Towards Teaching in Public Reshaping the Modern University
Edited by Mike Neary, Howard Stevenson, Les Bell.
Foreword by Mary Stuart

Chapter 6 (pp 83-100)

Invisible Publics: Higher Education and Digital Exclusion

Sue Watling

Introduction

Teaching in public involves reducing barriers to access and nowhere is this more appropriate than with the subject of electronic resources and the delivery of virtual learning opportunities. The future of the university, in a time of resurgence of neo-liberal values, the primacy of market forces and an increasing emphasis on private rather than public provision, has become the subject of much debate. Insufficient attention, however, is being paid to the possibility of exclusion, which is the inevitable result of increasing digital pedagogies and practices. This chapter focuses on the role of the university in ensuring equitable access to digital technology. Over the last decade, the possibilities of virtual learning have included opportunities for widening participation, increasing student numbers and opening up world trades in professional and academic expertise, thereby sustaining the globalization of education. This chapter addresses the limitations to these opportunities, in particular the failure to prioritize issues of digital inclusion and the divisive consequences of digital discrimination. The chapter is in two parts: the first examines the adoption of virtual learning within higher education, in particular, the ability of the technology to both enable and deny access. The second looks at the wider implications of this duality when set against the background of an increasingly digital society, and how inclusive practices are failing to have inclusive results.

The chapter begins by revisiting the early potential of Communication

and Information Technologies (C&IT) and electronic learning (e-learning) for higher education, first made explicit in the Dearing Report (NCIHE 1997). Of particular interest are the promises of widening participation and of providing support for a non-traditional student base. The chapter will examine national e-learning policy for evidence of support for these promises, before exploring in more depth how the divisive potential of the technology depends on the ways in which it is managed and distributed. Informed by research which suggests that digital exclusion follows existing patterns of social exclusion, the chapter examines how issues of access have become almost exclusively associated with disability and how this side-lining has blurred the boundaries of responsibility for ensuring digitally inclusive practice. Examples of digital discrimination demonstrate how a society dominated by virtual ways of working requires equitable digital practices as a key to gaining social citizenship. Unless these are realized, exclusion from digital public spheres may constitute new social categories of silenced and invisible publics. It has been suggested that higher education for the public good has a signifi cant role to play in addressing issues of social exclusion and disempowerment (Burawoy 2005b, Delanty 2003). The chapter concludes by suggesting that the university of the future must be the site of critical debate, in particular, with regard to pioneering equitable online learning environments and championing digital democracy.

The Emergence of E-learning

In 1963, the Robbins Report supported the expansion of entry to higher education for young people with ability and attainment (Committee on Higher Education 1963). The report informed the creation of the Open University and the establishment of new ‘ plate glass ’ institutions. However, during these pre-internet times, the only significant increase in admission of students from non-traditional backgrounds to higher education was into the new city polytechnics. The Dearing Report (NCIHE 1997) revisited the

issue of widening participation. It focused on the potential of new C&IT for broadening access and better preparing students for a burgeoning knowledge economy. The proposal was that 50 per cent of all people between the ages of 18 and 30 should have experience of higher education by 2010, and this would be achieved through the possibilities of C&IT for virtual learning. Its transformative power would enable students to become self-directed, benefiting from links to resources at all times and in places of their own choice. Underpinning the rhetoric of widening participation was the anticipation that e-learning would become a new tradable commodity in a competitive international market. Potential benefits would include opening up lucrative contracts for digital publishers, content creators and providers of educational hardware and software, attracting international students and establishing a world-wide research network through the digitization of academic literature and sharing of virtual knowledge.

This initial enthusiasm for e-learning was deterministic in scope and promise. Providing access to virtual learning was prioritized; the complexity of adopting new working practices was underestimated. The vision of digital higher education within the Dearing Report failed to acknowledge the existence of cultural capital or the influence of ‘ social shaping ’ (Bijker 1989). From the beginning, C&IT was promoted as equitable when, in reality, learning technology privileged those with technical ability and adoption was limited to areas where subject discipline or personal interest was already developing within digital parameters. The divides between analogue and digital practices proved to be more extensive than anticipated, diluting early promises of virtual learning. The Dearing Report had promoted C&IT as a means of reaching those in remote, rural areas or with existing work or care commitments, as well as improving access for students with visual, hearing or motor impairment. The report also recognized that ‘ disabled students learn in different ways ’ (NCIHE 1997: 7.40). This explicit recognition of the power of technology to support non-traditional access was commendable

but did not go far enough. It failed to recognize how technology did not exist within a vacuum but within a complex social and cultural mix of attitudes and behaviours. It was not only disabled students who learned in different ways; there were wider social determinants of digital access. Gender, age and cultural background all had a potential influence on preferences for learning and online interaction.

