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Child Welfare and Information and Communication Technology: Today's Challenge

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Summary

Information and communication technology (ICT) usage in contemporary child welfare practice reflects dominant managerial interests rather than those of the profession, and, importantly, of service users. Explicit use of ICT in the interests of service users remains embryonic, and professionals have been slow to capitalize on the communication potential of new technologies. This contrasts with technology uptake in other areas of human services. Unless this situation changes, client participation and power may decline further and managerial interests increasingly dominate. ICT has the potential to strengthen interaction between families and workers and change the conditions of initiation, distribution and use of spoken and written 'texts' in social work practice. This could significantly affect the ability of service users to be heard and to influence decision making. However, the opportunities and limitations of computer-mediated communication are a relatively new area of study—their application to child welfare requires considerable care. Social workers should explore the advantages that ICT offers service users and challenge the digital divide which still affects significant pockets of service users, and reflect on our own role in this. Here, we ask why social work has been has been slow to capitalize on new approaches to its core business: communication.

Keywords: child welfare, information technology, client participation

It is now ten years since the *British Journal of Social Work* drew attention to the challenge for social work of computers and the internet. In an article entitled 'Social work tomorrow', Sapey (1997) identified the use of information and communication technology (ICT) in government agendas for change and management's demand for accountability. However, he also described an

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alternative scenario for harnessing ICT for social work and service users (see Ballantyne, 1996). This latter potential has not been realized and recent commentary points to continued strong growth in development of ICT for management and accountability purposes (Garrett, 2005; Munro, 2005).

In this paper, we explore aspects of ICT that might further the interests of service users and question social workers' limited advocacy for greater access to and use of ICT for this purpose, while managerial interests proliferate. Suggesting such a reappraisal does not imply a naive belief that technology can solve the complex problems of welfare—an example of 'techno-determinism coupled with a utopian vision of the techno-future' (Hutchby and Moran-Ellis, 2001, p. 4). Rather, it reflects the view that ICT offers a range of new capabilities, and that the way these are taken up and their ultimate effect are deeply affected by the operation of power in welfare systems.

Social workers in child welfare cannot overlook potential means to improve communication because of difficulties in services providing adequate, in-depth and responsive relationships to vulnerable children (Cooper, 2005; Gilbertson and Barber, 2004; Parton, 2004). ICT may have the potential to deepen and develop social worker–service user relationships in time-efficient ways. Elements of ICT have potentially significant, but largely unexplored, capabilities such as increased self-disclosure, enhanced capacity to develop relationships, improved accountability and increased participation (Ben-Ze'ev, 2004). These advantages may become even more important with ongoing skill shortages which threaten more time stress in providing services for children (Meagher and Healy, 2005).

However, ICT is not without its dangers. Like all technologies, including paper-based record keeping and filing, ICT imposes limitations and contains significant risks which need to be taken into account. Importantly, child welfare has unique attributes that will affect the use of ICT. It will be essential to come to grips with issues such as changed communication dynamics online, finding the balance in on and offline communication, respecting privacy and individual preference for use of ICT. In any changes to our use of computer-mediated technology, we need to ensure that social worker–client relationships maintain important meaning and can produce beneficial change for children.

The reach of ICT is growing and current aspects of the internet offer a range of possibilities and challenges (Crystal, 2006). Could web-based client records encourage participation by giving greater access to information to families and young people? Could email, instant messaging, blogs, chat-rooms and social networking sites encourage service-user-led communication? Could 'virtual worlds' (multi-user domains such as *Second Life*) give us new opportunities to develop social learning skills? Will the rapid convergence of technologies (such as hybridization of mobile phones and the internet) leave children more vulnerable to cyber bullying or paedophiles? Is social work's own use of ICT as effective as it could be? For example, is email usage effective with service users?

Development of case management and communication software could powerfully define the focus of intervention, and provide valuable information to service users. Such tools are already developed in guided practice systems like

'Looking After Children' (LAC) which provide clear outlines of what is to be discussed in child welfare, requirements for service user participation and increased transparency in decision making. When combined with the internet, such systems could also provide tailored information to effect two-way interactions and decision making.

