Disabling communications? A capabilities perspective on media access, social inclusion and communication policy*

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Abstract

Digital information and communication technologies (ICTs) feature prominently in programmes to promote social inclusion and to implement extensive reform in public service provision across Europe. The transition to an all-digital communications environment and the digital 'switchover' of public services bring to the fore a need to rethink access as a goal of public policy. This paper probes patterns of internet diffusion among disabled people using capabilities framework and resource-based models of access. The analysis highlights the multi-dimensional character of media access capability as the space to evaluate policies for social inclusion; the relational character of disability as a phenomenon of the interface between personal circumstances and structural disadvantage; a capability failure resulting from a gap in policy commitment to promote universal access for disabled people and other excluded groups; and a requirement for policies sensitive to the need for additional resources to equalize the media access capabilities of these individuals.

Keywords: media access, capabilities, disability, e-inclusion, social exclusion, communications policy

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1. Digital inclusion and the switchover of public services

Amid trends in informational economy and neoliberal politics, digital media and information and communication technologies (ICTs) have taken centre stage in public policy as the means to implement reforms in welfare through digital delivery of public services and to achieve inclusion. This paper uses the capabilities framework to examine disabled media access as a complex factor in social exclusion, to investigate the lack of access to the media as a process of disablement in the information society, and to assess implications for inclusion in media-related policies.

Policy discourses on 'e-inclusion' or 'digital inclusion' have been characterized by a belief that universal access to today's ICTs can improve the lives and life chances of disadvantaged groups (CEC, 2001, 2005; Office of the e-Envoy, 2004; EU&EFTA, 2006). According to the European Commission, the two central dimensions of e-inclusion policy vision are to prevent the digital exclusion of socially disadvantaged groups by ensuring their access to ICTs and to exploit opportunities for their better inclusion in society (CEC, 2001). This dualistic vision has defined multiple goals, ¹ as in the account offered by the UK Digital Inclusion Team in 2008. These goals are: giving people ICT skills to participate in the economy; closing the gap between those enabled to participate in information and knowledge-based society and those who are not; making technology and electronic services accessible and usable by people with disabilities or the elderly; giving people broadband internet access; preventing economic exclusion from electronic commercial and public services; using digital ICT to tackle area-based deprivation (UK Digital Inclusion Team, 2008). More recently, policy accent has been shifting towards a more neoliberal agenda, predominantly focusing on mainly economic goals. ICT access and digital skills feature prominently in the 2010 Digital Agenda for Europe as the means to reach the

Commission's objective for a more competitive knowledge economy and inclusive society, and to achieve further progress in the delivery of online public services (CEC, 2010a, 2010b). According to the 2010 Communication, digital competence can help members of disadvantaged social groups to access services 'of direct interest to them such as eLearning, eGovernment, eHealth' and to 'tackle their disadvantage through increased employability' (CEC, 2010a:25). On the one hand, ICTs are mobilized with a compensatory logic, as a tool to break down traditional inequalities by more equally distributing knowledge resources and tapping new 'digital opportunities' for the inclusion of socially disadvantaged people and less-favoured areas. On the other hand, a strong relationship is assumed between the economy of welfare service provision and the take-up of online service access. Nationally, in the UK, the importance of spreading access to digital ICTs as a channel for the delivery of public services was highlighted in the Digital Britain report (DCMS & BIS, 2009). Launched under the New Labour administration, Digital Britain announced a commitment to get broadband internet access to everyone in the UK by 2012, a national plan to promote 'digital participation' of disadvantaged groups (in the spirit of Europe's e-inclusion), and the government's intension to start implementing the so-called 'digital switchover' of public services in 2012 making available some government services primarily online (DCMS & BIS, 2009). Digital inclusion and the digital switchover of public services, now labelled 'digital by default' (Cabinet Office, 2011), remain a priority in the Coalition government's agenda, as they seem to offer cheaper, smaller government and an aspect of self reliance that is very much in line with the thinking of the right.² In the words of the UK's Prime Minister Cameron: 'Getting online can help people save money, find a job, access services in a way that works for them, and make connections with each other and with their community. It will also help us all to drive down the cost of delivering public services.' (Citizensonline, 2010)

