

# The Role of Digital Technology in Career Development

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## Abstract

This chapter analyses the role of digital technologies in career development. It argues that digital technologies change the context for individuals' careers and the opportunities that exist for the provision of career support. The implications of digital technologies for career are dependent, in part, on how technologies are believed to interact with society. They may be thought of as tools, as shapers of society, or as social practices. For individuals, digital technologies can be understood through six metaphors: (1) library, (2) media channel, (3) surveillance camera, (4) marketplace, (5) meeting place, and (6) arena. For career development professionals, the choice is using them to provide information, automated interactions, or communication. The chapter concludes by arguing that there are three main pedagogic stances (instrumental, connectivist, or critical) that can guide career development professionals in the combination of different technologies and in the resolution of the opportunities and challenges that are presented to individuals in their career building.

**Keywords:** career development, career guidance, digital technologies, Internet, online, pedagogy

## Introduction

Career development has always made use of, responded to, and been influenced by technologies. For individuals, the development of new technologies has opened up new forms of work, learning, and living. For the careers profession, it has had an influence on what forms of practice are possible. In this sense, technology is understood in Bain's terms as 'all tools, machines, utensils, weapons, instruments, housing, clothing, communicating and transporting devices and the skills by which we produce and use them' (Bain, 1937, p. 380).

Technologies, from the taming of fire through the conveyor belt and the motor car and on to the smartphone, have the potential to open some possibilities in our careers and close others down. So, the creation of the technology of flight and its application to the mass transportation of people had both direct implications for the new professions of the pilot, cabin crew, and ground crew, but also unintended consequences for the globalisation of the labour market and the expansion of the psychosocial horizons of career possibility.

Just as technology has always interacted with individual career development, it has also had a dynamic relationship with career development interventions. At the inception of the field, Parsons (1909, p. 165) argued that the new activity of vocational guidance should make use of 'every facility that science can devise for the testing of the senses and capacities, and the whole physical,

intellectual, and emotional make-up of the child'. In stating this, he rooted the new field in rational positivism and placed technology at the heart of the process of career development.

As the nascent career development field grew, it made use of a wide range of technologies and became increasingly dependent on information and computer technologies. Watts (2002) traced the development of information and communication technologies within career development interventions from the 1960s through four phases: mainframe, microcomputer, web, and digital. As the final two phases unfolded, Watts described a paradigm shift, with individuals increasingly able to self-serve in their careers in new ways without direct reference to a career development professional. Although self-service approaches existed before digital technologies, the Internet has enabled and accelerated this form of career delivery.

As the digital phase has unfolded, there has been an explosion of tools, techniques, and initiatives that have explored the utility of digital technologies for career development interventions (CEDEFOP, 2018; Hooley, Shepherd, & Dodd, 2015; Vigurs, Everitt, & Staunton, 2017). This chapter draws together some of the key findings of the literature and explores what defines digital career guidance practice, as well as looking at the nature of the digital environment and how it shapes society and individual careers. The chapter begins by looking at the nature of the digital environment and asking how it shapes society. It then examines why the Internet is important for individual's career development and concludes by exploring how digital technologies can be integrated into careers work.

## What Is the Digital Environment?

The concept of the 'digital' literally refers to the ability to represent information in the form of numerical (often binary) digits. Digital technologies have developed to be able to describe increasingly complex forms of information: numbers, language, images, audio, video, and even physical objects. The pairing of this ability to describe information with communication technologies allows information to be almost instantaneously replicated and disseminated across the world. The ability to replicate and communicate information at marginal costs is one of the biggest paradigm shifts associated with digital technologies and underpins a vast array of the social, cultural, and economic forms that have developed from digital technology, including the World Wide Web, social media, video streaming technologies, and digital cryptocurrencies.

The range of different ways that digital technologies are used in society means that they are difficult to ignore in thinking about almost any aspect of society, including career. Some commentators have argued that we now live in the digital age and that the development of digital technologies increasingly defines our society. Schwab (2016) has referred to this new social and economic paradigm as a 'fourth industrial revolution', which has been brought about by a 'digital revolution'.

## How Digital Technologies Shape Societies

In this chapter, digital technologies are viewed as being underpinned by historical and sociological realities. Digital technology is historical in the sense that technologies developed out of historical processes and did not suddenly come into existence. It is sociological in the sense that the digital both changes the social world and is acted on and developed out of wider social realities.

There are a variety of ways that the relationship between new technologies and society can be conceptualised. It is important to explore these different perspectives because they have implications for how we think about the interaction between digital technologies and career and

career development interventions. The different perspectives are summarized as (1) technology as a tool, (2) technology as a shaper of society, and (3) technology as a social practice.

The first perspective views digital technologies as a series of tools that can be used by individuals. Digital technologies can enable individuals and groups to act and interact in ways that they were not able to before the technologies existed. Such tools allow people to improve their lives—for example, by improving access to information, facilitating communication, enabling new forms of teaching and learning, or allowing people to transcend distances.

There are many enthusiastic accounts of the way that digital tools can improve people's lives in almost every field, but good examples from the careers field include the promise that the Internet can help people to find and get a job (Hooley, Bright, & Winter, 2016), to establish their own business (Paulson, 2017), and to get recognition and respect in the workplace (Adlam, 2018). Of course, not all tools are used for good. Digital tools can also have a dark side, enabling individuals to do things that transgress or attack social and moral norms and make their lives or the lives of others worse, such as in cases of cyberbullying (Whittaker & Kowalski, 2015) or digital crime (Bryant & Bryant, 2016).