Enabling this diversity of access was dependent on inclusive digital design. The transformative power of virtual environments, which the Dearing Report had promised would enable students to become self-directed and interact with teaching and learning content at times and places of their own choice, failed to recognize the unique ability of digital data to be made available in alternative formats. So long as resources were designed in ways which took into account multiple modes of delivery, users had the potential to customize content to suit their own preference; they could, for example, convert text to speech, change print size or adjust colours and contrasts. The inherent flexibility of digital data meant that not only did it suit a range of assistive technologies, it also offered support for other users; for example, text-to-speech software provided a valuable alternative delivery mode for non-native speakers or those with aural preferences for learning. If C&IT were to inform digital engagement with communication, information and active participation in the construction of new knowledge, e- learning content had to support diversity of access rather than denying it. The Dearing Report had highlighted the potential for digital democracy, but it was left to those developing the adoption of virtual learning to ensure the necessary structures for achieving this were in place. In the next section national e-learning policy directives will be examined to identify the extent to which this potential became practice.

E-learning Policy

The *Strategy for eLearning* (HEFCE 2005) was one of the first national guidelines to address the influence of virtual learning upon the higher education sector, and it appeared to dilute some of the early technological determinism evident within the Dearing Report. Instead of viewing C&IT, now referred to as ICT (Information and Communication Technologies), as a panacea for moving higher education forwards, the attention focused on supporting students as independent learners and meeting their needs and aspirations for development. The shift from technology to user was an ideal platform from which to address the diversity of user requirements and to offer strategic direction at a national level. However, HEFCE was an adamant supporter of institutional freedom, insisting that decisions with regard to developing e-learning strategies would remain the prerogative of individual universities. Students were merged into a homogenous group where the access parameters for virtual learning appeared to be taken for granted. The pattern whereby e-learning strategy was designed and delivered by those already operating within a narrow range of digital criteria had already been established, resulting in a failure to acknowledge the specific requirements of assistive technologies or the need to prioritize accessible digital content for a diverse range of users. This narrow range of criteria can be usefully described as following an MEE model, where computer access via a Mouse, Eyes and Ears are taken for granted as the dominant modes of working. When this model is privileged, it is followed with the assumption that others operate within similar constraints, and the diversity of ways in which people operate in digital environments is not supported. Individual universities created strategic guidelines which also failed to address the critical issues and, inadvertently, contributed to the embedding of a range of barriers to access which ran contrary to the early promises for widening higher education opportunities.

The revised e-learning strategy, *Enhancing Teaching and Learning Through the Use of Technology* (HEFCE 2009a), was a response to the rapidly changing nature of digital environments in the first decade of the twenty-first century. The read-only nature of the first phase of the internet, retrospectively

named Web 1.0, had been dominated by web development specialists, and digital environments were designed primarily for access rather than interaction. Web 2.0 was characterized by a move towards increasing user-generated content via multimedia creation and text-editing facilities in programs such as blogs and wikis. The increased availability of video and audio and the collaborative affordances of new Web 2.0 tools offered new potential ways of working and developing virtual teaching and learning resources. A number of external reports had also focused on the use of new ICTs in education, aided in particular by developments in mobile technology (BECTA 2008, UCISA 2008, JISC 2008, JISC 2009a). These reports had offered evidence of how the internet, in particular, the social networking phenomenon, influenced students entering higher education, and how their increasingly digital lifestyles were changing expectations of university responses to virtual practices. They also suggested a greater need for digital literacy provision in order to support students making sense of the vast array of digital data they were being exposed to. However, HEFCE reaffirmed that while it would continue to support and encourage institutions to use technology to widen access and opportunity, it remained institutions ' individual responsibility to identify the specific directions to follow. Any coordinated attempt to address the dual ability of the technology to both enable and deny access, or the critical need to support diversity of digital access via alternative delivery modes, remained invisible.

