are also true for social care?

However, it is difficult in the current framework of social-work education and practice to envisage the day when we can take for granted the ability to do a virtual tour of a residential home for an ageing parent with user reviews as found as on Amazon.com for books or DVDs, or for someone with a care-management package to join an online user forum. Yet the rise of service-user and carer involvement in social-work practice may well presage just such developments.

Changing the dialogue

Are we at the beginning of the third wave of the social-work technology which represents praxis for some and a nemesis for others? As technology becomes ubiquitous will it increasingly complement or replace face-to-face social work? Since the typology of skills was identified in 2000, a fourth category needs to be added: that of digital practice skills. Social workers still and increasingly unfairly are stereotyped as technophobic – they have had to engage with social-work information systems and there is evidence of the beginnings of involvement with technology to enrich professional practice such as online counselling services (Rafferty and Waldman, 2006).

Digital practice will require extending the instrumental skill set as it will be difficult to undertake social work online if your typing skills are very slow, though that will probably be overtaken by the increasing simplicity of using the computer to talk to, and see, each other through audio and visual applications. More importantly, it also requires extension of practice skills.

> The method of communication can influence not only what is discussed but also how. Sentences are often sent in shorthand and SMS text language is often used. Young people are used to texting and communicating in an abbreviated form, a skill easily transferable to the computer keyboard. The loss of visual information can create uncertainty and result in rapid exchange conversations to avoid delay. This means that in this abbreviated form there is a tendency to dispense with the normal formalities of greeting. It is this 'in your face' approach that is so different to face to face work. It might take weeks of face to face work before a young person might disclose abuse whereas through the computer it might well be the opening sentence.
>
> (Waldman and Storey, 2004)

The quote is from a social worker in an National Society for the Prevention of Curelty to Children (NSPCC) online youth-counselling service. The evaluation cites social workers being challenged in the online medium in terms of:

> building trust and expressing sympathy and understanding without the usual body language clues; dealing with asynchronous flows of communication; the shift in power and control in the relationship from the worker to the young person; the fast levels of

> disclosure, managing silences and endings; managing supervision when every word is recorded on the computer.
>
> (Waldman, 2004).

As technology-based services driven by innovators explore new ways of working, they highlight the fact that managing change requires time, resources, training and a cooperative culture. Whereas the NSPCC evaluation highlighted the need for additional practice-skills training, an Australian survey indicated that nearly half of the social workers at Centrelink, a call-centre operation providing online benefit services, had received no formal training in how to use the technologies on which they relied heavily (Humphries and Camilleri, 2002). The instrumental and even the structural skill sets are challenges that will be met as time passes. However, we are a long way from enabling students to learn e-practice skills, and achieving this requires development of both educators and the curriculum.

Social work practice

Q. How can you use ICT in your social-work practice? What concerns you about use of ICT in social work?

The use of ICT in social-work practice arose as a consequence of the political shift in climate within social policy as public services moved into the era of accountability and monitoring (see Chapter 22 for an analysis of this). This was a greater influence than either technological determinism (albeit a major influence) or social constructivism.

Several authors argue that technology is not a politically or morally neutral factor in the implementation of social policy (see, for example, the chapters by Harlow, Gould, and Huntington and Sapey in Harlow and Webb [2003]). Lord Laming wrote in his introduction to the Inquiry Report on Victoria Climbié:

> Improvements to the way information is exchanged within and between agencies are imperative if children are to be adequately safeguarded. Staff must be held accountable for the quality of the information they provide. Information systems that depend on the random passing of slips of paper have no place in modern services.
>
> (Laming, 2003)

Along with growth in monitoring and accountability, social workers have struggled to adapt to using computerised care-management and children's-information systems in the UK. Many staff experienced the introduction of such systems as often less than enhancing of their practice, particularly where their perspective is that the systems are being

implemented as part of new managerialism and that the 'emphasis is on the use of performance monitoring, performance indicators and outcome measures' rather than on the service-user – practitioner relationship or policy intelligence-gathering (Postle, 2002; Richards et al. 2005; see also Chapter 17).

The Electronic Social Care Record implemented in 2006 is at the heart of shared information systems, storing details of every social-service 'user' in a database which can be shared with all relevant professionals. This development expands our understanding of information-system records by opening up the possibility of including unstructured information, even audio and video recordings. With growing interprofessional and multidisciplinary practice across social services, health, criminal justice and education systems, issues of skills, accuracy, privacy and data protection are growing challenges. It is not just an issue of information systems talking to each other through technological interoperability. Social workers have found working with computerised information systems raises technical and ethical complexities and feel it detracts from face-to-face work.

