Chapter 9 Jessie Bustillos

The Digital Divide in Europe, Neoliberal Imperatives and Education

We live in a time of rapid technological and digital development, with information communication technologies (ICTs) permeating everyday life, socially, economically and educationally. The rise of information societies in Europe, characterised by increased use of ICT and the Internet has produced an increasing social concern around the digital divide between European states, which has guickly become an indicator of social exclusion (Facer and Furlong, 2001). In this chapter, we shall explore the European digital divide within the proposition that it has become one of Europe's social problems. Significantly, the new information poverty posited by the digital divide, and its implications for individuals and the economy, have been taken up in political discourse, policy-making in Europe and it has also become a vital part of the European Union's political agenda. Some of this is evidenced by the attention dedicated to the digital divide in European policy texts such as, the World Summit on the Information Society (WSIS) in 2003, the European Commission's report, A Digital Agenda for Europe, presented in Brussels in 2010, and the communication from the Commission to the European Parliament, Opening up Education: Innovative Teaching and Learning for All Through New Technologies and Open Educational Resources (2013).

With reference to European information societies, this chapter seeks to address some of the existing insufficiencies in understanding the digital divide, which may limit the treatment of the issues, as needing to be framed through the 'proposing of simple, dichotomous models, building on the classic "haves vs have nots" distinction' (Comunello, 2013: 631). This chapter will also build theoretically harnessed implications for education; as formal systems of education are envisaged as sites where, as a society we continuously seek to address society's pressing social problems. This chapter explores different characteristics of the digital divide in Europe, including the different types of divide (such as the user type divide), the divide which cuts across the different European countries and the invisibility of the digital divide. It is also argued, by drawing upon Foucault and others, that Europe is characterised by a new sort of education fuelled by neoliberalism. This chapter will situate these ideas by looking at the notions of the cyber learner and cyber citizen as a new form of citizenship in a digitally divided Europe. On the one hand, the chapter approaches the issues presented sociologically; with a socio-cultural analysis, accounting for the national digital divides in Europe and how the digital divide has shifted in recent years. Another part of the analysis focuses intermittently on education and outlines some of the entanglements between the new enterprise culture affecting European education, and the focus on developing neoliberal subjectivities as expressed by recent legislations and policies in Europe. On the other hand, it uses the notions of neoliberal subjectivity (Rose, 1996) and power and governmentality (Foucault, 1994) to critique the cultivation of neoliberal imperatives - autonomy, fulfilment, responsibility and choice - through the apparently equality-seeking policies addressing the digital divide in Europe, which have been produced by the European Commission, leading to the Europe 2020 strategy.

The digital divide as part of changing European societies

Having located this chapter within an initial theoretical and argument-led structure, the next section starts to ground definitions and describe geographical nuances and indicators, that have traditionally pointed to the existence of a digital divide in Europe. Keeping this goal in mind, it is important to remind ourselves that debates concerning issues of social justice, such as, the digital divide, need to be understood as axiomatic with the nature of changing societies. European societies have undergone a huge transformation in the last thirty years, entering a phase of rapid technological advancement, which has made the world of the digital a necessary knowledge for modern living in these new digitalised information societies. Lack of know-how of technological and digital innovation affects individuals' opportunities in the world of work, education and everyday life, as well as, becoming a new aspect of social exclusion (Scheuch and Sciulli, 2000). The gap in skills, usage levels, access and everyday utility associated with the digital divide, have a direct impact on the lives of individuals, thus, transforming these new inequalities into a modern social problem in Europe. Some of the key challenges faced by European states in the new millennium were seen to be, the steady transformation of European societies into societies, 'where everyone can create, access, utilize and share information and knowledge' (WSIS 2003: 9). European states find themselves under various pressures, which exceed those of a national environment to a global environment, thrusted upon them by the dynamics of the European Union (EU). To this effect, the EU has released the Europe 2020 Strategy, 'which seeks to exit the crisis and prepare the EU economy for the challenges of the next decade' (European Commission 2010: 42). Yet, in Europe these challenges are closely aligned with political discourses, juxtaposing economic growth, a need for a technologically-informed population and profound changes to systems of education. In the UK, the harnessing between digital advancements, economic growth and education have been repeatedly articulated by politicians, perhaps better illustrated by PM Tony Blair's comments:

'To thrive in the global knowledge economy it is going to be important to change the whole educational system to ensure a wide base of knowledge workers who understand and use new information technologies...It is important that there be an army of skilled technical experts who understand and can apply technical knowledge. These workers are the underpinnings of the knowledge economy' (PM Tony Blair cited in Ball, 2008: 16).