The only support for ensuring access to digital content was within statutory legislation that was enshrined in the Disability Discrimination Act (DfEE 1995). SENDA, the Special Educational Needs Disability Act, (DfEE 2001) made it unlawful to treat a disabled person less favourably than a non-disabled person. This covered access to information, so was applicable to higher education. The Act required individual institutions to be proactive in anticipating cases where students were likely to be substantially disadvantaged and to accept the responsibility for making reasonable adjustments, either through alternative formats or the provision of equivalent

experiences. Concepts of ‘ substantial disadvantage ’ and ‘ reasonable adjustment ’ were vague; the justification being that interpretation depended on individual circumstances. This made it difficult to judge the boundaries for establishing inclusive practice guidelines, in particular, within the development of teaching and learning resources which typically crossed multiple disciplines and specialist subjects. The lack of direction was compounded by the remit of the legislation. Isolating the requirements for accessible content within SENDA associated inclusive practice solely with disability. It made invisible other strands of diversity such as age, gender or cultural background which might influence learning preference and be a determinant of access to digital content.

HEFCE ’ s hands-off approach, allowing freedom for each university to set its own digital agenda, led to a focus on provision of access rather than attention to quality of access and usage practices. Where the need for inclusive practice was recognized at an institutional level, due to SENDA, it continued to be primarily regarded as a service for students in receipt of Disabled Student Allowance (DSA). This narrow perception limited awareness that diversity was about more than making changes for a discrete group, it was a socially responsible example of inclusivity where making changes for some had potential benefit for all. The first document to state that ensuring learning and teaching practices were inclusive of disabled students would enhance the learning opportunities of all students was the Quality Assurance Agency (QAA) revised *Code of Practice for Disabled Students* (QAA 2010). The code provided a useful reminder of the social model of disability, whereby barriers to participation are environmental in origin. It reminded the university of its statutory obligation to identify and remove obstacles. It also called for the direct involvement of disabled students in the design and review of inclusive provision for new programmes, the review/revalidation of existing ones and their methods of assessment, a direct involvement of students that mirrors the SCOTs project described in Chapter 4 and the concept of the Student as Scholar (Chapter 5). The code

reiterated the need for institutions ' websites, and all other sources of ICT, to be designed according to professional standards of accessibility and states how ' gaining knowledge of these standards should be part of the professional development of relevant staff in the institution ' (QAA 2010: 16). Unfortunately, the potential usefulness of this powerful document remained constrained by the focus on disability, which not only suggested limited distribution to areas of the university with remits for disability issues, such as Student Services and Disability Support Units, but also diluted its strength to offer wider strategic direction.

Existing social restrictions such as the influence of age, low income and cultural background, as well as individual preferences for learning, all play a role in determining quantity and quality of access and thereby contribute to the complex nature of digital divides. As the digitization of information increases, the learning curve required to operate with confidence and competence within new twenty-first century digital environments becomes steeper. Costs of participation can also be significant barriers for low income families and individuals. Many existing categories of social marginalization and exclusion are those where new digital exclusions are also frequently to be found (van Dijk 2006, Seale 2009). There was, however, no broadening of diversity beyond the category of disabled students, ensuring that other disadvantaged students remained invisible. Instead, e-learning directives were limited to maximizing the benefits of ICT across the institution ' s business activities, suggesting that business models and their underlying agenda had priority over resourcing measures to ensure access for all. Pressure to use virtual learning environments, in particular, via policies that promised enhancement of the quality of teaching and learning, had led to a melee of contradictory practices. Placing lecture notes online for students with dyslexia was encouraged, but this was also of benefit for those with alternative learning preferences and non-native English speakers, as well as providing reliable catch-up or revision materials. Scant attention was

paid to the inclusive design of these documents, often resulting in access barriers being inadvertently put in place by staff, for example, presentation slides with text too small to read effectively or text running across images and blurring visibility. When staff provide content in a single fixed format with no opportunity for the user to customize it to suit their own preference, or no other alternative version, it significantly reduces its usefulness as an aid to teaching and learning. In the decade since the Dearing Report, awareness of the individual responsibility of staff for ensuring inclusion, such as greater attention to text size and formatting, had become disassociated from the core teaching and learning functions of the university. In an increasingly digital environment with multiple modes of digital delivery, inclusive practice was rarely incentivized or given priority. Instead, attention focused on the technical support for the virtual environments rather than on the daily production of digital documents created by staff to support their teaching and learning.