No technology is power-neutral. Social workers, as advocates for families, need to understand the impact on children, young people and their families of these rapidly emerging new practices. This is so whether we actively seek out ways to employ ICT with service users, or merely allow it to unconsciously infiltrate interactions, or continue to use the limited pen, file and telephone technologies. An ongoing concern is the continued exclusion of our service users from technology. At the very least, we need to ensure that we are not, actively or passively, contributing to the digital divide.

What determines current use of ICT in child welfare

Technology-based communication and information systems are an important site for the exercise of power in organizations and welfare systems. Like all resources, those interests with the greatest power will exploit ICT and this, in turn, will consolidate and increase their power. Conversely, those with the least power will be further disadvantaged.

One useful framework for analysing the operation of such power in the child welfare field is Ife's (1997) analysis, which constructs human services delivery as a contest between the competing discourses of: managerialism, professionalism, community and market. Whilst the real world will be a complex mix of positions, this paper suggests that current use of ICT is dominated by the managerial discourse, with professional and community discourses relatively powerless.

These discourses have a significant impact on the application of ICT in the field. 'Managerialism' is a 'top-down' positivist approach in which accountability for the service is to management and organizational goals. Thus, ICT would be employed for organizational ends with a clear focus on efficiency and hierarchical control. 'Professionalism' implies accountability to both the profession and service users; it is also hierarchical but arises from a humanist perspective. An example of professional discourse applied to ICT would be the use of databases to argue against a perceived threat to services or to identify growing need. One important distinction within the professional discourse is the divergent positions of practitioners and researchers. Researchers have a stronger interest in the data capacity of ICT for long-term rather than immediate practice purposes. Another important point to make about professional discourse is that although it aims at improvement for service users, it can be at odds with a community-focused discourse; for example, professionals may find client participation a threat to professional authority.

The third discourse of 'community' stresses participation and democratic decision making. With this dimension in mind, ICT could be used to expand clients' access to workers and information. Finally, the 'market' discourse focuses

on clients as customers with choice. This perspective is of less relevance to the present discussion, except to note Garrett's (2005) observation about the coalition between ICT developers and managers in the development of profitable software.

Research shows us that the managerialist discourse is strongly evident in use of ICT in human service delivery. In a study of computerized systems in social security governance in thirteen countries, the use of ICT is overwhelmingly to advance management interests (Henman and Adler, 2003). This has primarily taken the form of record keeping and aggregated data collection used to:

- improve 'governing processes': increasing productivity, cutting cost, improving information flow, automating decision making and measuring performance;
- control of staff: monitoring productivity and measuring performance;
- empower staff: by assisting to manage complexity, providing information for front line staff and improving working conditions;
- control claimants: through detecting over-payment and reducing fraud.

These uses contrast with functions which might empower claimants, such as increasing the responsiveness of organizations, encouraging sensitivity to user demand or enabling self-assessment. The researchers claimed that 'ICT increased control of staff and claimants by management rather than empowering them' (Henman and Adler, 2003, p. 139). Opportunities to enhance services by treating the 'whole person', integrating service delivery and improving customer service through expert systems have been lost. Hough (1996) identifies similar trends in early child welfare computerization which focused solely on client information systems, 'best explained by reference to the needs of dominant power groups within the organisation in question' (Hough, 1996, p. 164).

Two recent UK commentaries reinforce this view that managerial interests dominate ICT applications in child welfare. In discussing decision-making tools for child protection, Munro (2005) argues that front line workers' need for information to assist decision making should be central to ICT development, rather than systems like the UK's *Information Sharing and Assessment* database. She suggests that such tools should be developed by analysing front line work and identifying areas in which workers want help. Garrett (2005) draws attention to the growth of surveillance involving ICT in juvenile justice, child welfare and child protection. Databases and practice management systems, such as the Integrated Children's System, are seen as functional elements in government agendas for 'joined up thinking, the e-government agenda and marketisation' (Garrett, 2005, p. 529). Garrett draws attention to the interest of both government and the corporate sector in this process.

Professional discourses appear to have only limited power in child welfare. One example is the meshing of ICT with guided practice systems, which has created data for social workers. In the UK, electronic recording of information is aimed at 'output tools to enable (staff) to analyse their own work, make comparisons with others and contribute service-wide performance evaluation'

(Gatehouse *et al*., 2004, p. 3). The Australian Looking After Children Electronic System (LACES) was developed for 'accurately aggregating data . . . enhancing program evaluation and ongoing planning' (Dixon, 2001, p. 2).