With these various motions of policy enactment in Europe and political discourses, it seems evident that, information and communication technologies have a central role in the needed growth and socio-economic development that needs to take place, if Europe is to realise the goals of the Europe 2020 strategy. The profound changes in the political, legislative, economic and growth-oriented landscape in the EU, have also had a huge effect on the everyday social life of people living in Europe. A social reality which requires an increasingly digital and technological immersion and skill, which needs to be reflected in government practices and administrative processes; pervading the experiences and minutiae of everyday life of individuals. Before we take a step towards our further analysis, it is important to assess the term digital divide and to outline some of the attempts to measure it in Europe.

Understanding the Digital Divide in Europe

The digital divide as a phenomenon has been examined through various disciplines; this has produced an intersectionality about the term. For instance, in political science the digital divide is investigated in terms of aspects of governance and democracy; in communications there is an emphasis on the digital divide debate as a wider debate for social inclusion, and in economics and business it has been observed

as a challenge to desired e-business and e-commerce activities (Lengsfeld, 2011). Whilst there have been various convincing attempts at defining and measuring the digital divide, and attempts to consider its implications for labour markets, and other economic and technological aspects in Europe (Ramos and Ballell, 2009; Lengsfeld, 2011; Cruz-Jesus et al 2012; Armas Quintá and Macía Arce, 2013); there is often an overlook of any socio-cultural dimensions linked to the digital divide in Europe. This chapter offers a study of the digital divide in Europe which considers the sociological, educational and wider socio-economic implications, not just as one of Europe's social problems, but also as a process of 'neoliberal becoming'; which occurs differently in the various European states.

With reference to the emergence and importance of the digital divide in research, and later in aspects of governance within the EU, it is significant to point out that, in the last fifteen years there have been around '852 journal articles and books published... with more than 26,000 citations using the term "digital divide" as keyword' (Cruz-Jesus et al, 2012: 279). The numerous scholarly articles on the digital divide, coupled with the attention world leaders give to the term, puts this phenomenon at the centre of the digital agenda for political change in Europe. This is partly because digital development is seen as a driver in the creation, progression and maintenance of information societies.

The Organisation for Economic Co-Operation and Development (OECD) defines the term as: 'digital divide refers to the gap between individuals, household, businesses and geographic areas at different socio-economic levels with regard both to their opportunities to access ICT and to their use of the internet for a wide variety of activities' (OECD, 2001: 32). This is an important definition because it speaks of the term with reference to two dimensions, access and use, but it also uncovers geographical aspects and socio-economic aspects that might characterise this dimension of inequality in Europe. There has been a definite move from understanding the digital divide as, to do with the "haves and have nots", to a wider view involving patterns of, access, usage, socio-economic factors and geographical differences in Europe.

Recent studies like the one conducted by Cruz-Jesus et al (2012) have provided a comprehensive picture of what the digital divide looks like in Europe. Their study proposes that the European digital divide can be currently explained:

'by two latent dimensions....The ICT infrastructure and adoption by population...This dimension includes the internet and broadband penetration rates, the usage of mobile devices to access the internet, the availability of e-government services by the supply (public) side, the adoption of e-government services by the users' (population) side, as well as the nature and intensity of Internet use. The second dimension is related to the commercial use of the ICT...and is therefore named e-business and Internet access costs...related to the diffusion of e-business, including the diffusion of e-commerce' (Cruz-Jesus et al, 2012: 283).

Based on these two dimensions the analysis by Cruz-Jesus et al (2012) shows that Bulgaria and Romania have the lowest levels in relation to the average on the two previously mentioned dimensions. The countries setting the average in Europe and with no particular high levels of ICT infrastructure, or ICT adoption by population, but still considered 'relatively digitally developed, with balanced levels on both dimensions' are, Austria, Belgium, Germany, Ireland, Malta, Poland, Portugal, Slovakia, Spain and the United Kingdom (Cruz-Jesus et al, 2012: 284). There are other countries which have 'highly unbalanced digital development and which have been called, the individual-side focused', because of their emphasis on population usage and access, which does not convert to balanced levels in e-business; these countries are, Estonia, France, Hungary, Latvia and Slovenia (Cruz-Jesus et al, 2012: 284). Finally, the groups leading digital development and presenting less disparities in their own national digital divides are, Denmark, Finland, Luxembourg, the Netherlands and Sweden. This study is useful in understanding the asymmetries between European countries, however, it does not account very clearly for the reasons why these digital divides might exist. Interestingly, the study does provide an outline of how many EU countries, which are considered to be developed economies, for instance France, have such uneven disparities between ICT adoption and usage by population and the proliferation of e-business and e-commerce.

Different aspects of the digital divide: Shifting to Differences in Usage?