Moving beyond the campus, ample evidence of exclusive digital practices is available within the wider society. Here, the internet is increasingly being used to support digital lifestyle choices which include online shopping, banking, access to health care and leisure activities plus a broad range of opportunities for social networking and virtual collaboration. The more the internet supports digital lifestyles, the greater become the divides between those with access and those for whom access is problematic. It is the potential implications of this and the consequences for the university of the future which are addressed in the next section.

Access Enabled – Access Denied

The dual potential of the technology to enable or deny access stems from a broad range of differences in skills and motivation as well as wider determinants such as gender, age, cultural background, disability and

learning preference (van Dijk 2006). However, digital educators have continued to support an increasingly narrow gateway of access criteria; one which excludes diversity rather than enables it. There is a vast range of technology available to support digital equity, therefore the majority of barriers to access derive from the failure to design for a diverse range of access criteria rather than restrictions which are technical in origin. As already mentioned, the strength of providing resources in digital format lies in the potential flexibility of digital data to be customized to suit individual user preference. The value of this cannot be stressed enough, as it offers genuine opportunities for digital inclusion. However, issues of inclusive practice have become associated with disability which, while it partially recognizes this value, it misses the wider support digital data offers to a diverse user base. Individuals who are not registered as disabled can also benefit from a range of assistive software, such as text to speech facilities, in order to check the fl ow of a piece of writing, to practice competence in an additional language or simply because they have a preference for aural learning. The only weakness of digital data is dependency on inclusive design practices. Where such practices are not evident, those who have most to gain from customizing their digital access to suit their own preferences are also those most likely to have that access denied.

If staff in higher education do not design, develop and support accessible e-learning materials, then the gap between disabled and non-disabled students will widen and the technology will outstrip it usefulness as a tool that can facilitate access to learning, curricula, independence and empowerment. (Seale 2006: 27)

The gap referred to here is not only about disabled and non-disabled students but is about supporting diversity. Seale (2006) calls for e-learning material which maximizes opportunities for the technology to enable access. The fi rst step to ensuring digital equity is a clear understanding of

the nature of the barriers to be overcome.

The principle of inclusive design informs equitable digital practice. This states that making changes for some creates an improved environment for all. Within the built environment, providing ramps into public buildings not only overcame barriers for wheelchair users, but also improved access for those pushing prams or buggies, shopping trolleys or suitcases on wheels. Removing digital barriers follows the same principle; design that recognizes and caters for a diversity of delivery modes is potentially improving access for all.

Digital barriers have three sequential layers: first the cost of any alternative technology; secondly appropriate training and support and thirdly inaccessible design. Within higher education, cost can be less of an issue; the majority of university computer networks supply a range of assistive programs such as text-to-speech conversion and additional costs for specialist assistive technologies can be met through the Disabled Student Allowance (DSA) or Access to Work scheme. The second stage involves the specialist, non-standard nature of any alternative technologies. Perception of their use as marginal when compared to core practices can result in support being side-lined. ICT helpdesks are frequently ill-equipped to answer queries about the complexities of text-to-speech software, while technical support from manufacturers is not only expensive but can fail to take into account any unique individual set-up, resulting in assistive technology being unable to realize its full potential. The third barrier is the quality of content because, even with the pre-requisite training and support in place, if the digital data has not been designed with diversity in mind, or if it is provided in a single fixed format preventing customization, then access will continue to be denied. Digital design becomes exclusive when content is fixed in a single format which prevents users from customizing it to suit their own requirements and when this format is problematic. Examples of exclusive digital practices

include:

 Providing text in a complex font which is difficult to read
 Using the upper case, underline or italic functions for emphasis as these formats can take longer for the brain to process and grasp the meaning; the bold function is preferable
 Fully justifying text, which creates ‘ rivers ’ of white space running down the page between unevenly-spaced words
 Audio or video content provided without textual equivalents, which prevents alternative access their content
 Inadequate labelling of digital images which leads to loss of information when viewed via non-visual delivery modes
 Inconsistency of navigation can create confusion if structures change from page to page
 Online module sites demonstrating a conflicting variety of styles
 Interaction requiring a mouse click rather than a key stroke
 Failure to use inbuilt headings and styles for word processed documents, which prevents users from taking advantage of alternative reading layouts.