There are only limited examples of social work attempting to use ICT to enhance communication with service users. In the UK, computer-mediated communication has been attempted with 'looked after children' (Davies and Morgan, 2005):

> (It) . . . seems to provide the opportunity for difficult to say things to be said more safely, to be heard more effectively and to be acted on more accurately (Davies and Morgan, 2005, p. 403).

A further example is the application of 'bubble' dialogue (thought or speech 'bubbles' similar to those in comic strips) which are filled in by children, with emotional and behavioural difficulties, to encourage communication (Jones and Price, 2001).

These limited examples contrast with an explosion of applications of ICT developed by professionals in other areas of human services. Psychology has developed a direct ICT user-focus for social support, therapy, information and promotion of social groupings (Illingsworth, 2006). The internet has proved to be highly effective when used for diagnosis and treatment of cognitive disorders, as applications have been personalized, focused on individual needs and data on progress over time recorded (Christensen *et al*., 2004):

> We are able to harness the power of downloadable software and use artificial intelligence systems to construct very sophisticated tailored interventions (Australian National University, 2005, p. 9).

In health, consumer control of information has led to access to quality information and empowerment of individuals (Henman and Dean, 2004). The internet has proved to be useful for the dissemination of information on domestic violence (Shrimpton and McKenzie, 2005). Qualitative researchers have also drawn attention to the capacity of ICT to help obtain rich material and understanding of participants' experience (Hine, 2005; Illingsworth, 2006). In welfare research, computer-based questionnaires have been described as the optimal way of researching children (Black and Ponikarkis, 2000).

Current use of ICT in child welfare stands in stark contrast to the widespread and creative adoption of ICT in the wider world. The most intimate of courtship is spontaneously practised over the internet (Ben-Ze'ev, 2004), with 13 per cent of the population estimated to actively use the internet to form social relationships (Hardie and Buzwell, 2006). In this scenario, people often seem to find computer-mediated communication more satisfying than face-to-face communication (Ben-Ze'ev, 2004). Experience of emotional connection can be intense:

> People enjoy all the benefits of both close and remote relationships, while avoiding their flaws. . . . Thus, they are able to get away from people when they want to, and be instantly close to them when they desire (Ben-Ze'ev, 2004, p. 56).

Significantly, self-disclosure also appears greater when the issues dealt with are most sensitive (Weisband and Kiesler, in Joinson, 2005, p. 25). Could the attributes favouring relationship development which make ICT communication so meaningful teach us something about ICT application to child welfare?

An alternative scenario: ICT's capacity to strengthen child welfare

ICT has a powerful capacity to deliver information and order communication which is well appreciated in the wider world, but, for child welfare, it also offers changes in the 'creation, distribution and consumption of written and spoken interaction' which could directly affect the participation of service users. Written and spoken 'texts' are the tools of child welfare: this is what happens in conversation between service users and workers, what is reported to children's courts, and what is recorded of a child's life. Changes in 'discursive practices', such as those involved in the move from paper-based technology to ICT, could bring important changes to the power of participants such as parents and children (Fairclough, 1992).

ICT and the more equitable initiation of the spoken and written text

ICT may allow service users a greater capacity to set the timetable in interactions with social workers. Indeed, many human service websites attribute their success to increasing service users' participation by opening up access, removing barriers to communication and allowing control over sequencing of communication.

In traditional practice, the timing of interactions between service users and professionals is largely determined by workers. Contact is limited by office hours and worker availability, especially at times of crisis. Workers determine timing of encounters. Individual contacts may be separated by weeks or months or there may be very limited contact where service systems are poor (Gilbertson and Barber, 2004). In contrast, the internet can allow service users to initiate communication at times that suit them. The stressed mother trying to manage pre-schoolers, preoccupied by pressing financial issues and embarrassed over her housing conditions, may well be better able to communicate after the children are in bed rather than at the worker's convenience. A young person may be more easily able to draw attention to their needs if workers give them the time they need.

There are also physical barriers to service user initiation of interaction that can be altered by ICT. Vulnerable families are often geographically isolated without transport, or they may suffer from a disability which significantly limits their access to goods and services. The internet could help side-step these barriers.