Having made sense of some of the initial differences in technological and digital activity and engagement in Europe, it is important to understand the digital divide more holistically. In recent years there have been new ways in which the digital divide in Europe has been studied. These have led to a re-conceptualisation of the digital divide, which problematises trends in Internet usage, rather than just demarcating issues of access. These new perspectives are also useful in helping us understand why there are developed countries in Europe with uneven uptakes of ICT usage and adoption.

These disparities could be partly understood by considering economic inequalities in different EU states. To this effect, Hsieh et al (2008), have shown that economically advantaged and disadvantaged people have very different post-implementation behaviour and use of ICT; they argued that 'economically advantaged people have a higher tendency to respond to network exposure' (Hsieh et al, 2008 : 97). Similarly, the digital divide in Europe might be connected to other demographic factors; links have been traced between this new dimension of inequality and how it affects individuals from lower income families, belonging to ethnic minorities, those with disabilities, or with low educational attainment. Recent studies have pointed to how the digital divide between European states is:

'mainly a consequence of economic inequalities between countries. The term information rich and information poor have appeared to classify countries in terms of their digital development. Besides economic development, countries with lower educational attainment also tend to present lower rates in the use and adoption of ICT' (Cruz-Jesus et al, 2012: 280).

As pointed out above, education is also understood as a wider characteristic that can be explored to explain why the digital divide is how it is in Europe. In terms of education, studies have considered the influence of aspects of education on the digital divide, such as, school attendance, levels of educational attainment, use of ICT in schools and universities (Sims et al, 2008; Youssef and Ragni, 2008; Warschauer et al, 2004). These factors, arguably, have a strong effect on how individuals learn to be digitally literate, and how they envisage their own digital use in everyday life.

There are other important distinctions regarding ICT and Internet access and usage. Contrary to what people might think, there are various cases in Europe where people from poorer backgrounds and people with low educational levels have high levels of ICT and Internet access and usage. With reference to this factor, Van Deursen and Van Dijk (2013) report on how people with low levels of education in the Netherlands use the internet for more hours a day, in comparison to their more educated counterparts. Moreover, they also found that disabled people use the internet for more hours a day than their employed counterparts. This is an interesting result since it challenges a lot of the research on the digital divide in Europe. Additionally, the case of the Netherlands is interesting, since the country as explored above, has high and balanced levels of ICT usage, adoption by individuals and government and e-business implementations. Van

Deursen and Van Dijk (2013: 507-508) claim that, 'in the first three decades of its history, the internet was completely dominated by people with a high or medium level of education, both inside and outside of work and school'. Therefore, these observations around people with low levels of education surpassing internet usage levels, when compared to others who have higher levels of education, may suggest that the digital divide may finally be closing. Yet, they seem to suggest something different in relation to the digital divide, that it is changing, and that the nature of internet use emerges as a more critical issue (Van Deurse and Van Dijk, 2013; Brandtzæg et al, 2010).

The emerging issue here is, that the digital divide literature had discounted the role of ICT and digital development in relation to the sustenance of knowledge-based societies and the knowledge economies in Europe. This points to how in Europe the digital divide has shifted from, simple inequalities of access or adoption of technologies, to differences in usage. Van Deursen and Van Dijk (2013) argue that this new distinction can be founded on the theoretical relevance of the 'knowledge gap and the usage gap hypothesis'. The knowledge gap theory suggests that, with the instillation of mass media information into social systems of everyday life, the groups in society with higher socioeconomic (and educational) levels tend to appropriate this information more rapidly than other groups in society. The use of traditional mass media, on which the knowledge gap focuses, is relatively straightforward and uniform, if it were to be compared to internet use (Bonfadelli, 2002). Namely, the functionality of media, such as, radio, television and print media, and the Internet is significantly different; the 'latter requires a broad range of skills enabling navigation through a vast amount of information rather than simply reading newspapers or watching television' (Van Deursen and Van Dijk, 2013: 509). Consequently, the Internet creates a usage gap that is different from the knowledge gap. Since the knowledge gap is about the possible drawing of knowledge from traditional media; whereas the usage gap is more relevant to the information-rich societies in Europe. The usage gap implies that there is a normative account as to what is valuable and worthwhile internet use; and that there are some activities that are more desirable for people to engage in, which should enable them to benefit from living in, informationrich, knowledge-economies, like many European societies (Hargittai and Hinnant, 2008; DiMaggio et al, 2004).

Similarly, Brandtzæg et al (2010) have also conducted some research which claims a shift in the traditional digital divide. In their research, Internet usage patterns in Europe allowed them to cluster users into five categories, Non-users; Sporadic users; Entertainment Users; Instrumental Users and Advanced users. Some of their findings suggest that a total 60% of their sample was reported to be falling within the clusters of Non-users and Sporadic users, which points to how 'most citizens still lack the higher level of usage patterns for digital participation. This situation indicates that the digital divide is still a large scale problem in Europe' (Brandtzæg et al, 2010: 132). With reference to previous studies conducted between 2004 and 2006, Brandtzæg et al (2010) found that there had been a decline in the digital divide of only 2%; they found this surprising since the countries researched are well developed countries, with healthy economies, and with high Gross Domestic product (GDP).