This paper examines the situation of disabled people with regard to their access to the internet using data from the UK. More specifically, it considers whether the digital switchover of public services is enabling social interactions and inclusion for disabled people and the role of communications policy in promoting access to digital communications for all. Disabled people belong to groups most likely to be digitally and socially excluded. People with disabilities are less likely to use the internet and more likely to rely on government services and on welfare support compared to people without disabilities. They are also commonly regarded as 'those who have the most to gain' from internet access. In that spirit, Pillar 6 in the 2010 Agenda for Europe has placed emphasis on the need 'for concerted actions to make sure that new electronic content is also fully available to persons with disabilities' (CEC, 2010a:26). The first section that follows outlines a framework for the analysis of media access, disability and exclusion. It conceptualises media access through the capability approach (Sen, 1992, 1999) and uses resource-based models (Warschauer, 2002, 2003, 2004; Star and Bowker, 2004) to capture its social origins and political implications. Next, the paper examines patterns of internet access and use by disabled people conceptualising disability through the capability approach as a phenomenon of the interface of personal circumstances and (social) disadvantage that stems from environmental design. The concluding section focuses on the role of communications policy highlighting a gap in policy provision for the inclusion of disabled people and other disadvantaged groups.

2. A conceptual framework for the study of media access and inclusion

Digital networks carry an expanding range of services, constantly increasing the possibilities that can be realised through media use. Our multifaceted engagement with today's ICTs is conditional upon meaningful access, which in turn can be conceptualised as a complex and multidimensional construct (Van Dijk, 1999, 2005, 2006; Newhagen and Bucy, 2004; Selwyn, 2004) that is linked to opportunities and inequalities (Van Dijk, 2006: 222-223). In digital media systems there is no straightforward correspondence between access to a communications network, provision of and access to a specific service and ability to use this informational content/service. Meaningful use of a service delivered through digital, online ICTs requires user capability. Development of our capacity to use ICTs requires media literacies, in the sense of basic computer skills, competence in information seeking and in making intelligent use of content. Media literacies are cultivated through engagement with a range of resources in socially embedded practices of learning. Warschauer (2002, 2003, 2004) has conceptualised literacy acquisition as a set of social practices which comprise access to physical artefacts, content, skills and social support. Applying this four-layered model to digital media, he distinguishes physical resources (infrastructure and equipment/devices such as computers and connectivity), digital resources (content services), human resources (literacy and education) and social resources (communities and institutions facilitating and supporting use of digital resources) as essential to achieve meaningful access and inclusion. Star and Bowker (2006:240) conceptualise network capability, content, skills and social support as infrastructural resources that permit the development of media literacy. Both types of infrastructure, physical/technology (digital communication networks) and social (social networks to exchange information and learning support), are needed to develop capacity to engage in meaningful practices of media use. Opportunities to access network capability, hardware and training are therefore subject to distributed resources and

infrastructural barriers. More than merely reflecting local, contextual/relational infrastructural considerations, development of media literacies can lead to further distinctions in use (Zillien and Hargittai, 2009) with the potential to exacerbate inequalities (Di Maggio et al, 2004). As put by Warschauer (2002) 'the presence of these resources helps ensure that ICT can be well used and exploited. On the other hand, access to each of these resources is a result of effective use of ICTs.' In that sense access is never really equal (Star and Bowker, 2006:240). Resource-based perspectives are of value for research as they demonstrate the multidimensionality of access, the social character of media literacy and the complex dynamics of exclusion/inclusion but do not build an argument for policy action.