It could also reduce social embarrassment—a factor which mental health websites identify as a hurdle to seeking help. The greater anonymity of the internet could assist in making approaches for help less stigmatizing. ICT may also overcome class and age barriers that can inhibit initiation of interaction. This is especially the case for young people, as they express discomfort about care planning meetings and as they continue to find the office environments intimidating (Create Foundation, 2004).

ICT also offers potential for service users to prioritize the issues that they may wish to work on. Websites offer the potential for non-sequenced communication (Fairclough, 2003). For example, a website may give a menu of options to choose from. In contrast, paper-based forms, such as LAC, move a user sequentially through issues. Thus, a young person with education concerns may find it easier to click the appropriate icon and immediately focus on their priority rather than work their way to p. 20 of a form.

ICT can offer opportunities for people who may otherwise when dealing with welfare agencies feel intimidated because of problems associated with their level of education and literacy. Young people continue to raise the problems of the language used in documentation and face-to-face communication workers. They ask workers to 'use words we understand . . . have a glossary for "big" words' (Create Foundation, 2004, p. 7). The level of spelling and grammar required for SMS or internet communication is less stringent than written text on paper and young people may feel more in control of language, such as in the unique SMS text language. Literacy problems can also be avoided in computer applications which have exploited the audio capacity of computers (Davies and Morgan, 2005). Importantly, websites offer the opportunity to provide information at a range of literacy levels, and can tailor vocabulary and grammar to the audience by using graphics or photos.

The issues of literacy of service users and their ability to interact in a predominantly text-based medium is even more subtly affected by ICT:

> E-mail communication is characterised by a distinctive combination of oral and written styles. The new medium invites informality even in business or official contexts. It is a kind of 'interactive written discourse' (Ben-Ze'ev, 2004, p. 33).

Commentators note that values and attributes can be quite different in cybercommunication; for example, creativity, wit, humour may be more valued than literacy, thus potentially enhancing some service users' self-esteem (Ben-Ze'ev, 2004). Social constraints such as status differences because of education may be altered. However, this question remains controversial; some research shows social status differences to be largely eradicated (Ben-Ze'ev, 2004, p. 16), while other data indicate the strong transfer of social cues, even in anonymous communication (Spears *et al*., 2002).

The move to ICT from paper-based technology is also a change in 'genre' which may have implications for the engagement of service users (Fairclough, 2003). The change from the bureaucratic feel of forms, such as LAC, to an

interactive web page could well create different responses from service users (Shrimpton and McKenzie, 2005). Young people in Australia have already expressed interest in report formats which they can more easily understand. In research on LAC, they specifically request 'a visual tool for identifying where you are at and where you want to be' (Create Foundation, 2004, p. 11).

ICT and improved distribution of the written text

Distribution of what is written is a significant issue for service users in paper-based technology. Privacy and confidentiality are strong professional goals, but service users continue to identify them as areas of concern. ICT has the potential to offer service users greater control over distribution of text. It can also ensure that information is predictably distributed to service users through the use of automatic messaging.

One of the major contributions to developing participation in systems, such as LAC, is the effort made to ensure that service users see, and approve of, what is recorded. This is to some extent limited by 'pen and paper' technology: since workers hold written text about a service user in their office, it can be amended without the service user's knowledge. In contrast, records kept in real time on the web have the potential to make the most recent version available to service users. Service users could have more or less unfettered access to what is written about them and be able to add comments or contest what is recorded. Access to the most current records could also give greater control to service users in ensuring accountability of workers (as well as reminding themselves of their own undertakings).

Service user studies indicate concern with confidentiality where information is designed for inter-agency circulation (Create Foundation, 2004; Francis, 2002; Munro, 2001; Wise, 2003). However, the capacity to attribute user-specific access and security levels to information could give service users a degree of privacy which paper-based systems never can. Such confidentiality is an important element in the success of mental health websites (National Rural Health Alliance, 2006), although it should be noted that this cannot be guaranteed (such as when access is at school) (Davies and Morgan, 2005).

A further advantage of ICT is that it has the ability to distribute information automatically and reliably. Currently, workers are responsible for co-ordination of decision making and participation, but reminders of meetings may be lost in busy work settings. Service users complain of the difficulty of understanding the processes, timing and the opportunities to participate in decision making in paper-based LAC, 'highlight(ing) the need for professionals to inform and remind children and young people of their rights within a case and care planning process' (Create Foundation, 2004, p. 11). SMS reminders to children and young people and birth parents about care reviews are achievable within current technology.