There are many other examples, but these are common barriers which could be overcome if awareness of inclusive digital practice was given a greater priority. As mentioned earlier, it is common for creators of digital content to assume a narrow range of access criteria rather than being aware of a diverse range of delivery modes. Unfortunately, it remains the case that digital design is primarily taught for the needs of visual users and the internet continues to develop into an increasingly visual environment, one where style is privileged over substance and appearance over usability. Over the past decade, while the university has adopted multiple digital ways of working and user-generated content has become integral to daily working practice, it has failed to promote inclusive digital practices. One area in

particular which is causing increasing access problems within teaching and learning is the adoption of commercial e-resources including e-journal and e-book platforms. While on the one hand they offer wider availability of core texts and their facilities to annotate and extract content are improving, on the other they have complex navigation structures and significant inconsistencies in style. The advantages of providing reading content online are diluted by their general inaccessibility to proprietary screen reading and text narration software. Similar limitations are found within increased use of collaborative online opportunities such as blogs and wikis and with experiments with social networking tools and data management mechanisms like RSS feeds. The value of the technology in supporting diversity has been diluted by policy guidelines which have side-lined the accessibility of digital resources into the disability arena, resulting in digital exclusion remaining a largely invisible discrimination. To investigate this further, it will be useful to pay attention to the wider social background beyond the university and in particular to the contemporary location of disability alongside other determinants of socially inclusive practice.

Invisible Publics

The language, or discursive practices, used to label categories of social exclusion are fluid and changing by nature (Foucault 1980). As a result, these categories can become culturally repositioned in response to external pressures and influences. Underpinning this shifting landscape of identities can be found hierarchical social systems which favour an inequality of resource distribution on the one hand, while promoting explanations for disadvantage on the other (Foucault 1988). Disability studies offer clear examples of this dichotomy. Individuals with physical, sensory or cognitive impairment have been discriminated against historically on the ground of deficit medical diagnosis, a dominant view which remained unchallenged until the late twentieth century and calls for raised awareness of the social

nature of barriers to participation. The medical barriers model was replaced with a social model, whereby discrimination was perceived as resulting from society failing to make provision for a broad enough range of difference. In the twenty-fi rst century, it can be useful to apply this barriers model to digital exclusion where, while the technology exists to ensure digital equity, the range of barriers preventing inclusion is non-technical in origin.

There may be a need for a more sophisticated understanding of the ways in which the digital parameters of access reflect broader social inequalities, in particular in new knowledge societies where the redistribution of resources privileges the transfer of digital information. Research into unequal access to ICT within higher education identifies the social groups most likely to be digitally excluded as those already experiencing social exclusion (van Dijk 2006). This aligns with findings from the UK government Digital Participation agenda which describes those most at risk of digital discrimination including older people, those in low income households, people with no formal qualifications, disabled people, new immigrants and those living in geographically remote communities (BIS 2010). The parallels between digital exclusion and groups already marginalized and disadvantaged suggests the potential for digital discrimination may not yet be fully realized. The role of the university, as a producer of the citizens of the future, should include the critical function of identifying and challenging the unequal power structures which afford privilege. This chapter suggests that of particular importance is the need for higher education to address issues of digital exclusion and provide institutional support for equitable digital practice. In order to do this effectively, the structures which support discrimination must be visible and their destruction must be considered to have value. If new digital ways of working are to be made available to all then it is critical that accessible digital practices become fundamental to the university ' s philosophy. The side-lining of accessibility issues into the disability arena has blurred the boundaries which delineate responsibility for digital inclusion and it is to these blurred boundaries this chapter next turns.