Importantly, the study by Brandtzæg et al (2010) found an increase in Entertainment users in Europe, however, these variations seemed to have little effect on the overall digital participation desired from citizens in Europe. There seems to be a clear shift in the ways the digital divide is understood in Europe. Whilst issues of access seem to be useful in explaining why there are more instrumental users in countries such as 'Austria, Spain, and Norway', it does not help explain Instrumental users in 'Sweden and UK', where there are high levels of Internet and Broadband access (Brandtzæg et al, 2010: 133). It is evident from Brandtzæg et al's findings that the Internet usage divide is the key feature of the new digital divide among European countries with considerably high access to both PC and Internet technologies. All of the different clusters of Internet use represent a different form of online participation and 'a digital divide that goes beyond "the haves" and the "have nots". The results rather suggest a "user type divide", where unequal Internet usage or online participation is the key to understand the new digital divide' (Brandtzæg et al, 2010: 135).

Subsequently, the growing concern around the digital divide as referring to gaps in access to computers (Van Deursen and Van Dijk, 2010), has been diffused among a more critical dimension which problematises issues of digital equality in Europe. Arguably, the new digital divide encompasses not just the access divide, but also 'the misconception that all users are equal and equally creative, particularly in relation to the so called Web 2.0 culture in which everyone is defined as being a participant in the new internet services' (Brandtzæg et al, 2010: 123). The world of the internet and the culture of the internet mean different things to different people, differential uses and personal appropriations of the internet in Europe might be widening the gap within this new perspective on the digital divide. As we have explored there are various indications pointing to education and more specifically schooling as the site where digital inequalities can be addressed. Nevertheless it is not sufficient to account for the way in which the digital divide has shifted. The new digital divide is therefore marked by an intrinsic desirable set of internet practices and of course, a less desirable set of internet practices. The desirability of these internet practices is then constructed around the needs of the economy, dominant political discourses and neoliberal imperatives.

Crucially, it is not the case that countries with marked disparities in their national digital divides have poor systems of education; rather, it might be suggested that it is a consequence of how these economies are pervaded by neoliberalism (which will be explained in more detail later in the chapter) and wider economic inequalities (Rose, 1996), which we have been discussing. The new digital divide as to do with Internet usage activities suggest that:

'Some activities offer users more chances and resources in moving forward in their career, work, education and societal position than others that are mainly consumptive or entertaining...In terms of capital and resources theory, inspired by Bourdieu (1984), one could also say that users build more economic, social and cultural capital and resources' (Van Deursen and Van Dijk, 2013: 509).

This passage explains how the expected use of the Internet needs to involve people digitising themselves in ways that benefit the competitive economic realities of Europe. Both in the policies by the European Commission on the digital divide, and in political discourse, citizens need to use digital technologies and the Internet to further their careers, to secure a stable and financially independent existence and to have a better chance at improving their social mobility. These are important characteristics of the type of neoliberalism present in Europe and which demarcates the digital agenda for the EU.

The digital divide and the case for European Education

The digital divide, unlike more pragmatic inequalities in housing, welfare, health or educational attainment, has tended to remain invisible within calls for social justice in Europe. Crucially, the existing calls for modernisation in education in Europe, seek to undo the invisibility of digital inequalities, and articulate a clear need for addressing aspects of the digital divide in Europe. Established systems of education are entangled with the digital formidability needed to keep up with global economies marked by competition and technological innovations. To this effect, there have been several communications to the European Parliament indicating 'the need for more advanced EU education', as it is seen as, 'failing to keep pace with the digital society and economy' (European Commision 2013: 2). Similarly, concerns surrounding social justice in European education are perceived to be challengeable through the systematic incorporation and uses of technologies to improve students' experience of education. Policy-makers within the European Union are preoccupied with how the 'EU also risks lagging behind other regions of the world', when 'technology provides the opportunity to increase efficiency and equity in education' (European Commission 2013: 2/3); this, in turn has further entangled improvements to education with technological advancements. Therefore, the future of European education is embedded within the wider plane and promise of access and expert use of information, communication and digital technologies.