Towards this end, critical scholarship has drawn on the capability approach (Sen, 1992; 1999). Capability theory provides a normative framework for understanding the lack of access to digital media as a denial of opportunities. This framework can be used to assess the role of public policy in promoting universality in media access (Garnham, 1999; Mansell, 2001; Klamer et al, 2002). The focus in this approach is on individuals having the capability, defined as 'free' or 'real' choice, to participate in society in the ways they wish to (Sen, 1999). Under Sen's approach capabilities are understood as substantive freedoms or practical opportunities to be or do the things a person may value being or doing³ (Garnham, 1999:117; Burchardt, 2004:738). A person's capability set is influenced by the resources available to her, the environment in which she lives and her personal characteristics (Mitra, 2006:239). Being a normative framework for assessing inequality, the capabilities approach proposes that social arrangements should be evaluated in the space of the real freedoms people have to promote and achieve their wellbeing (Terzi, 2005b:445). Following Sen, the focus of this assessment should be placed on the set of alternative functionings or 'the actual ability of a person to achieve

things that she has reasons to value' (Sen, 2002:10; see also, 1999:18, 1992:85). By moving from a consideration of what people are or do (functionings) towards the assessment of the opportunities to achieve certain states or undertake certain activities, the capabilities approach offers a way forward to identify the social implications of disadvantage (Burchardt, 2004: 742; Mitra, 2006:239) — one that foregrounds political questions of inclusion, exclusion, disadvantage and choice. Especially pertinent to public policy, an assessment of disadvantage should take capability to mean that 'the individual possesses the personal ability, resources, practical means, and knowledge that is required to achieve the combination of functionings in question, *and* that the external circumstances (social, economic and physical environment) are such that he or she could do so' (Burchardt, 2004:738, emphasis in original).

Access to digital, online ICTs, to the services these ICTs mediate and the actions they enable is now part of a very important capability (Sen, 2004:79). Lack of access can be seen to prevent individuals from fulfilling active roles in society (Haddon, 2000). Taking this approach to assessing opportunity and disadvantage in media use, the relevant question is not whether one uses the internet or expresses a wish to use it but whether she has the opportunity to perform media-enabled actions or take part in activities which are mediated by digital ICTs. This way of framing policy questions foregrounds normative understandings of universal access to the internet as a means to promote social inclusion. Being an approach to the assessment of individual advantages or disadvantages in social schemes that takes into account the situational conditions as opposed to a mere focus on the equality of resources (Sen, 1999:78; Terzi, 2005a:206), capability theory allows for a context-sensitive approach to media access and social inclusion.

Capability analysis and resource-based models of access indicate a continuum of supply- side factors, referring to the design, availability and affordability of networks and specific ICTs, and local

situational conditions that may inhibit media use. Both perspectives recognize that opportunities for inclusive and usable media access may be constrained by people's particular circumstances, which can include personal/individual traits or the different natural endowments people have as well as the nonavailability of an adequate level of resources and lack of knowledge. As an illustration, visually impaired people, such as individuals with congenital blindness, might well need a higher level of resources or income to produce the same level of media literacy achievement as other people (for example, being able to locate and retrieve information on the Web). From this perspective, inclusion in the information society is not merely a matter of addressing 'technical' barriers through specially designed and affordable technology apparatuses (devices/equipment). Opening up any real possibilities that may be presented via internet access would require the building of infrastructures to support the acquisition, development and accumulation of media literacy skills (Klamer et al, 2002:8) through policies addressing the inhibitors to usable access, and with positive discrimination for equality in the space of capabilities (Garnham, 1999:122; Nussbaum, 2000:99; Terzi, 2005b:455). Support measures may comprise assistance by other people, that is, formal or informal carer assistance, which may be necessary in certain societal contexts. For instance, to facilitate electronically mediated access to public services for older people who do not possess digital skills (Sourbati, 2009) or to support online publishing activities by adults with learning difficulties (Seale, 2007).

Having conceptualized media literacy in terms of infrastructural resources and capabilities, the next section will use the capability approach as a framework to define disability at a conceptual level and examine patterns of internet access and use by disabled people in the UK. The discussion that follows does not engage with the variance in impairment and disability and the relative impact of physical, sensory, cognitive or psychological impairment on media access and use. Rather, it considers

dynamics and consequences of disability, media access and social exclusion as reflected in media access patterns against the backdrop of a policy push towards the digital switchover/digital by default, and the discontinuation of national (UK) policy initiatives to promote development of media literacy capacity.