Future Digital Exclusions

Increased adoption of ICT within the university mirrors the broader social shift towards the affordances of the Internet. Fundamental to these new digital practices is their social shaping (Bijker 1989). Not only does inaccessibly designed digital data exclude users who operate outside a narrow range of access criteria, it effectively silences analogue voices by denying them access to the new digital platforms of the public sphere. The university of future must take the lead in offering opportunities for critical debate, in particular addressing issues of social inequality and giving voice to narratives of marginalization and exclusion. In a challenge to market solutions to the financial problems of higher education in the US, Burawoy asks ‘ Do we have to abandon the very idea of the university as a “ public good? ” ’ (Burawoy 2005b: 4). The answer has to be a resounding ‘ no ’ and several chapters in this book suggest how students can be empowered to question traditional ways of working. The re-design of teaching and learning within disciplines such as social work already seeks out narratives of exclusion to inform education and practice (SCIE 2004). If higher education is to prepare socially responsible citizens for the future good of society, increased awareness of the consequences of inequitable practices is essential. The lens of digital exclusion has a unique contemporary relevance due to the pervasive nature of the internet and the dual capacity of the technology to enable and deny access. However, bringing the issues to the surface can be problematic. This is partly due to existing marginalization of publics rendered invisible through lack of participation in public spheres, but also because of the shifting parameters of categories of social exclusion. Changes in cultural attitudes towards difference can be evidenced by the history of anti-discriminatory legislation designed for the protection of minority or non-traditional groups. It is a comparatively short history which derives from the identity politics movements in the later twentieth century,

which gave rise to the first protected categories of gender, race and disability (DfEE 1995). This triad has recently been extended to include age (within the workplace), marriage or civil partnership (within the workplace), sexuality, gender reassignment, pregnancy and faith/religious belief. These are currently ‘ protected characteristics ’ against which discrimination directly, indirectly or through association is illegal (DWP 2010). Following in the footsteps of SENDA (DfEE 2001), the Single Equality Act reaffirms the specific association between access to information and disability. It does not make explicit the mass development of digital information over the past decade or its unique power for digital democracy and fails to identify alternative social determinants of access such as age, gender, location or cultural restrictions. However, what the act does is to use language which puts the stress on the individual having difficulty with digital access, rather than the digital environment being incorrectly designed. This is a worrying echo of the medical barriers model whereby disability was perceived as a personal deficit (Oliver 2009). While the Act draws attention to discriminatory practices, the subtle use of language suggests that the individual rather than wider society is the source of these barriers. As such, it fails to challenge broader social attitudes towards social difference. This raises concern for groups at risk of digital exclusion in the future. On the one hand, as can be seen within higher education, the need for inclusive practice with access to information has primarily been associated with the disability arena; on the other, within the wider society, the social category of disability itself is being subsumed into generic equality issues. The risk is that attention to unique identity and the rights necessary for valuing diversity is becoming diluted and, in places, seems to become invisible.

The very word disability has a complex history, which involves social attitudes of fear. Society has traditionally dealt with diversity through incarceration; from the mediaeval Ship of Fools, set afloat to sail permanently on the oceans, to purpose-built Victorian asylums and institutions designed to render

impairment invisible (Foucault 1988). It has been mentioned above that contemporary use of the word disability derives from the social barriers model, which called for recognition that individuals did not have disabilities, instead they were disabled by society. As the language of the Single Equality Act suggests, this distinction appears to be fading. It is worth noting that Burawoy, calling for public sociology in the university to ' make visible the invisible ' (Burawoy 2005b: 8), lists gender, race and class as categories of marginalization, but fails to mention disability. In an ideal world, examples of absence might suggest that diversity has been recognized and barriers to participation identified and removed. Unfortunately, this does not appear to be the case and this chapter has shown how using a narrow range of access criteria to control digital access is not only reiterating and reinforcing exclusion, it is also rendering it invisible.