These entanglements discussed above, traversing systems of education, concerns with social justice, economic imperatives of competition and digital and technological innovations, make up the socio-cultural landscape in which the digital divide exists now. Importantly, these aspects influence the way in which the purposes of education are understood, the roles of students and teachers within education systems, ideas of learning as not bounded by space, but they also conflate digital and technological advancements with what students want and need to thrive in education in Europe:

'Today's learners expect more personalization, collaboration and better links between formal and informal learning much of it being possible through digital-supported learning. However, between 50% and 80% of students in the EU never use digital textbooks, exercise software, broadcasts/podcasts, simulations or learning games. The EU lacks a critical mass of good quality educational content and applications in specific subjects and multiple languages as well as connected devices for all students and teachers. A new digital divide in the EU, between those who have access to innovative, technology-based education and those who do not, is on the rise as a consequence of this fragmentation of approaches and of markets' (European Commission 2013: 2)

At policy level we see that Europe is preoccupied with not just providing a digitally advanced technology-based education but also with the creation of digital content of a particular educational value. The value still appears to be dictated by wider economic pressures and the market in which education happens. Therefore, students are constructed as needing and wanting to experience an education marked by digital and technological advancements at different levels. However, these assumptions are also evidence of how 'young people, like technologies, are constructed within current popular discourse as the natural inheritors of future societies' (Facer and Furlong, 2001: 452); as such, trajectories in education need to change to supply the demands, that this construction of young learners requires. It is then not surprising that the new envisaging of the modern learner and the young in our society is closely associated with the mastery of digital technologies. In Europe, these entanglements are characterised by the need of remaining a global, competitive economy, in which the digital divide is a pressing threat, since the 'easy appropriation of technological expertise is...associated with the acquisition of cultural capital in a technology-rich economy' (Facer and Furlong, 2001: 452).

At the heart of the calls to understand, measure and address the digital divide in Europe is also an awareness of other global competitors and their innovations. This is coupled with the need for digitality and technological development in education as it is seen as crucial to maximise issues of inequality of access and inequality of outcome:

'The EU also risks lagging behind other regions of the world. The USA and some Asian countries are investing in ICT-based strategies to reshape education and training. They are transforming, modernizing and internationalising education systems with tangible effects in schools and universities on access to and cost of education, on teaching practices and their worldwide reputation or branding. A case in point is that much of the supply of digital content comes from players outside Europe, including from educational institutions offering their courses globally through Massive Open Online Courses (MOOCs)....and yet technology provides the opportunity to increase efficiency and equity in education (European Commission 2013: 3).

Interestingly, in Europe there has been a gradual equation of higher levels of social justice with the creation and provision of technology-based education. Much of this understanding has been arrived at through a process of societal and political development and change, which saw the emergence of new information societies in Europe, re-defining social life as becoming technology-led, open to global digital content

and needing a new digital generation to decode the future. This new digital generation has been written about as the 'Net generation', the 'Digital Natives', or, if bounded by age, the 'Cyberkids' (Facer and Furlong, 2001: 463). These constructions are also suggesting something very specific about learning and the rise of the new information age and the knowledges it produces. More specifically, that technology-based education provides the conditions for understanding the fluidity of knowledge, the malleability and availability of information and the power of digital collaboration and digital content, within the social justice ideal of education for all:

'The potential benefits of the digital revolution in education are multiple: individuals can easily seek and acquire knowledge from sources other than their teachers and institutions often for free; new groups of learners can be reached because learning is no longer confined to specific classroom timetables or methods and can be personalised; new education providers emerge; teachers may easily share and create content with colleagues and learners from different countries; and a much wider range of educational resources can be accessed. Open technologies allow All individuals to learn, Anywhere, Anytime, through Any device, with the support of Anyone.' (European Commission 2013: 3).

It is evident that in Europe there is a current move to open education up, not just to the digital revolution, but also to a more globalised understanding of knowledges, however, this is still bounded by the needs of the knowledge-economy. Open technologies are seen as enabling and generating a new response-ability to both students and educators; to create spaces of learning attentive to global circumstances and digital content, that can make learning accessible and open to all.

Nevertheless, these recent calls and modernisations often essentialise the effects of non-participation by students in this almost inevitable digital culture. There has been an overlook of these effects, even when there is extensive evidence that the digital divide exists, that it is changing to differences in usage and that it has a long-lasting impact on individuals' lives. These debates are problematic and the phenomenon of needing to be digitally-aware and participating, as expressed by the term of the 'cyberkid', unravels very differently for young people involved in education in Europe. In this digital age, the idea of being 'successfully young' is embedded within the features of being technologically-skilled and digitally-participating; the young people excluded from the information revolution through lack of expertise or access to technology, explicitly distance themselves from the values of the digital age in an attempt to save face. This distancing process is further mapped out in research by Facer and Furlong (2001) when interviewing a teenager residing in a rural area of southwest England:

'It's like because if you can't do it...if you think about it right, if you cant' play football you think it's rubbish, if you can't do like computers you think it's rubbish...because if you're not that good at it, well, you don't like it do you? you don't want to do something you don't like' (463).