ICT and enhanced communication

ICT appears to change communication in ways which have direct implications for child welfare. The internet is an attractive medium, which many people find satisfying to use and this, in itself, may be helpful in engaging service users. The very nature of ICT, with its attributes of interactivity, egalitarianism, 'fun' and children whose proficiency in the medium is striking, may be more inviting of participation than the bureaucratic forms or the formality of appointments (Ben-Ze'ev, 2004). The internet can be a source of company and entertainment (Downes, 2005), particularly significant for people excluded from social interactions by economic and social circumstances. For example, while children generally preferred the company of peers to being alone with a computer:

> . . . if the child is alone or feels lonely, the media can act as a friend; media offers social contacts in the form of para-social interaction . . . (Suss *et al.*, 2001, p. 31).

ICT can also increase initial communication with the anxious and offers advantages to those dealing with taboo subjects (Tyler, 2002). It is also important to note that the internet is widely used and the medium of choice for many young people and we may jeopardize communication with them by not actively using ICT.

Computer-mediated communication can also enhance self-disclosure—an important issue in child welfare. Hypotheses about why this may be the case include:

- the capacity to present one's self in a better light (Joinson, 2005);
- absence of socially restricting features which stop communication in face-to-face relationships, such as shyness (Ben-Ze'ev, 2004) or concerns about personal appearance (Walther, 1996);
- the advantages of asynchronous relationships (Joinson, 2005) which can allow people time to consider and frame responses—asynchronous communication does not occur in real time; responses can be postponed (Crystal, 2006);
- greater anonymity;
- greater focus on individual feelings and relationships;
- feeling more akin to other people who communicate electronically (Joinson, 2005);
- provision of greater detail in the social situation (which happens spontaneously as participants attempt to reduce uncertainty) (Walther, 1996);
- the development of a 'feedback loop' which means that self-disclosure accumulates, namely it becomes self-perpetuating (Walther, 1996).

However, it is far from certain how these potential benefits may be realized in welfare practice involving authority relationships and a strong offline component.

Many of the studies looking at self-disclosure have been in anonymous situations rather than in ongoing professional relationships such as child welfare.

What are the risks?

Computer-mediated communication may bring significant changes to interactions but not all of these are understood in the child welfare context. Social work has a strong duty of care and should proceed cautiously. Issues of particular concern are the possibility of:

- increased vulnerability of children and young people;
- loss of assessment capacity;
- loss of change and life-enhancing aspects of the worker–client relationship;
- insensitivity to individual difference in skills and use of ICT.

Increased vulnerability of children and young people

There is emerging understanding of the dangers in ICT for children—particularly those children who may be emotionally vulnerable (see *www.netalert.net.au*). Websites used by children may attract paedophiles. Children may be vulnerable to cyber bullying, which is relatively invisible in cyberspace and becoming more significant with the dramatic increase in instant messaging (such as *MSN*) and social networking sites (such as *MySpace*). Children who are lonely, who lack strong adult supervision and who are prone to risk taking are particularly vulnerable. If we are to encourage children to use the internet more extensively in communication with social workers, we could be inadvertently exposing them to these dangers. However, it is unlikely that they are not using the internet in some form (OECD, 2006) and we may be doing them a disservice by not tackling these issues by using this opportunity to educate them about these dangers.

Loss of assessment capacity

Communication may be distorted online, with important implications for protection of children. Image management and deception have been shown to be widespread in email dating (Ben-Ze'ev, 2004). This is a significant problem given the lessons that have been learnt about the importance of workers not being led to inappropriate conclusions by parents (Parton, 2004). For this reason, ICT will be, at best, only a tool to assist the relationship; it will never wholly replace the face-to-face relationship. Service users are frequently 'involuntary clients', with social workers in an authority relationship. Thus, 'image

management' and dishonesty on the part of service users are real possibilities. Social workers must not only operate with a 'higher level of suspicion' (Munro, 2005, p. 379) but, drawing on past learning, ensure the frequent physical sighting of vulnerable children (Parton, 2004).

An associated danger in child welfare lies in the potential ability to avoid face-to-face contact through the overuse of online communication. Workers may avoid contact with some family members in stressful circumstances, such as where there are violent men or mothers whom they see as unco-operative, and this may leave the most vulnerable children at increased risk. This is a phenomenon already recognized in face-to-face work (Cooper, 2005). In addition, service users may more easily curtail online contact and present real problems to social workers with statutory responsibilities.