Discriminatory Practices

Deal (2007) applied the principles of aversive racism to disability discrimination, suggesting that individuals are not overtly discriminatory but where statutory legislation has reduced instances of blatant discrimination, it gives rise to more subtle forms of prejudice instead. Individuals do not recognize themselves as exhibiting discriminatory behaviours. ' Aversive disablists recognize disablism is bad but do not recognize that they themselves are prejudiced. Likewise, aversive disablism, like aversive racism, is often unintentional ' (Deal 2007: 97). The effectiveness of legislation in modifying discriminatory behaviour is limited. The language of prejudice may have changed, with certain words and phrases no longer in current use, but the human problem of being uncomfortable when faced with difference remains. Future advances in challenging the discrimination of minority groups will only be supported if they can be seen to promote the self-interest of the majority, otherwise they will not materialize (Deal 2007). This can be usefully applied to digital exclusion. Individuals already operating effectively within the MEE model do so within a narrow range of access

criteria, therefore alterations in habitual ways of working are unlikely where there is no perception of personal benefit. As a result, the inadvertent contribution to oppressive digital practice is not unusual.

‘The conscious actions of many individuals daily contribute to maintaining and reproducing oppression, but those people are usually simply doing their jobs or living their lives and do not understand themselves as agents of oppression ’ (Young 1990: 41 – 42).

Discrimination derives from lack of knowledge and privileges culturally discursive practice over personal experience. Social labels, when accompanied by attributions of stereotypical behaviour, often have unfortunate connotations with deficit images and traditions. Prejudice based on fear of difference has deep roots, making elimination unlikely and attempts at control through statutory means a tokenistic alternative. Social attitudes towards maintaining discrimination are becoming more sophisticated. For example, Freire (1972) has suggested the use of a ‘ banking concept ’ within education where disadvantaged individuals are taught passive acceptance of the world as it is, together with its structural inequalities. This unquestioning acceptance informs a lack of action, thereby condoning and replicating the structures of oppressive practice. Mullaly (2002) examines some of the ways in which citizens are persuaded, at an unconscious level, to comply with and contribute to their marginalization. Dominant groups, and in particular the media distribution of content reinforcing negative categories of the Other, have a powerful impact on personal identity.

These socially constructed differences are then used by the dominant group as the bases and rationale not only for appropriating most of society ’ s resources and political influence but for carrying out acts of prejudice and discrimination against subordinate group members. Such acts can be either conscious and aggressive or more likely today unconscious and aversive.

Unconscious and aversive acts of oppression are much more difficult to contravene since, given their nature, they seldom can be legislated against. (Mullaly 2002: 70)

Post-structural discourse has also contributed to the social acceptance of oppressive practice. Traditional categories of identity and knowledge have been challenged, giving rise to linguistic games. Social reality is no longer a fixed knowable experience but has morphed into an uncertain landscape, delineated only by the shifting parameters of multiple ways of knowing. The term inclusion, as favoured by politicians, offers an example of the ease with which meaning can be obscured. The definition refers to the bringing together of disparate parts into a whole, in particular with regard to recognizing and valuing diversity. But without making public the specific measures for action necessary to challenge exclusive practices, the word becomes a cultural contradiction (Delanty 2003: 76). Closer examination of policy designed for inclusion reveals reinforcements of existing conditions which results in greater, not less inequality. ‘ Even as the rhetoric of equality and freedom intensifies so sociologists have documented ever-deepening inequality and domination. ’ (Burawoy 2005b: 4). The contradiction can be applied to widening participation directives in higher education, whereby promises to broaden access through technology to non-traditional students favoured those who could operate within a narrow range of access criteria. Those with ability but with diverse ways of working were marked out as different and continued to have equitable access denied. Without specifi c measures for breaking down the barriers of exclusive practice, promises of inclusion will continue to be cancelled out by existing conditions and continue to be at best tokenistic and at worst completely ignored.

The University as a Site of Social Justice

The university of future is likely to become increasingly reliant on digital

ways of working and the production of digital research and knowledge. The reconstitution of the university as public space will require democratization in the way knowledge is produced and disseminated. Universities have invested heavily in networks and infrastructures to enable digital communication, information and the flexible distribution of teaching and learning content. However, this has largely been constrained by a narrow range of access criteria, which fails to take into account the diverse ways in which computers are used and interaction with digital environments is enabled. Addressing the divisive nature of digital data and the management of digital access should be generic to the future development of all learning landscapes. It has already been argued in Chapters 4 and 5 that an increased focus on the student experience and supporting the concept of students as active producers rather than passive consumers of knowledge encourages critical examination of the relationships between knowledge and power and the discursive practices through which they are mediated. If the university of the future is serious about challenging the restraints of marketization and reforming itself as an institution of the public sphere (Delanty 2003), it has a vital role to play in the education and training of future citizens. This includes addressing issues of social exclusion and marginalization and nowhere is this more important in a digital society than ensuring digital democracy for its public spheres.