Yet, there is a further aspect of exclusion that arises if students were not to engage in participatory practices that characterise education in the age of the digital revolution. Students who do not engage in technology-based education and who do not digitally blend their learning, are not seen as engaging in the new formations of knowledge and knowing about the world that the new information age requires. These students are seen as failing to develop the digital and technological capital needed to navigate through the new information-rich and knowledge-based economies. Whether this is as a consequence of the effects of the digital divide or, through personal circumstances, becomes irrelevant; since within education, the new identity of the ideal learner is constructed upon the notion of the cyber-student: who accesses global information, and digital content, whilst creating, sharing and manipulating tangible digital content, which evidences his learning and his positioning as a successful student within a new digitised reality in European education.

The Development of New Digital Selves: Neoliberalism and Subjectivities

As we have explored throughout this chapter, the digital divide in Europe has shifted from its emergence as the existing gaps in access to ICTs and the Internet, to the various differences in Internet use by individuals. In the context of the European Union, there seems to be a central preoccupation with developing and maintaining Internet practices that allow individuals to participate in social environments imbued with digital and technological advancements:

'where everyone can create, access, utilize and share information and knowledge, enabling individuals, communities and peoples to achieve their full potential in promoting their sustainable development and improving their quality of life' (WSIS 2003: 9).

Within this shift of the digital divide, civic and active social participation becomes increasingly reliant on technological and digital prowess and know-how. As with many other perceived social problems in Europe, education has been used to address many of

the perceived inequalities. As a result of this, it is important to point out that calls to address the digital divide in Europe through changes to systems of education has led to new ideas about learning and the learner in Europe. Firstly, ideas about learning as becoming increasingly shared and global and de-centralising the power of the teacher as a bearer of knowledge, and knowledge as becoming more autonomous through information technologies. Secondly, ideas about the learner as wanting and needing this perceived autonomy that the Internet and ICTs afford, which have successively constructed students as the 'Net Generation'; idealising students as cyber-learners who should use digital technologies to further their education and to self-instruct.

Yet, an important part of these new understandings and the shifts in the digital divide, indicate that these new ideal constructs of the 'cyber-learner', or the 'cyber-citizen', who has the required digital-awareness to navigate life in technologically advanced societies, are impinged by the logics of neoliberalism. Within this context neoliberalism is understood as 'an enterprise culture accorded a vital political value to a certain image of the human being'...the 'image of an enterprising self' (Rose, 1996: 151). A self that works on itself, that reflects and improves his/her quality of life, that has respons-abilities, which as an expert, understands and uses to act upon his/her 'self'. As explored in the initial quote above this neoliberal selves are to self-develop in a digital environment, using technologies in a way that allows them 'to achieve their full potential in promoting their sustainable development and improving their quality of life' (WSIS 2003: 9). Here is some of the political value that Rose (1996) points to, a value that denotes the power governments exert over subjects through legislations and policies.

In the case of the European Union and the digital divide, it is interesting to see how there is an emphasis on digital skills and Internet use to translate into commercial uses of ICT that lead to increased e-business and e-commerce (Cruz-Jesus et al, 2012: 283). Again pointing to the desirability and undesirability of certain Internet practices and uses in Europe. This presupposes that the individual is to become a digital self that can act in correlation to desired political values which promote capitalist enterprise, entrepreneurship, economic independence and autonomous citizenship. This in turn favours the new economic targets of governments in Europe currently reforming and reducing social welfare and public services. This is the enterprise culture, so important to the creation of neoliberal subjectivity, which has been 'associated in particular with the regimes of Margaret Thatcher in the United Kingdom...and now proving so attractive to politicians in the many former welfarist polities in Scandinavia, Australia, New Zealand and elsewhere' (Rose, 1996: 150).

As explored in previous parts of this chapter, the usage gap that characterises the new digital divide suggests that there is a normative and desirable set of Internet practices that individuals should engage in. These Internet practices are important contributors to the development of neoliberal subjectivities that are perceived to thrive in information-rich societies, like most of the societies of European states. Van Deursen and Van Dijk (2013) argued that the new shifts in the digital divide in Europe create a new usage gap, that goes beyond the original access gap. Crucially, this usage gap is also underpinned by neoliberal imperatives, seeking to develop subjectivities, (that is people who think of themselves and *on* themselves) that value economic independence, entrepreneurship, autonomy and self-promotion in the new knowledge economies of the twenty first century. As Rose (1996: 151) argues these neoliberal subjectivities envisage the individual as:

'a subjective being, it is to aspire to autonomy, it is to strive for personal fulfilment in its earthly life, it is to interpret its reality and destiny as a matter of individual responsibility, it is to find meaning in existence by shaping its life through acts of choice. These ways of thinking about humans as selves, and these ways of judging them, are linked to certain ways of acting upon such selves'.

