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The Emergence of a Digital Underclass **Digital Policies in the UK and Evidence for Inclusion**

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Key Messages

- New evidence shows that a digital underclass is forming in Britain. Although there is some improvement in access, skills and use of the internet among those who have lower education levels and no employment, these groups remain far behind other groups. As the government plans to make public services ‘digital by default’ these individuals will be unable to access them, not because of a lack of infrastructure but because of a lack of (effective) take up of the available connections.
- Exclusion of these most vulnerable groups has become entrenched. Gaps based on education and employment persist independent of age or other characteristics. They therefore represent a problem that is unlikely to go away even with better infrastructure or as younger generations grow up.
- These individuals are those that rely most on the government services that are now becoming ‘digital by default’ and will continue to do so. Those who need access to services most, from where the biggest cost savings through the digitisation of services are supposed to come, are the least likely to take these up even when access is available.





Introduction

“We can make the UK the first nation in the world where everyone can use the web” (David Cameron, 11 May 2011)

“However, maintaining the pace of growth will be no easy task since for the “easiest” classes of users saturation levels have been reached and further progress will mostly depend on the catching up of lagging socio-economic groups.” (EU Digital Agenda Score Board, 17 June 2011)

Internet use continues to increase steadily in the UK. In 2010 around 75% of the population was online, broadband take up has risen dramatically as prices have dropped. Almost everyone who uses the internet has access to broadband. So it seems that digital inclusion policies such as the Broadband UK strategy are a success story. Does this mean we can now leave it to the market to sort out the last 20% of people who have never used the internet?

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The UK government seems to think so. The policy focus has narrowed down to promoting the rolling out of infrastructure, assuming that skills and effective engagement will follow the spread of high-speed broadband infrastructure.

The data presented here shows that this approach is likely to lead to the emergence and persistence of a digital underclass. A group of people that is increasingly disadvantaged in comparison to those who have full access to and use of the internet. Infrastructure policy and improved access are necessary, but not sufficient to achieve digital inclusion.

1. Digital Inclusion Policy in the UK and Europe

This policy brief examines the implications of a recent shift in [UK digital policies](#) – away from active intervention to improve use towards emphasising the rollout of superfast broadband. This policy shift in the UK is not mirrored in EU policy and can be traced in a series of changes to programmes and structure.

- The previous government developed a policy framework which aimed to make sure that everyone is able to take full advantage from the content and services available online. Policy makers concerned themselves with improving both access to and use of ICTs such as the internet. Improving access required infrastructure improvement – e.g. rolling out access in rural areas and increasing the speed to superfast broadband. Improving use required a range of interventions – including education, literacy and public awareness campaigns – to improve use of ICTs.
- The UK model that covered infrastructure, inspiration and skills was followed by countries around the world and made the UK a leader in ICT policies in Europe. EU Policy continues to focus on both infrastructure and use but current UK policy promises in this area focus almost entirely on infrastructure. The government bodies and related organisations that dealt with the social and educational aspects – such as the Department of Communities and Local Government (DCLG), OFCOM’s media literacy programme, and the British Educational Communications Technology Agency (BECTA), are now mostly defunct. The Department of Culture, Media and Sport (DCMS) has become the central coordinator of these policies, some of those who were working on digital inclusion in other departments such as the Department for Business, Innovation and Skills (BIS) are slowly being integrated into DCMS, but most have been ‘reallocated’ to completely different and unrelated areas. The earlier question for the current policy seems to have shifted to the much narrower one of “How can we get Broadband to everyone?”

Improving use required a range of interventions – including education, literacy and public awareness campaigns – to improve use of ICTs.

- The remaining social and educational aspects of digital inclusion have purportedly been outsourced to either the commercial or third sector, which will not necessarily have broad social inclusion in mind. The commercial sector is by definition consumer and profit driven and cannot be expected to help people engage with ICTs in a meaningful way unless

there is a clear benefit to their investment. The third sector mostly targets very specific groups, and there is limited knowledge transfer between programmes.

- The biggest current initiative that deals with use is the RaceOnline led by Martha Lane Fox which is the umbrella for 1,500 organisations and initiatives, linked to but not accountable to government. One of the biggest partners, 'UK online centres' core remit is to support disadvantaged people in using the internet and digital public service channels 'by default'. However RaceOnline has not specified what being online means. Is it one off use or sustainable and prolonged engagement? Due to the lack of policy back up and the size and the impossibility of monitoring and evaluating all the different stakeholders involved, the RaceOnline is more a race for access (i.e. get people to use it once) than for full engagement through ICTs.