3. Capabilities, disability and structural disadvantage in internet access and use

Defining disability

The UK Disability Discrimination Act (DDA, 1995) now replaced by the Equality Act 2010, defines a disabled person as a person with 'a physical or mental impairment which has a substantial and long term adverse effect on his ability to carry out normal day-to-day activities' — a definition that is also adopted by the UK Equality and Human rights Commission (DDA, 1995:S1; EHRC). Following the DDA, the 2006 Office of Communications (Ofcom) Media Literacy audit defines disability in terms of 'physical or sensory impairment that impacts on a person's capacity to independent living' and disabled adults as 'those with any type of self-reported impairment that limits their daily activities or the work they can do' (Ofcom 2006: 5). This definition comprises any kinds of impairment that are limiting to daily life and work. In a now discontinued initiative, the UK National Audit Office advised that UK public sector bodies use the social model of disability which is 'based on the fact that disadvantage and social exclusion stem from the barriers disabled people face rather than from an individual's disability' (NAO, 2006). The social model, which has a political activist origin, defines disability as 'all that imposes

restriction on disabled people' (Oliver, 1996:35), directing attention to the disabling effects of discriminatory social and economic structures. Evaluations of disability undertaken under the social model can be considered in the design of inclusive social arrangements.⁴

The recognition of societal barriers to equality and the central role accorded to discrimination in the social model language adopted in the DDA corresponds closely with the capabilities perspective as described in the foregoing analysis. The capabilities perspective, which includes personal circumstances alongside social barriers, helps explain how disability may result from three types of factors: the nature of impairment and other personal characteristics (e.g. age, gender, race); the resources available to the individual; and the environment, in its physical, social, economic, political and cultural aspects (Mitra 2006:241). Impairment may be seen as one characteristic among many that interacts with the social, economic and physical environment to produce a profile of advantage or disadvantage (Burchardt, 2004:746; Mitra, 2006: 241). Disability may be defined accordingly as 'a phenomenon of the interface between personal characteristics of the individual and the specific design of the social and physical environment that the individual inhabits' (Terzi, 2005a:213) allowing research to assess implications for policy. This approach resonates with the social interactive personenvironment definition of disability as 'the loss or limitation of opportunities to take part in the normal life of the community on an equal level with others due to physical and social barriers' (Fougeyrollas and Beauregard, 2001:177; Thoreau, 2006). Under the capabilities perspective, the disadvantage experienced by people with impairments (i.e. their disability) is best understood in terms of a deprivation of opportunities. By recognising how an individual's opportunities to do or be various things in life can be constrained by personal characteristics and the social, economic and physical environment, the capabilities approach underscores the substantial role the design of social and

environmental arrangements plays in determining access and how fundamental policy choices can be in determining the level of disability and inclusion (Burchardt, 2004; Terzi, 2005a; 2004; Mitra, 2006). As discussed in the preceding section, policies enabling disabled people to use digital, networked ICTs would imply interventions to address the social basis of capabilities (see Nussbaum, 2000; 2005) entailing redistribution of access resources and the redesign of the physical and social infrastructures of media access and literacy.

Internet (non-)use by disabled people

This section uses data from surveys of internet access undertaken by public sector bodies (Ofcom, the Office for National Statistics (ONS) and the Oxford Internet Institute (OxIS)) to probe patterns of internet use among disabled people in the UK. These surveys report on patterns of internet access and use across the UK population according to the participants' self-defined disability status. Research explicitly designed to determine the views and experiences of disabled internet users and non-users has been very limited in the UK. This section will examine the relationship between disability and social and technological infrastructural constraints on media access by looking into: How internet access of disabled people compare with internet access by people without disabilities; How disabled people's internet access relate to their access to the physical, digital, human and social resources required to develop media literacies and how the attitudes of disabled non-users of the internet compare with the attitudes of non-users without disability.