Of course notions of subjectivity and personhood vary greatly from country to country, from society to society. These variations can be explained by examining the ways in which *being a person* might become connected to religious, legal, economic or other practices which bear upon people at a particular time and in a particular social, economic and political climate. However, this notion of neoliberal subjectivity allows us to uncover some of the enterprise culture which has swept across Europe in recent times. The ways in which the digital divide has been presented, defined, studied and repositioned has allowed us to see the various forms of political and governmental power which filtrate down through to our *-selves* through various aspects of social life, such as education and work, just to name a few. Michel Foucault's work on power is very illustrative here, since in his writings Foucault (year) concentrated on rejecting the traditional ways in which power is made sense of, as restraining, constraining and repressive. Instead, Foucault presents us with an account of the study of forms of power

which 'analyzes power not as a negation of the vitality and capacities of individuals, but as the creation, shaping, and utilisation of human beings as subjects' (Rose, 1996: 151). Therefore, power is not an abstraction or concept, nor a set of rules, power works through people and not against people.

Similarly, another way to explore power relations as argued by Foucault (year) is through the notion of 'governmentatlity'; a notion explaining the various mentalities of government which produce specific, practices, regulations, policies, political strategies and tactics which influence social institutions (or the authorities) to seek a desirable states in human lives, such as, wealth, health and economic independence. These desirable states reflect the particular 'governmentality' of nation states. In the case of Europe, it can be argued that the mentality of government seeks to act upon the lives of people by nurturing and rewarding the neoliberal economic imperatives of, economic independence, self-efficacy, accountability through the promotion of choice and a sense of responsibility for one's own well-being. We can explore how this form of power works, following a Foucauldian perspective, through the emphasis placed on using the Internet for e-commerce and e-business in Europe; this has become a strong indicator of the new digital divide among European states (Cruz-Jesus et al, 2012). As indicated by Van Deursen and Van Dijk (2013) in their study of the Netherlands, the unemployed, the disabled and the less educated use the Internet and various ICTs for longer hours than other sections of society. Yet, there is a marked difference in Internet use, which points to a usage gap, whereby people in employment and in formal education are more likely to use the Internet and ICTs for self-promotion online, improving work statuses and business start-ups. Whilst their less educated and unemployed counterparts use the Internet and other ICTs for gaming, online entertainment, or to access basic public services. This latter group are constructed as 'failing' to engage in the meaningful and constructive digital activities which allow them to benefit from living in information-rich societies (Hargittai and Hinnant, 2008; DiMaggio et al, 2004), but only because there is an accepted and desirable use of the Internet and ICTs marked by neoliberalism, and pursued by current governments in Europe. There is an envisaged 'enterprising digital self' in the legislations and policies produced by the EU on the need for developing digitally-advanced societies which can meet the 2020 economic targets. The term enterprising here 'designates an array of rules for the conduct of one's everyday existence: energy, initiative, ambition, calculation, and personal responsibility' (Rose, 1996: 154). The enterprising digital self, is that who seeks to make the most of its technological and digital engagements, to make the most of business opportunities online, to present itself as a credible candidate on social media, to showcase itself as a project online, through calculated Internet engagements which help it shape itself into that which it wishes to become. The described ways in which we are expected to engage with the Internet and ICTs in Europe, in order to address the current digital divide, is to ascertain a neoliberal reality, to think of our *-selves* as neoliberal subjectivities, in the world of education, in the world of work and even in our private lives.

Conclusion

For a better understanding of the digital divide in Europe there is a need to recognise that the original digital divide, which described the the gap between people who have and do not have access to the Internet and computers, has shifted and produced a new digital divide. The new concerns around the digital divide seem to suggest that there is a growing gap in terms of Internet usage and digital skills. Through exploring the various communications by the European Commission it is evident that developing digital and Internet skills across the EU nation states is an important priority for Europe. A priority which has been extensively addressed through systems of formal education. There are clear calls to modernisation within debates around the future of European education. The proposed changes suggest that increased digitality and technological advancements in education are paramount to give students a truly global education. Similarly, there are claims that technologies help achieve issues of social justice in education. This is in direct opposition to the findings by recent studies discussed in this chapter on the digital divide, which suggest that increased access to the Internet and computers opens up a second, more inscrutable divide around Internet usage differences.