Using the typology above, the introduction of computerised information systems equates to the first wave of social-work technology, complementing or replacing paper records. Perhaps the second wave has been the use of e-mail for communicating with colleagues and with service users, usually to arrange face-to-face meetings, and use of the Internet for accessing information. Even this wave generated examples of innovative service provision. For example, the Samaritans started an e-mail support service for people with mental illness. In 1999, the Samaritans received 25,000 e-mail contacts; in 2004 the number of e-mail contacts had risen to 100,000. 'The Samaritans believe that people find it easier to express their feelings using email than they do on the phone – email contacts are three times more likely to mention suicidal thoughts than phone callers. It's not entirely clear what is happening, but it seems that people find the anonymity of the medium helpful' (LASA, 2000). Yet current systems are but the first step on the virtual ladder of e-social services in a digital society, and we are just beginning to see the potential of the third, transformative wave.

Social constructivist or technological determinism

Social workers are not just routine professionals who carry out the tasks they are asked to do. Like most modern professionals, they are reflexive practitioners who perform their job while innovating. This idea applies to most social interventions, and, hence, also to those involving technology. From that perspective, any apparent reluctance of social workers to engage too optimistically with technology in daily practice can be seen as healthy when their focus is on improving the use of technology and its relevance to social work. Such an 'innovation-through-resistance' attitude is probably more suitable for the social-work context than uncritical technology fascination.

Consequently, there is one specific aspect of digital literacy that needs to be highlighted here. This relates to approaching technology from a social-constructivist perspective rather than technological determinism. Technological innovation is often taken for granted and approached very similarly to the weather: you can learn to understand forecasts and take appropriate measures (your umbrella!) but you can't change the weather. Given the history

of technology, that is a very peculiar approach. Most innovations were not developed in laboratories by engineers but emerged from dialogue between product innovators and early users. How did popular applications such as chat or peer-to-peer networks emerge? Because some amateur had a good idea, developed a prototype and had some success then, later, professional product/technology developers expanded it. That is how Jarkko Oikarinen kick-started chat software in 1988, and how Shawn Fanning developed Napster in 1999. In other cases, the technology comes from industry, but the actual applications were not foreseen. This is how mobile-phone text-messaging developed. It was originally only a tool for telephone engineers to communicate and not a service for end-users. Sending a text message was free until the telephone companies realised that people were actually willing to pay a small amount of money for sending small amounts of text.

Approaching technology from a social-constructivist perspective and learning from the 'negotiations' between industry and users provides a starting point for dealing with some of the social consequences of technology. From the perspective of a social worker, it should not make a difference whether there's a computer on their desk (or a laptop for home visits), but whether the applications that run on the technology mirror the process of social-work practice or are mainly driven by a managerial or accounting and actuarial rationale. Far too often, social workers have resisted technology as such and have not been partners (or have been weak ones) in the process of constructing applications. No wonder then that the social-work rationale is often missing (or weak).

There are also examples of negotiated developments. Accessibility is a major concern for people with functional impairments, or for older people. Their 'negotiations' have resulted in major software developers such as Microsoft building functionality into products to enhance accessibility and launching simple-to-use technology. See §508 of the US Rehabilitation Act and <http://www.microsoft.com/enable/>, <http://www.corel.com/accessibility/> or <http://access.adobe.com>. See also, for example, <http://www.simpc.nl> for simple computers for older people, or Philips' new slogan on 'sense and simplicity'. Assistive technologies provide technology solutions that can support disabled people to lead more independent lives. Outside of the assistive-technology and management-information arenas, very little research is being carried out in the UK concerning how these technology tools can support service users and carers and social-work practitioners, and this situation urgently needs to be remedied.

Conclusion

In this chapter we have explored some of the ways in which ICT can impact on the individual, families and communities and have provided frameworks to make sense of what is happening around us as we enter the digital society. We have argued that the level at which technology can enhance social-work practice and process is not a given, and the potential benefits of the technology will not be realised unless social workers engage creatively with the tools that are already available. They need to work with the technology and its developers to ensure future developments enhance quality of life and work for service users, carers and practitioners, as well as providing data for management and policy purposes. Preparing practitioners for this role requires curriculum changes that take account of the

digital age we live in and the skills required to take this agenda forward as well as developmental research on both a micro and macro scale to analyse which uses of technology are beneficial to the social-care process.

Key learning points

1. We need to acquire the digital skills to make the best of the Internet and ICT. This requires professional information skills.
2. The digital divide replicates existing patterns of social exclusion but is also dynamic: while gender used to be important, now it's age.
3. Technology's effect on social-work practice is something we can influence. To do this, social workers must become partners in technology developments.
4. There's a myriad of technological applications capable of enriching social care besides monitoring and accountability.

Taking it further

Readers who want to know more about this will find the following helpful:

Harlow, E. and Webb, S.A. (2003) *Information and Communication Technologies in the Welfare Service*s, London: Jessica Kingsley.

Journal of Technology in Human Services

Human Services Information Technology Applications (HUSITA), an international network, at <http://www.husita.org>.

Centre for Human Service Technology, at <http://www.chst.soton.ac.uk>.

ECDL initiative, at <http://ecdl.com>.