Research by Ofcom into the levels of media literacy of disabled people in the UK showed that in 2006 50% of disabled adults aged under 65 had access to the internet at home, compared to 62% of all UK adults under 65 (Ofcom, 2006). Data compiled by the Ofcom Consumer Expert Group (CEG) on behalf of UK BIS reported that in 2008, when home broadband access levels were 70%, disabled people remained disproportionately under-represented when compared with the general population, with 42% of people with visual impairments, 32% of people with hearing impairments and 36 % of people with mobility impairments having access to broadband at home (CEG, 2009: 14). According to the Oxford Internet Survey (OxIS), use of the internet by people with a health problem or disability increased, but only marginally, between 2007 and 2009. In 2009 41% of those with a disability used the internet, while in 2007 only 36% did so. However, people with a health problem or disability still used the internet considerably less than people without a health problem or disability (41% against 75%) (Dutton et al, 2009:16). According to the ONS data for the first quarter of 2011, the 4.20 million disabled adults who had never used the internet represented almost half of all internet non-users (ONS, 2011). Overall, disabled people experience relative inequality in their engagement with the internet, in terms of their physical access to it as well as their use of digital technologies and network capability.

Disabled people are more likely to experience structural inequalities such as not having educational qualifications, being outside work and living in deprived neighbourhoods. According to the Family Resources Survey 2003/4 there are up to 10 million disabled people in the UK and millions of other individuals who are affected by mild cognitive, sensory and physical impairments (CEG, 2009:12). Disabled people are far more likely to be unemployed than non-disabled people⁵. The (now abolished) UK Disability Rights Commission estimated that one-fifth of people of working age can be defined as

disabled (www.drc.org.uk). Of the 4.6 million disabled people of working age only 50% are in work compared to 81% of non-disabled people of working age (CEG, 2009: 12). A different figure, published in the 2002 Labour Force Survey, counted 7 million disabled people of working age with almost half being out of work (Thoreau, 2006). Disabled people are twice as likely as non-disabled people to have no educational qualifications: the UK Equality and Human Rights Commission reports that 23% of disabled people have no qualifications compared to 9% of non-disabled people

http://www.equalityhumanrights.com/search-results/index.html?q=disability

Patterns of inequality in opportunity can also be seen in the few existing qualitative surveys of ICT use by disabled people. Qualitative research undertaken on behalf of Ofcom has shown that disabled people experience disadvantage as a result of the distribution of educational and social capital (general literacy, digital skills and media literacy competencies) in their immediate environment. A study of media use by people with learning disabilities⁶ reported that low levels of literacy and numeracy limited their access to communication services. This study found that the severity of the learning disability was 'not always the most differentiating factor when it comes to accessing, using, and paying for communication services', noting that other factors such as access to support, age and income 'had a significant impact on participants' access to communication services' (Ofcom, 2008:2). This finding corroborates the few available investigations into the specific issues and experiences of disabled internet users. Seale's small-scale qualitative study of people with learning difficulties (Seale, 2007) reported that the vast majority of personal 'webpage' authors with learning disabilities were supported in their online publishing activities by their immediate families. The only detailed study into the experiences of disabled internet users in the UK has highlighted the importance of media literacy competencies in the immediate environment of disabled people: Pilling et al (2004:37) found that 44%

of respondents had received help in learning from a friend, suggesting that those who do not know someone else who uses the internet are less likely to start using it. Asymmetries in the distribution of educational and social capital, which are additional to any particular physical circumstances experienced by individuals, indicate that the majority of disabled people do not have the choice of drawing on formal, school- or work-based learning, or of turning to their close relatives and friends to develop digital media literacies. Nor can they rely upon family and intimate social networks to use the internet on their behalf, for the skills and competencies underpinning this kind of support are not readily available in the places where they live. Unsurprisingly, Ofcom's media literacy audits show that reported levels of proxy use – involving individuals who do not have access to the internet or/and do not use the internet themselves but having access through someone who does is higher among ABC1 classes (Ofcom, 2010a; Ofcom 2011) – were lowest for disabled people (Ofcom, 2010b:8).

Research into the attitudes and preferences of disabled non-users of digital media technologies indicates patterns of articulated needs, value and desires which compare with those of all non-users. According to the only Ofcom audit of media literacy of disabled people (Ofcom, 2006), one-third of respondents aged under 65 (34%) said they were interested in learning more about these elements (the figure for all UK adults under 65 was 37%). One in five (18%) were interested in learning about using the internet and one in 10 (11 per cent) about creating a website (Ofcom, 2006:47&52).