Having explored various policies and texts by the European Parliament, there is consensus that they are pursuing solutions to the current digital divide. Nevertheless, the way in which Internet use and technological development have been envisaged in policy is also against the backdrop of neoliberalism. There is an inherent political agenda which asks of individuals particular types of Internet use; to self-promote, to do business online, to use the Internet to develop their own lives as an enterprise; this has been argued in the chapter with the help of the notion of neoliberal subjectivity. Developing measures to address digital inequality espousing the logics of neoliberalism in private, personal spheres, that is, in people's everyday lives, might aggravate social inequalities in Europe. The focus on using the Internet and developing digital skills to allow us to wield a neoliberal subjectivity which is autonomous, competitive, entrepreneurial and self-efficient becomes a new dimension of social exclusion, and a very difficult one to challenge. If people with low levels of Internet skills, struggle to find information online, in an age when an increasing amount of information is going online, they become disadvantaged through their own gap in skills, or lack of physical resources. These disadvantages could be addressed by upskilling the population and making physical resources, such as PCs and fast Broadband connections available. But if they then are expected to use the Internet and other technologies in particular ways that suit political agendas, they become ideologically and structurally excluded.

Bibliography:

European Commission, Opening up Education: Innovative teaching and learning for all through new Technologies and Open Educational Resources, Brussels, (2013).

European Commission, Europe 2020 - A Strategy for smart, sustainable and Inclusive Growth, Brussels, (2010)

European Commission, A Digital Agenda for Europe, Brussels, (2010).

OECD Understanding the Digital Divide, OECD Publications Paris, (2001)

WSIS, World Summit on the Information Society: declaration of principles, World Summit on the Information Society, Geneva, (2003)

Armas Quintá, F. and Macía Arce, J. (2013) The Information Society in Europe: Policies to Stem the Digital Divide, Quaestiones Geographicae 32: 2, 25-38

Ball, S. J. (2008) The Education Debate. London: Routledge.

Brandtzæg, P.; Heim, J. and Karahasanović, A. (2010) Understanding the New Digital Divide: A Typology of Internet Users in Europe, International Journal of Human-Computer Studies, 69, 123-138.

Bonfadelli, H. (2002) The Internet and Knowledge Gaps: A Theoretical and Empirical Investigation, European Journal of Communication, 17: 1, 65-84.

Comunello, F. (2013) digital Divides in Europe: Culture, Politics, and the Western-Southern Divide, Information, Communication & Society, 16: 4, 631-633.

Cruz-Jesus, F., Oliveira, T. and Bacao, F. (2012) Digital Divide Across the European Union, Information and Management, 49, 278-291.

DiMaggio, P.; Hargittai, E.; Celeste C. (2004) From Unequal Access to Differentiated Use: A Literature Review and Agenda for Research on Digital Inequality. In: Neckerman, K. Social Inequality. New York: Russell Sage Foundation, 355-400.

Facer, K. and Furlong, R. (2001) Beyond the Myth of the 'Cyberkid': Young People at the Margins of the Information Revolution, Journal of Youth studies, 4: 4, 451-469.

Foucault, M. (1994) Power: The Essential Works of Michel Foucault 1954-1984: v. 3 London: Penguin Books.

Hargittai, E. and Hinnant, A. (2008) Digital Inequality: Differences in Young Adults's Use of the Internet, Communication Research, 35: 5, 602-621.

Hsieh, J. J. P. Rai, A. and Keil, M. (2008) Understanding Digital Inequality: Comparing Continued Use Behavioural Models of the Social-Economically Advantaged and Disadvantaged, MIS Quarterly, 32, 97-126.

Lengsfeld, J. (2011) An Econometric Analysis of the Sociodemographic Topology of the Digital Divide in Europe, The Information Society, 27: 3, 141-157.

Ramos, J. and Ballell, P. (2009) Globalisation, New Technologies (ICTs) and Labour Markets: The Case of Europe, Journal of Information, Communication & Ethics in Society, 7: 4, 258-279).

Rose, N. (1996) Inventing Our Selves: Psychology, Power and Personhood. Cambridge: Cambridge University Press.

Scheuch, E. and Sciulli, D. (2000) Societies, Corporations and the Nation State. Leiden: Brill.

Sims, J., Vidgen, R. and Powell, P. (2008) E-Learning and the Digital Divide: Perpetuating Cultural and Socio-Economic Elitism in Higher Education, Communications of the Association for Information Systems, 22: 23, 429-442.

Warschauer, M., Knobel, M. and Stone, L. (2008) Technology and Equity in Schooling: Deconstructing the Digital Divide, Educational Policy, 18: 4, 562-588.

Van Deursen, A. and Van Dijk, J. (2013) The Digital Divide Shifts to Differences in Usage, New Media & Society, 16: 3, 507-526.

Van Deursen, A. and Van Dijk, J. (2010) Internet Skills and the Digital Divide, New Media & Society, 13: 6, 893-911.

Youssef, A. B. and Ragni, L. (2008) Uses of Information and Communication Technologies in Europe's Higher Education Institution: From Digital Divides to Digital Trajectories, RUSC, 5:1, 72-84.