McLean (2006) suggests the university adopt a role of emancipation and transformation, with the goals of social justice at its heart, so ' critical university pedagogy would take up the functions of universities to educate citizens and professionals who can tackle injustices and social problems ' (McLean 2006: 19). Links between existing categories of social exclusion and individuals most likely to be digitally excluded indicate that access will continue to be denied to those already marginalized and disempowered. Unless the university increases focus on the social inequalities that inform and enable digital participation, it is in danger of reproducing and reiterating external

oppression. One way forward is to address the issues directly through generic social justice modules for all first year undergraduate students. These would offer public commitment to the principles of social justice. It would fi t well within the parameters of conceptualizing the student as producer rather than consumer and offer a lens for viewing the deeper cultural causes informing structural inequality. Van Dijk (2006) suggests the most conspicuous fact with regard to understanding digital exclusion is that digital divides have not been discussed against ' the background of a general theory of social inequality; other types of inequality or even a concept of human inequality in general ' (van Dijk 2006: 212). Doing this would involve critical analysis of the contradictions and debates between state and market as regulatory factors and the conditions for participation in the public sphere.

The university also needs to take steps to ensure equity of digital access on campus. This will initially be more demanding of resources, both in terms of people and finances, and will require personal commitment and motivation. Seale (2009) describes how a higher education built on the theoretical frameworks of inclusion and social justice

demands a commitment to adopting a political stance that actively seeks to challenge discrimination, exclusion and unwillingness to change things. Inclusion and social justice research stems from passionate outrage rather than dispassionate interest. Research underpinned by inclusion and social justice theories cannot be neutral. (Seale 2009: 15)

Research informed by policy and procedure which supports the alleviation of anti-oppressive practice is fundamental to a university of the future that supports public fairness and individual empowerment.

Conclusion

This chapter suggests that digital inclusion is set to become a new, divisive category of social exclusion, the full effects of which might not yet be realized.

Individuals denied digital access may constitute the new invisible public of the future, doubly disempowered through barriers to digital lifestyles as well as to a public sphere which makes increasing use of digital platforms for discussion and debate. Awareness of digital exclusion has been marginalized into the disability arena, and while access for users of assistive technology is of critical importance, attention must also be paid to the wider social determinants of digital participation such as age, gender, language and cultural background.

Issues of digital exclusion have to be made public. Citizens who are rendered invisible need to be identified and given a public identity. Without a focused drive towards digital inclusion, the technology that enables access will continue also to deny it and those already marginalized and disadvantaged will be further disempowered.

The university of the future has a critical role to play in addressing these issues and taking positive steps to ensure it does not reproduce and replicate wider social inequalities on campus. All staff and students should have opportunities to engage in effective and rewarding digital practices. Ensuring their confidence and competence, and promoting digitally inclusive ways of working, will ensure that when they move out into wider social spheres they take digitally inclusive ways of working and living with them.

This chapter ends where it began, with the Dearing Report (NCIHE 1997). In spite of criticism that the report is typical of the cultural contradiction of massification and democratization (Delanty 2003), it remains the first document to link the new information and communication technologies with widening participation in higher education for a public previously denied access for multiple reasons, prejudices and beliefs. Setting aside potential political motivation, it is useful to revisit Dearing ' s conclusion: ' above all, there remains an urgent need for institutions to understand better and respond to the challenges and opportunities of the emerging information age ' (NCIHE 1997: 13.57). We should no longer be seduced by the

rhetoric of ICT. Instead, attention needs to be paid to the ways in which technology reinforces existing oppressive practice. The university of the future needs to address the challenges and opportunities of its time and play a critical part in ensuring solutions and practices are inclusive and empowering. The greatest challenge of all may be the pervasive influence of the internet on digital ways of working in the twenty-first century and the uncovering of the potential implications for those for whom access to digital participation is being denied.