Moreover, the Ofcom survey found that although the take-up of digital media technologies remained lower among disabled people, as did their levels of competence and confidence in learning to use the internet, disabled people showed the same interest as the UK population as a whole in learning about digital media technologies.

Taken together, these data reveal a relationship between the digital disengagement of the majority of disabled people and inequality statuses owing to their economic and social situations. Disability remains a factor that is strongly associated with digital exclusion, defined by the 2009 Oxford Internet Survey as non-voluntary non-use of the internet that is structured by economic, social, geographical or physical situation of individuals rather than subject to personal choices by individuals (Dutton et al, 2009:16). This is not to downplay an overlapping but distinct set of issues pertaining to disability and impairment-related technical-infrastructural barriers. In comparison to average (non-)users, disabled people experience additional forms of disadvantage, relating to their personal circumstances and physical and psychological situation. Technological forms of exclusion are a reality for many, with technical barriers resulting from the design of communication devices and services, and concerning, for instance, the availability of affordable, suitably usable equipment. The multiple barriers to access can be seen to compound the disadvantage that comes from the relationship between impairment and disability. These trends in social-economic and geographic, neighbourhood-based barriers are likely to have a more substantial impact on how people, disabled or not, interact with communications products and services in the future environment of high-speed broadband and webdelivered services, even if usable equipment and web accessibility issues are addressed (i2, 2008:14).⁷

4. Disability, media access and (the lack of) communications policy provision

Despite their limited empirical weight, the reported data indicate a capability failure for disabled people. Using a capability framework to assess media access patterns, the preceding discussion

demonstrated that disabled people are denied real opportunities to be or do something online. Their access to digital ICTs may be inhibited not only by the level of ability but also by lack of resources, practical means and of the knowledge required to achieve any combination of functionings. From this perspective, it is the designed environment that enables or disables interaction by opening up or foreclosing opportunities to access. Therefore, the redesigning of the technologies of public service provision (as in the 'digital by default') can seek to address disadvantages of disability or, alternatively, be implicated in their (re)production.

Communications is one of the many policy fields with a role to play in promoting access to digital services through regulation, legislation and standards. Although access to network capability, digital ICTs and services is not synonymous with media use competencies, it is nevertheless a necessary component and therefore can be thought as a base-level entitlement. In the UK, under the 2003 Communications Act, Ofcom has a duty to secure the availability of a wide range of electronic communications services throughout the UK (2003 Communications Act:S. 3.1(b)) and to have regard to the needs of persons with disabilities, the elderly and those on low incomes as it deems relevant in the circumstances (S.3.4(i)). Under the current universal service obligation (USO) framework there is a requirement for equivalent access to fixed-voice telephony to be ensured for people with hearing impairments through the provision of a text relay service. Broadband internet access is not part of the USO obligation⁸ and there is no policy provision to make broadband services accessible to people with disabilities. In 2009, the government announced a universal service 'commitment' (as opposed to 'obligation') to enable access to 2 Mbps to all areas of the UK by 2012, implying a commitment to partfund the upgrading of the UK telecoms network to roll out broadband infrastructure (DCMS & BERR, 2009). The 2012 target was subsequently abandoned by the new administration, replaced by an

ambitious expanded vision for Britain to have the 'best superfast' broadband in Europe by 2015 (DCMS & BIS, 2010) with support for universal access objectives remaining unclear. According to the broadband delivery programme (UKBD) announced in March 2011, the Coalition government's position is that infrastructure is stimulated through the market with limited investment from government (DCMS, 2011).