Risks to the worker–client relationship

The positive, change-developing and life-enhancing aspects of the relationship between worker and client may be diminished by decreased face-to-face contact. Trust and a sense of care could be threatened in online relationships and inflexibility of websites could constrain the relationship. We must be thoughtful in negotiating the balance between on and offline communication, the timing of computer use in the relationship, and the level of use in individual circumstances.

Loss of face-to-face contact was originally seen as a limitation of computer-mediated communication. However, this is now rejected by researchers and online relationships are now viewed as highly meaningful (Tidwell and Walther, 2002). Nevertheless, the dynamics of relationship development online may be different. The absence of social cues online may change the speed of relationship development; qualitative researchers have been quick to learn the importance of providing personal and social cues in developing online relationships.

Computers may also bring rigidity to the social work relationship through their ability to define and control discourses, and this is not without its dangers. Paper-based 'preformatted' interventions have been the subject of rigorous critique: for example, in commentaries on LAC (Garrett, 1999*a*, 1999*b*, 2002, 2003*a*, 2003*b*), the *Framework for the Assessment of Children in Need and their Families* (Houston, 2002) and the integration of these systems (Calder, 2004). This limitation could be exacerbated by expanded use of ICT. While this argument needs to be considered seriously, it is important to note that face-to-face child welfare work is already highly influenced by professionals and interactions may not be as transparent, accountable or free from localized organizational culture as may be desirable (D'Cruz, 2004).

Aspects of online communication may also inhibit realistic relationships. The importance of imagination in online communication, and the scope for imagination to become unrealistic, has been noted in online dating. The potential

problem of anonymity and the absence of 'gating' features (which may inhibit anti-social behaviour) may prove to be problems in child welfare.

The ability to negotiate online has been shown to have considerably different dynamics from that in face-to-face interactions (Thompson and Nadler, 2002). Research on anonymous online negotiations demonstrated less relationship-building behaviour than in face-to-face negotiation. Individuals seemed less accountable and more likely to 'burn their bridges', be more impulsive, rude, mistrustful and suspicious. The asynchronous nature of some forms of communication online may modify this tendency (it is an important feature of email but absent in instant messaging). Asynchronous communication allows breaks in communication which may provide both worker and service user greater time for thought before responding. However, it can also encourage 'hair-trigger' responses. This could be a significant disadvantage in work with adolescents and adults who may have difficulty in controlling impulses, but this is a phenomenon which workers need to learn to deal with professionally.

Further marginalizing the disadvantaged

Importantly, qualitative researchers draw attention to the observation that individuals may vary in their preferences for communicating on or offline. Researchers (Orgad, 2005) note that some individuals who communicated rich material online were not so impressive offline, while individuals who contributed little online could be much more expressive offline.

The use of ICT will require careful research in a wide range of disciplines. Currently, analysis is not well developed, having largely been undertaken in anonymous online interactions, which have limited application to social work. There is also little research on such relationships involving 'authority'.

How feasible is computer-mediated communication in child welfare?

A significant caveat to our ability to use ICT is clearly users' access to ICT hardware, to an internet service provider and to technological support to train in and maintain software. Clearly, one aspect of the powerlessness of service users is that many do not have access to computers, expensive internet service providers, technical support or virus and child-protection software. In the wider community, ICT is widely available but the 'digital divide' remains real for families using child welfare services.

This situation appears to be changing for some groups of service users but remains a problem for others. New technologies are typically initiated in those of higher social status, economic and educational resources, but, over time, this changes by diffusion to less advantaged people through:

> . . . commodification and market competition . . . together with technological developments and government policies that promote the wide diffusion of technology, . . . the spread of Internet access appears to follow similar patterns (Willis and Tranter, 2006, p. 45).

This indicates that the problems of access may soon disappear. However, the internet may be more resistant to take-up. It is a complex technology involving computers, telecommunication and content, and it requires ongoing updating and substantial infrastructure as well as a wide range of skills, literacy and confidence (Willis and Tranter, 2006).