*“However the punchline is that this data shows that the real story is that internet use is a much more complex issue than broadband availability. It’s a tale of two different issues: People **AND** Pipes.”*

(Helen Millner, UK Online Centres, 2011)

Now that the government no longer seems interested in intervening to improve internet use we need to look closely at the existing evidence for take up. What might the consequences of a policy focusing on infrastructure be? Are there any particular groups of individuals that are likely to be left behind in this race for ever-increasing speeds?

2. The Evidence for Impact of Inclusion and Infrastructure Policies

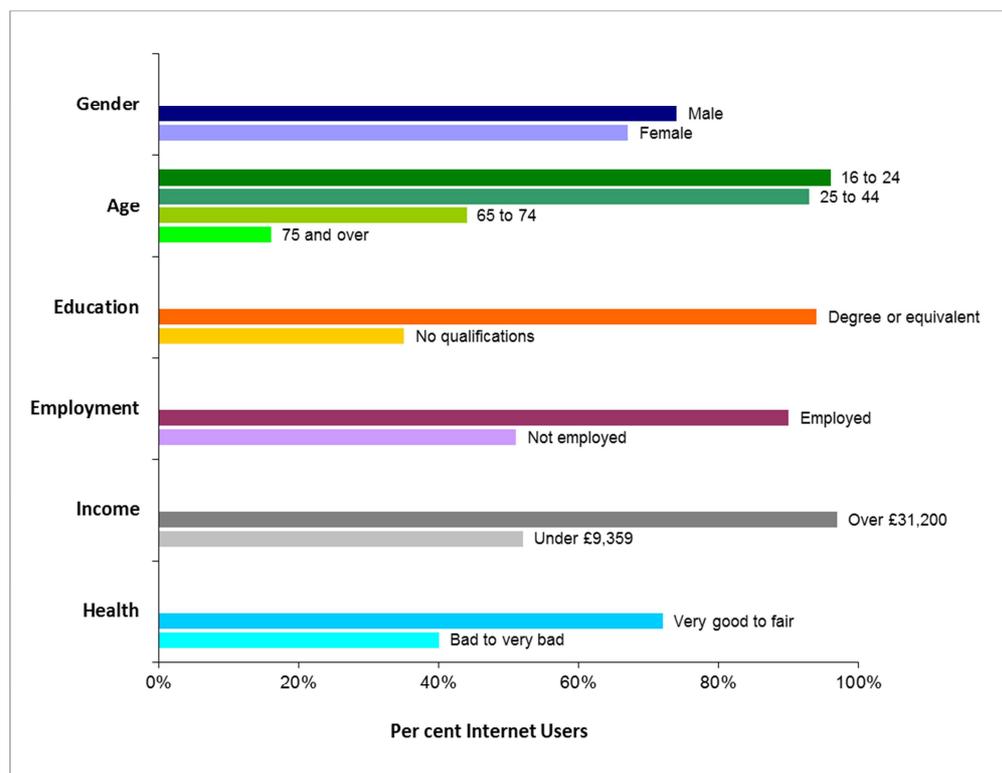
The basic facts are that in 2006 about 16 million adults used the internet daily in the UK, and in 2010 this had doubled to 30 million (Office of National Statistics, 2010¹). We need to look at where this increase comes from because if it is simply those people who were already online relatively frequently who have now become more frequent users then the risk is that participation in the digital society gets entrenched amongst the advantaged few who move even further away from those who are infrequent or non-users of ICTs. In other words, the information rich will get richer while the digital poor become, relatively, poorer.

Whilst internet use is arguably a matter of individual choice, government plans for health and other service delivery over the internet are based on ambitious assumptions about the remaining digitally excluded going online and using these services effectively.

2.1 Relative digital exclusion

One way of understanding whether a digital underclass is emerging is by comparing the most disadvantaged groups in society with those who are better off. The Office of National Statistics (ONS) has collected data on internet use since 2003 offering the opportunity to look at trends in digital exclusion.