Media literacy has been a national communications policy aim in the UK under S.11 of the 2003 Communications Act. Ofcom is one of the few communications regulators in Europe to have a specific statutory duty to promote media literacy. However, the regulator has not been given powers to impose media literacy requirements on education, industry and voluntary sector organisations to promote media literacy for all. Ofcom's main contribution has been in providing research leadership, which is also a statutory duty under S.14 of the Act (including its Media Literacy audits) and establishing partnerships with industry and third-sector organisations. Policies addressing digital skill acquisition, community and civic participation and improved public service delivery through digital media services were recognised as relevant drivers of media literacy promotion in the 2009 Digital Britain report (DCMS & BERR, 2009; Ofcom & DCSF, 2009). As part of the Digital Britain agenda, a national Media Literacy Plan was announced in 2009, followed by the Digital Participation Action Plan in March 2010, two months before the general election. The Action Plan aimed to coordinate industryand third-sector-led activities to address barriers to digital media use, with issues of affordability, the learning of skills and development of confidence falling under the purview of the Department for Culture, Media and Sport and the Department of Business, Innovation and Skills and public institutions including the BBC, which has an obligation under its Charter 'to help build the Digital Britain' (BIS and DCMS, 2010). Following the change in government in May 2010, the national Media Literacy Plan was

ceased as was the funding for the National Plan for Digital Participation. Ofcom's media literacy programme is now mostly defunct and its statutory remit is today more narrowly interpreted to concentrate on the national audits. Many initiatives in research coordination and leadership have been ceased following reductions in public funding. 'Digital by default' has become a main objective of media literacy according to the Secretary of State for Media, Culture and Sport who explained that, for government, a key function of media literacy is to secure suitable uptake of the online delivery of public services (Hunt, 2011)

Fewer steps have been taken on the issue of accessible equipment and multi-modal access. Under S.10 of the 2003 Communications Act Ofcom has a duty to take steps or encourage others to ensure availability of easily usable equipment. However, as with its duty to promote media literacy, no specific powers have been granted to the regulator regarding usable end-user equipment. The Accessibility Forum was established during early 2010 to produce an Action Plan that addressed 'the issues of people with particular needs so that they can participate fully in the digital economy' (BIS & Ofcom, 2010). The eAccessibility Forum is currently the primary means through which government will implement new provisions on equivalent access to ICT networks, services and equipment for disabled consumers, in line with new EU legislation, through inclusive design. Its first action plan, published in October 2010, announced an 'obligation [on behalf of government] to encourage manufacturers to produce easier to use and more affordable equipment' and a 'shift towards more software solutions that enable mainstream products and services to be used by disabled people' (BIS, 2010: 5). This was only few months after a joint BIS/Ofcom response to the EC consultation on Universal Service in e-Communications considered it 'unlikely' that the market would achieve equal access for disabled people who need special, costly, arrangements to use services (BIS & Ofcom, 2010). Indeed, research

funded by Ofcom had reported in 2009 that the current economic downturn and competing commercial pressures were likely to 'limit the extent to which industry is able to better address the needs of older and disabled people' (Ofcom, 2009:48). The first update to the action plan, published in January 2011, placed its emphasis on the goal of 'opening up a wider skilled workforce' and making it easier for business 'to deal with a wide range of consumers' (BIS, 2011:5). In alignment with the dominant neoliberal agenda, the functionings promoted by government policy are being reduced to digital skills for the workplace and consumption. With a new Communications Bill anticipated in the near future, there is little evidence of a commitment to addressing any of the disadvantages in media access experienced by disabled people.

Conclusion

This article has used elements of a capability perspective on media access, social inclusion and disability to assess the status of disabled people with regard to digital ICT-based inclusion policy initiatives and public service reform programmes. This perspective provides a framework for considering the multidimensional and relational character of disability and media access and for understanding causes and implications of disability as capability deprivation. It can be used as a tool for rethinking disabled access to the media as a broader and more complex issue of social exclusion. From this perspective inclusion/e-inclusion is a complex interaction between both environmental and personal circumstances. The capabilities framework delimitates a space to assess public policy against questions of equality of opportunity. It underscores the importance of environmental design in

creating or denying opportunities. Its recognition of societal barriers to equality and the central role accorded to discrimination gives rise to a requirement to support the building of social infrastructures to support media use.