Recent research amongst family support users shows that home computer use is very restricted in chronically poor households, with broken computers, inability to afford internet access and pawning of hardware being common. Furthermore, many adults, who are not in the workforce or who missed computer education at school do not seek to use computers or the internet (Tregeagle, 2006).

The area of greatest change in access is ICT availability to children and young people. A recent report by the Organisation for Economic Cooperation and Development (OECD, 2006) indicates that 100 per cent of fifteen-year-olds in Australia had access to a computer at home or at school, with 90 per cent of these young people reported as being competent users of the internet and 74 per cent using it actively. Internationally, OECD reports that, in 2003, an average of 79 per cent of children at age fifteen had access to computers at home but an average of only 55 per cent of young people are frequent users of the internet. Older members of families are less likely to have access to the internet than their children, who predominantly used the internet at school (McLaren and Zappala, 2002).

The causes for the ongoing digital divide vary across countries. The presence of poverty and low educational attainment augers badly for welfare service users. Key elements limiting access to the internet include:

- socio-economic disadvantage: in the UK, only 53.9 per cent of low-income families had a computer at home compared with 80.4 per cent in high-income families (Facer and Furlong, 2001). In Australia, in 2001, the National Centre for Social and Economic Modelling reported that over half the children in the most socio-economically at-risk areas have no access to computers at home (NATSEM, 2006);
- level of education: in Australia, educational attainment is the strongest predictor of home computer ownership and internet connection (McLaren and Zappala, 2002). Tertiary-educated Australians were three times more likely to use the internet than non-tertiary-educated Australians in 2003 (Willis and Tranter, 2006);
- gender: gender has a more controversial relationship to internet use. UK studies indicate that gender affects the use of computers (Valentine and Holloway, 2001), but other researchers claim that gender inequality has almost disappeared (McLaren and Zappala, 2002; Willis and Tranter, 2006);

- geographic location: rural areas are less likely to have internet availability (Willis and Tranter, 2006).

In addition, there is evidence that some groups of children appear relatively resistant to ICT for other reasons, although this research is already relatively dated. UK studies describe a category of 'Luddites' whose refusal to use ICT is the result of control and identity issues, including fear of performance, peer ridicule, frustration at machines and apprehension of things going wrong (Valentine and Holloway, 2001). Other UK research identifies groups of children with problems in accessing computers, not seeing computer technology as relevant to their daily lives, and those affected by the education system's capacity to exacerbate inequality and anxiety about computer use (Facer and Furlong, 2001).

The residual exclusion of many families needs to be considered in child welfare. Given the importance of ICT for inclusion in the social and economic aspects of our communities, this is a real social justice concern. It may be more appropriate for social work to challenge this situation than to use this as a reason for not taking up greater computer-mediated communication with service users.

Is social work part of the 'digital divide' problem?

A nagging question remains: why has child welfare been slow in the take-up of ICT when communication is central to our task? The digital divide has clearly been an obstacle in the past, and remains so with some service users. However, this and dominant managerial interests may not be the only reasons for poor utilization. Ife (1997) suggests the 'community discourses', of increased participation and demands for accountability, can be threatening to professionals. It may be fundamentally threatening to social workers to increase the service users' voice. Or it may be simpler—social workers may be feeling uncomfortable with the ICT competence of young people, and the new forms of localized language evident in SMS texting. Individual workers may not feel suited to this way of working or they may have unarticulated concerns about online communication which they have not yet explored (Harlow, 2004).

Whatever the reason, we cannot be complicit in depriving service users of the potential benefits of ICT by failing to advocate on their behalf. We must examine our own discomfort and position the use of ICT as an issue of social justice.

Conclusion

There is clearly a great deal to learn in this rapidly changing but relatively new form of communication. However, communication is central to child welfare

and, hence, technologies which could assist must be actively considered. Social workers need to move thoughtfully and, assisted by research, develop applications which can enhance service user participation. We must also address the question of access to technologies which has important social justice implications beyond the question of solely whether ICT can be utilized.

Inactivity in the development of computer-mediated communication will *not* be neutral, as managerial interests may become more dominant and service users further disadvantaged. Ten years ago, Sapey (1997) argued that social workers have to engage more actively in ICT, fearing that:

> . . . they will fail to influence its impact among their clients and may further fail to control the way in which computers affect the nature of social work itself . . . (Sapey, 1997, p. 803).

Unfortunately, such comments seem at least as relevant today as when they were written.

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