Figure 1: Internet use by socio-economic and demographic factors in 2009



Source: ONS Omnibus Survey 2009

Figure 1 shows that the differences in frequent use between different socio-demographic groups are still considerable, even in 2009 with widespread access. Data that looks at the development of these digital divides over time can point out whether or not these differences are likely to get smaller.

2.2 Access to digital

“... A policy that we believe will solve the big question of, first of all, how we deal with the homes that are not able to get access to broadband, or access at reasonable speeds, but will also lay



the foundations for the next generation of broadband-superfast broadband-to meet our stated objective that by 2015 we will have the best superfast broadband network in Europe.” (Rt Hon Jeremy Hunt, December 2010²)

A prime indicator of digital inclusion is the quality of access that people have, which is why much policy focus is on making sure superfast broadband becomes widely available.

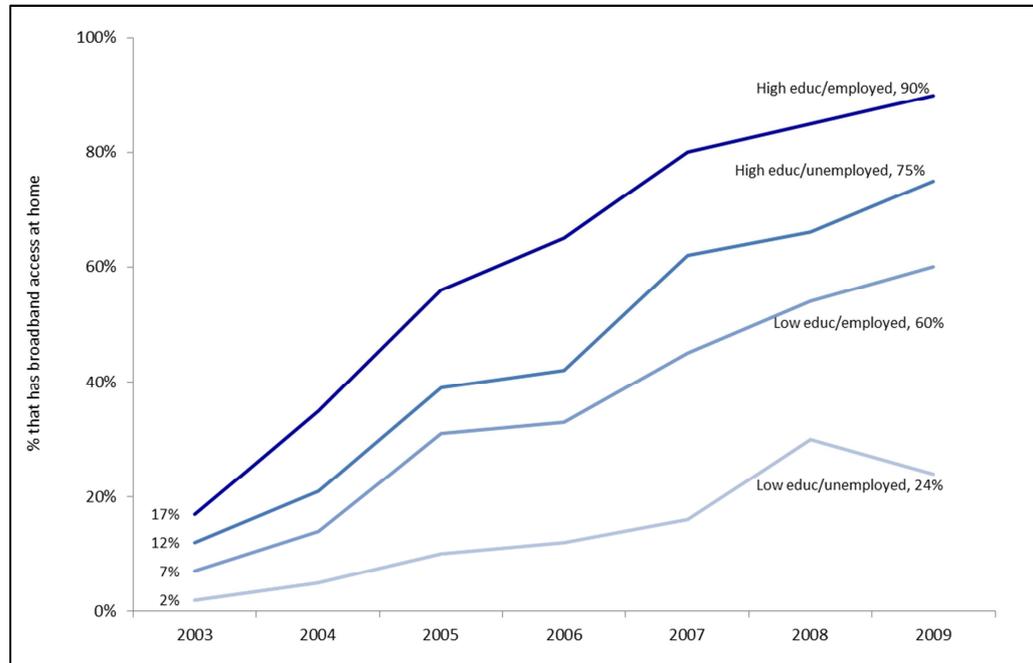
At the 2011 National Digital Conference (ND11) Rt Hon Jeremy Hunt followed his December statement up with two promises: 1) the need for speed – 90% of the population will have superfast broadband by 2015 (currently 15% has access to this) and 2) mobility – the focus is no longer on fibre but on using mobile technology. Nevertheless this was not backed up by clear commitments – what does the best superfast broadband mean? How is universality of service going to be achieved? It is not clear to what extent the government supports objectives of social inclusion and universal access, although broadband is becoming necessary for social inclusion and access to public services.

What does the best superfast broadband mean? How is universality of service going to be achieved?

What we can do is look at what the take up of “normal” broadband looks like at the moment and how it has developed over time across groups. Has general availability lead to even take up across society?

In 2003, very few had access to broadband at home (about 8% of the population) and differences between people with different backgrounds in access were unsurprisingly very small (ONS Omnibus surveys). In 2009, however more than half (ca. 63%) had a broadband connection at home. Socio-demographic background was more important in determining take up. It was the healthy, young, well educated, people with higher incomes and professionals who had taken up Broadband while those with health problems, the elderly, those without educational qualifications, low income earners and those in manual occupations were left behind.

Figure 2: Differences in broadband at home between education and employment groups³



Source: ONS Omnibus Surveys. Base: Adult Internet Users

Figure 2 shows clearly that a digital underclass is emerging. Although those who have lower education levels and are unemployed have increased their access to broadband, other groups have as well. This means that despite some gains, the gap between this group and the other three increased and in relative terms they were more behind in 2009 than in 2003. Education level and employment status became even more important in determining broadband access.