An examination of patterns of internet access and use by disabled people in the UK indicates capability failures: despite the fact that many disabled people inhabit environments that limit their substantive freedom to be or do something online, there is a serious shortage of policies to actively support universal access to broadband internet, media literacies and education for disabled people in their own homes. The functionings currently promoted by e-accessibility policies, namely individual capacity to learn a digital 'skill' and to use an accessible website in order to transact in the consumer market, will therefore aggravate the exclusion of many disabled people. Policies to promote technology-based solutions for inclusion can reinforce existing disadvantages and the unequal status of people with disabilities in society (Goggin and Newell 2003; Moser, 2006). Since their exclusion is strongly linked to other types of disadvantage, policies to increase media access need to be integrated into broader social and economic policies that aim to improve the quality of life and service provision to disabled people and more generally the most disadvantaged in society (see Helsper, 2011). At the same time, in light of structural constraints which impede universal access to media technologies (home internet connection, suitable equipment) and to social-infrastructural media literacy resources (family and social network support to take advantage of new ICTs; general educational capital), it can be said that only a small part of the digital exclusion experienced by many disabled people appears to be distinctively 'special', determined by individual physical or cognitive impairments.

The importance of issues around disabled access to ICTs can only increase. Internationally, patterns of structured inequality in media access are compounded by reforms in welfare provision, the

digital delivery of public services and trends in the informationalisation of the economy giving rise to some new dynamics of disablement and social exclusion. For example, analysis of employment trends in the USA and UK has suggested that, while disabled people may now be excluded from the economy to a greater extent than in the past, social exclusion could replace disability as a process in the twenty-first century (Sapey, 2000). The disabling effects of exclusion can be felt by many individuals who cannot use the latest digital media technologies. As digital information and services proliferate online, those who are unable to use digital ICTs constitute a new 'digital underclass' (Helsper, 2011), having a lower level of choice and a reduced range of benefits available to them compared to those who can.

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Notes

¹ For a critique of dominant dualistic perspectives on Information Society policy visions, their theoretical underpinnings and political implications see Fuchs, (2010:32-36)

² In the UK a very significant proportion of the formal care of older and disabled people is directly funded by the state with over 60% of formal social care being commissioned by the social services departments of local authorities and nearly 90% of health care provided by the NHS, which is funded directly by central government rather than through insurance schemes

(Lewin et al, 2010:45). This economy of welfare provision is unusual in capitalist economies and its dismantling is a priority area in the new Conservative–Liberal coalition government.

- ³ Capabilities are distinguished from functionings, which are states of being (for example being well-nourished or being in love), or activities (for example dancing or voting). Functionings refer to what a person is actually doing or being.
- ⁴ Notwithstanding any theoretical and political limitations that impact on the value of the social model as a basis for policy, namely what critics see as a reluctance to engage with the complexities and multi-dimensional nature of impairment and an over-socialisation of sources and causes of disability (Terzi, 2004). Consider the social model's claim 'disabled by society, not our bodies' against Shakespeare's (2006: 33) 'disabled by society *and* our bodies'.
- ⁵ With a greater likelihood of unemployment amongst disabled women, disabled people from ethnic minorities or amongst those with less education being the trend internationally, including the USA and UK (Sapey, 2000:621)
- ⁶ According to the UK Disability Rights Commission there are 1,5 million people with learning disability in the UK today http://www.mencap.org.uk/landing.asp?id=1683.

⁷Freedman et al (2008) have warned against the policy challenges stemming from the dual trend towards higher bandwidth networks that carry personalized services, which can be seen to present equalizing and advantageous potential for many disabled people conditional on inclusive interface design, and cloud computing. In these future systems, access may not depend so much on features of media form or people's ability to use ICT devices, which are likely to be matched to people's preferences and abilities, but more 'on social, cultural, economic and geographic barriers (e.g., not being able to afford services, being unserved by highest speed broadband, having 'old style' mental models of how to interact with and use media products and services.)' (i2, 2008:14)

⁸ Despite the relatively extensive roll out of broadband in the UK in certain areas, broadband access remains limited. In 2010, 11 % of households were unable to access broadband at a minimum download speed using ADSL or cable, and 13% of the population could not have access to 3G mobile networks due to persisting coverage gaps (BIS & Ofcom 2010).

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