Relatively speaking, people without employment and education are digitally worse off in 2009 than in 2003, 2004 and 2005 when it comes to quality of access.

The world around them has exponentially increased their take up of higher speed connections but this group does not seem to catch up. In terms of broadband there is thus evidence for the emergence of a digital underclass. As indicated before, high(er) speed access is important, but what counts is whether and how people use ICTs. After all, it is through use that individuals reap the benefits of digital technology and gain access to (government) services in which digital inclusion policies are or should be fundamentally interested.

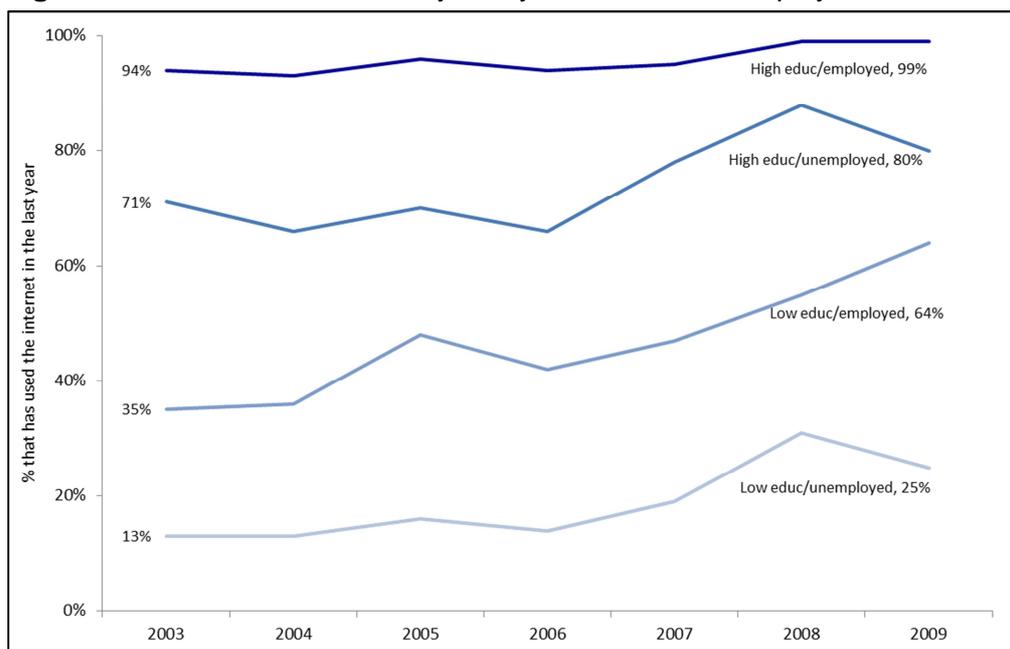
2.3 Frequent Use of internet

“There are over 9 million adults who have never used the internet, as compared with 30 million who use it every day. So it is a very important tool of social policy.” (Rt Hon Jeremy Hunt, December 2010)

“While 65% of EU citizens now go online every week, in 2010 more than a quarter of the population had still never used Internet. One year on, this has improved by 5 percentage points. The largest remaining challenge is getting the rest of EU citizens online.” (EU Digital Assembly Scoreboard, 17 June 2011)

Over the last decade, the differences in the frequency of internet use between the oldest and the youngest, the healthy and those with chronic illnesses have increased. In 2009, the over 75s were only marginally more likely than in 2003 to have used the internet in the last year, 16% used it in 2009 compared to 9% in 2003. In contrast 97% of those under 25 used the internet in 2009, a not so marginal increase from 79% in 2003. This difference might disappear over time but some studies⁴ indicate that life stage and socio-economic situation are just as important in determining use as age is. We can therefore not assume that those people who are now engaged with the internet will continue to be involved as they grow older.

Figure 3: Internet use in the last year by education and employment



Source: ONS Omnibus Surveys

Figure 3 shows that those who are unemployed and less educated are not catching up when it comes to internet use. The higher educated have been using the internet en masse since 2003, and the employed with lower education levels have considerably increased their internet use. However, the group of less educated and unemployed individuals, despite notable increases in internet use, continues to lag far behind the others.

For use, as was the case for broadband access, there is evidence for the emergence of a digital underclass, consisting of those without employment and education.

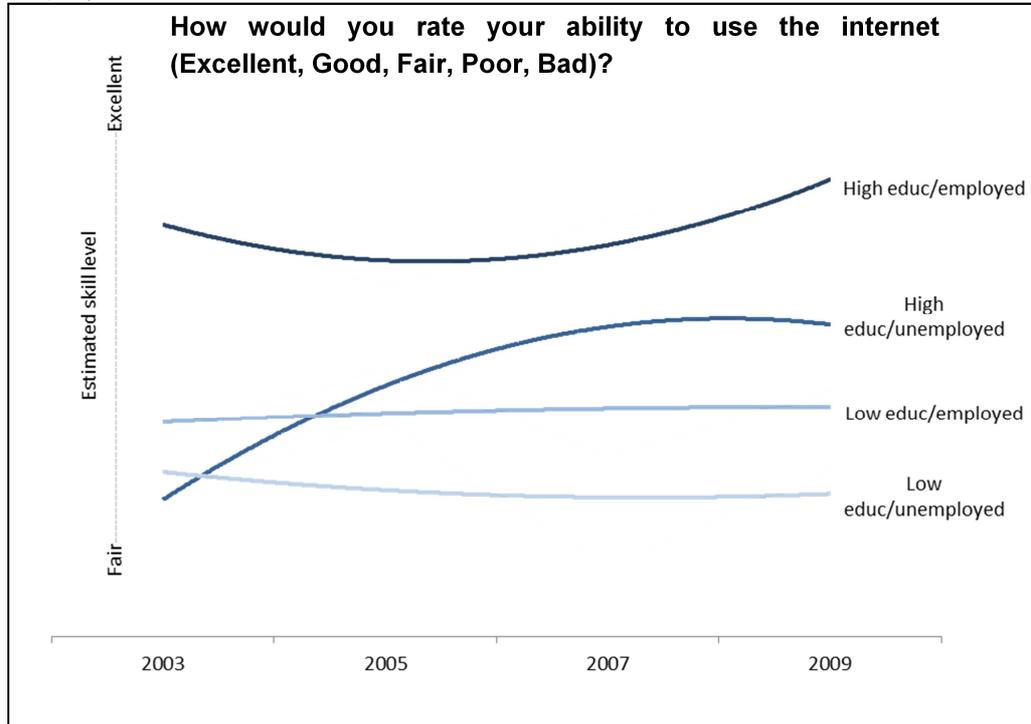
2.4 Digital skills

One argument underlying the Broadband Delivery UK (BDUK) and RaceOnline combination of government initiatives is that if policy could somehow guarantee high speed access for this particularly disadvantaged group, as well as some experience with use, individuals would start using the services provided online effectively.

“150 million Europeans have never used the internet. This group is largely made up of older people or people on low incomes, the unemployed, immigrants, and the less educated and at risk of social exclusion in general. In many cases the take-up gap is due to a lack of user skills, such as digital and media literacy and competences.” (EU Digital Agenda Pillar 6: Digital Competence)

Once someone has access to and begins to use the internet the next important step is that they begin to do so with confidence and engage with the services and opportunities available. Ofcom’s research on media literacy and previous research from the LSE Media Policy Project show that the skills for using digital technology and the internet are not evenly distributed throughout the general population⁵. What has yet to be examined in detail is whether these differences between different groups have diminished, stabilised or increased since larger part of the population started going online. The Oxford internet Surveys have collected data on skills and use of the internet since 2003.

Figure 4: Trend lines perceptions of skill level (self-efficacy) by education and employment over time.



Source: Oxford Internet Survey datasets⁶. Base: Internet Users.

The trends as presented in figure 4 show that there is depressingly little difference in internet users' perceptions of their skills over time and that this is particularly the case for those with lower education levels.

Those with higher education levels show some improvement in how they evaluate their online skills, especially and interestingly when they are unemployed. Within the group of people with low education, whether employed or not, the perceptions of skill levels are almost exactly the same in 2009 as in 2003 and significantly lower than for those with higher education. Therefore, even amongst internet users the unemployed and uneducated make up a digital underclass in terms of their skills.

The exclusion of the most disadvantaged from full engagement with the opportunities available online seems to have become entrenched, partly due to a lack of confidence, which continues to hinder them even when they have managed to secure access and go online.

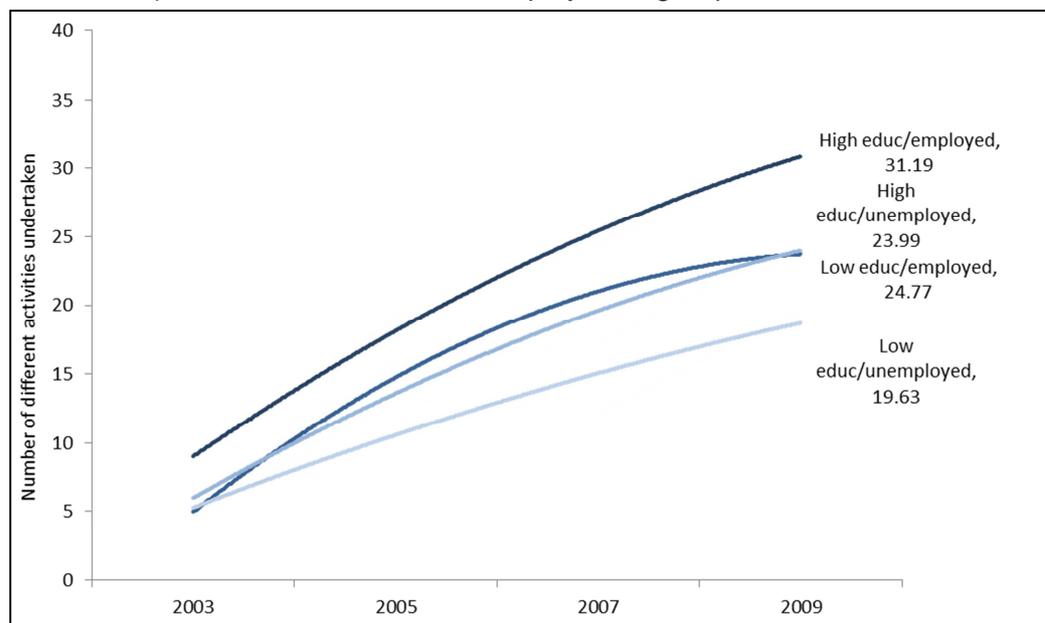
2.5 Embedded Use

The inequalities in access, frequency of use and skills have consequences for [UK Government's ICT strategy](#), presented by the Cabinet Office in 2011 which adheres to Martha Lane Fox's 'Digital by Default' theme.

“The Government will work to make citizen-focused transactional services ‘digital by default’ where appropriate using Directgov as the single domain for citizens to access public services and government information. For those for whom digital channels are less accessible (for example, some older or disadvantaged people) the Government will enable a network of ‘assisted digital’ service providers, such as Post Offices, UK online centres and other local service providers” (UK ICT Strategy, p.18-19)

One way to examine whether digital by default is going to benefit all groups equally is by looking at how many different activities people are undertaking when they are using the internet. The more different activities they undertake the more embedded the internet is likely to be in their everyday life.

Figure 5: Trend lines for breadth of use (number of different activities undertaken) between education and employment groups over time



Source: Oxford Internet Survey datasets. Base: Internet Users

What figure 5 shows is that those with less education who are unemployed have the narrowest take up of online activities. In 2009 they reported having



done fewer than 40% of the activities that they were asked to report on. This is compared to over 61% for those who were higher educated and employed. We see that the largest increase in breadth of use over the last 8 years has taken place for the higher educated and unemployed group. This might be due to some of the higher educated people becoming unemployed, especially since the breadth of use of the higher educated employed people decreased almost parallel to the rise in uptake amongst the other group. This seems to indicate that education is more important than employment in determining breadth of use. Nevertheless, amongst those with lower education levels, those who are unemployed are less likely than those who are employed to have the internet embedded in different practices. This again shows a persistent exclusion of those with compound disadvantage.

Unemployed internet users with lower education levels have incorporated the internet into fewer aspects of their everyday lives over the years and, while their use has increased, they are becoming relatively more disadvantaged compared to other internet users.

This is problematic for digital by default services because as other research shows, they are the least likely group to take up civic, economic and service activities online, even if they are internet users⁷.

Conclusion

Of course there can be no digital inclusion without access and a proper infrastructure. Most of the UK population no longer has to worry about the basics. Most people have access somewhere, but the quality of the connection and, most importantly the quality of engagement are of continuing concern. Super-fast broadband and eAccessibility initiatives are the focus of current UK policies and might actually lead to the persistence of a digital underclass in Britain in terms of skills and use unless policies are specifically aimed at narrowing the skills and engagement gap. The well-off have been able to take advantage of the better connections and the digitally excluded have become relatively speaking worse off. The voluntary and commercial sectors will not be able to narrow this gap on their own without government support.

In summary, universal roll out high speed broadband does not automatically lead to increased use for all.

Government responsibility needs to go beyond infrastructure and digital by default strategies, including action points on frequency of use, skills and depth of engagement with the ICTs, to avoid the entrenchment of a digital underclass.

- After the UK National Digital Conference (May, 2011) the coalition government's policy position is becoming clearer: physical infrastructure is stimulated through the market with limited investment from government. A sizable problem remains in terms of access that is rooted not in infrastructure per se but in socio-economic disadvantage. Since this type of deprivation is unlikely to disappear these issues are likely to remain a prominent aspect of digital exclusion when it comes to access. There is also an acknowledged problem in literacy, skills and motivation to use the internet, but leadership on this is being left to the coalition of 'digital champions' organised under the RaceOnline 2012 banner.
- The evidence shows the scale of the challenge facing the voluntary sector. When inequalities in basic access and general use go down digital inclusion as regards skills and quality of use do not necessarily follow. Therefore, policies that focus on infrastructure only cannot achieve the goal of Universal Service as stipulated



under the Universal Service Commitment because use of services will be built on existing inequalities. To achieve a digitally equal Britain as well as a digital Britain, which is what David Cameron said he wanted in his speech for the ND11 conference, policies need to address the whole spectrum of digital inclusion: quality of access, skills, motivations and effective, sustainable use. It is irresponsible to think that the latter can be handed over to industry or the third sector completely. Just as standards are set for education standards need to be set for digital inclusion across government departments and policies.

Notes

¹ Statistical Bulletin: Internet Access 2010 Households and Individuals

² <http://www.publications.parliament.uk/pa/cm201011/cmselect/cmcomeds/uc458-i/uc458-i.htm>

³ All analysis in this paper have been done for the whole population but were repeated for leaving out students and retired people, the results were almost exactly the same and can thus not be attributed to age cohorts.

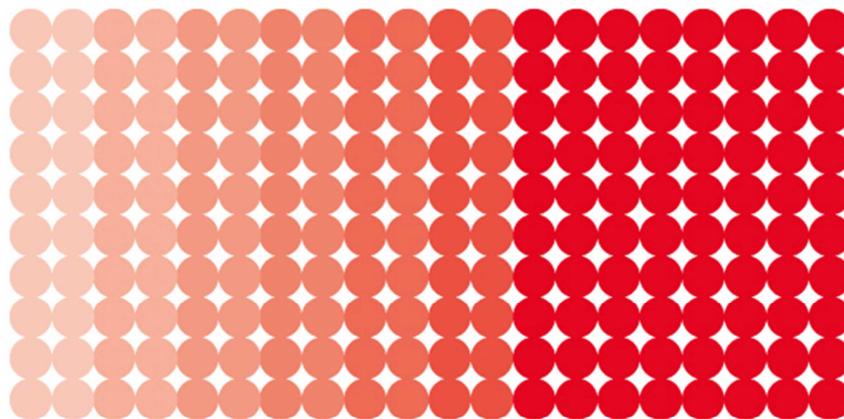
⁴ For example, Helsper, E.J. (2010). Gendered internet use across generations and life stages. *Communication Research*, 37(3), 352-374.

⁵ Livingstone, S. (2011) Policy Brief: Progress in digital skills has stalled.

<http://blogs.lse.ac.uk/mediapolicyproject/2011/06/13/media-literacy/>

⁶ <http://www.oii.ox.ac.uk/microsites/oxis>

⁷ Helsper, E.J & Galacz, A. (2009) Understanding the links between digital engagement and social inclusion in Europe. In A.Cheong & G. Cardoso (Eds) *World Wide Internet: Changing Societies, Economies and Cultures*. Macao University Printing House: Taipa (Macao).



LSE *media policy project*



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