By viewing digital technologies primarily as tools, the focus is on the impact on individuals, rather than on society. The accumulated impact of individuals' using such tools might ultimately have an impact on society, but when technology is viewed as a tool this is not easy to see. In contrast, the second perspective emphasises the way in which the use of digital technologies shapes and forms the social world. This view builds on McLuhan's (1994) analysis that human history is the history of the development of technologies, which shape society. In this view, the Internet as a medium has had more impact on society than the content (messages) that are actually carried by the Internet. Carr (2008) and Keen (2012) concluded that the affordances offered by digital technologies have reframed social life negatively. They argued that news-feeds, memes, notifications, friend requests, and selfies lead to a society that is characterised by superficiality, fake news, and social fragmentation. Others see digital technologies more positively, viewing them as empowering and levelling. So Shirky (2009) argued that digital technologies can democratise society and extend access to the public sphere, while writers like Sadler (2010) and Aguilar-Millan, Feeney, Oberg, and Rudd (2010) argued that new technologies, including digital technologies, will change the political economy, eradicate scarcity, and open the possibility for meeting human needs more fully. This perspective suggests that new technologies will have a deterministic effect on society. This reifies technology and turns it into a social actor in its own right.

The third perspective views technology as a social practice. This recognises that technologies can be used in a variety of ways (e.g., as tools, as in the first perspective) and that they can change societies and shift the context in which tools are being used (as in the second perspective), but it also reminds us that technology is in turn produced by and shaped by society. This perspective challenges the bifurcation of society and technology, with technology being viewed as part of society rather than separate from it. So, the technologies developed by Google are not external to society and acting on it, but are developments that emerged from the social, political, and economic formations associated with late 20th and early 21st century capitalism, Silicon Valley culture, and American company, copyright, intellectual property, and labour laws (Whelan, 2019). Technologies are not neutral or external actors. As Braverman (1974/1998, p. 133) argued they are not 'an alien force which subjugates humanity', but are instruments that emerge from existing power relations and give power to those who own and control them.

If digital technologies are viewed as a social practice, it is helpful to recognise that they are also a form of political practice. Politics is understood as the way in which the different, and often competing, interests of diverse groups within society are managed, addressed, and resolved. The digital environment provides the space for such contestation, albeit one that authors like Meijas (2013) and Van Dijck (2013a), echoing Braverman, argued is made up of specific architecture that is owned by private organisations and is both regulated, and made use of, by governments. So, while the Internet might look open and democratic, because it is possible for anyone to speak or to listen, digital technologies are designed by individuals and groups with assumptions about how things should be organised and with vested interests that they wish to advance. In many cases, this means that digital technologies are owned by the powerful and are used to preserve and extend that power. However, because technologies are social practices, they can also, in some cases, be repurposed to create tools for protest, resistance, and the redistribution of power (Bennett & Segerberg, 2013; Castells, 2015).

Technology does not just determine our careers, it is also determined by how our careers are framed and enacted. The individual and collective decisions that people make about how to live their lives shape the technologies that get conceived, developed, and utilised. In the rest of this chapter, this third perspective is broadly adopted to show how technologies interact with career and career development interventions in dynamic ways, and to view their use in career enactment and as part of career development interventions as a social practice.

## Why Are Digital Technologies Important for Individuals' Career Development?

Keeping in mind the nature of the digital environment and how it interacts with society more broadly, we can turn to exploring how this shifts the way that individuals enact their careers. Because digital technologies are now so embedded in the social world, almost all processes associated with a career have a digital component. Digital technologies are central to education, recruitment, work, civic participation, and leisure.

Digital tools are so embedded in social life that it is often difficult to distinguish between digital and nondigital experience. For example, the use of a YouTube film as part of a lecture places digital content at the heart of a face-to-face learning experience, while the routine use of tablets and smartphones in workplace meetings to check on information, and even to involve participants who are not physically present, creates an often unacknowledged, but deep, integration between physical and digital ways of gathering information and interacting.

Despite their deep integration in the everyday practices of career enactment, it is still possible to identify some particular roles that digital technologies play that intersect with the impact of the 'digital' on society. We have built on and extended Hooley's (2012) typology to propose six metaphors that describe the roles that digital technologies play in individuals' career enactment: (1) library, (2) media channel, (3) surveillance camera, (4) marketplace, (5) meeting place, and (6) arena.

### Library

Digital technologies provide individuals with access to a wide range of information that they can use to inform their career thinking. The information that can be found on the Internet is not necessarily accurate, is always partial, and reflects the aims of those who produced it (Sampson et al., 2018). Given this, the potential value of digital information as a career resource is strongly mediated by an individuals' capacity to interrogate, critique, and assess the value of such information.

## Media Channel

Digital technologies allow people to broadcast whatever they want with no requirement for permission or editing. People can control their self-presentation online and may choose to withhold their identity or adopt pseudonyms. In the context of career, it is possible for individuals to make use of this media channel to create, either intentionally or unintentionally, a narrative about themselves that can variously aid (Batenburg & Bartels, 2017) or hinder their career (Soares, Shenvi, Waller, Johnson, & Hodgson, 2017).

## Surveillance Camera

The flip side of the media channel is how digital technologies open individuals up to surveillance by everyone, but particularly by those with power. From a career perspective, such surveillance has the potential of turning every action that is captured online into material that can be used in a selection (Gandini & Pais, 2018) or management process (Ajunwa, Crawford, & Schultz, 2017). Similarly, data about students is increasingly captured and used by educational institutions, including career services. Perhaps even more perniciously, the perception of constant surveillance, even where it is not real, can shape individuals' behaviour in ways that encourage them to conform to what they imagine employers and others would want (Duffy & Chan, 2019; Hooley & Cutts, 2018).

## Marketplace

Digital technologies also serve as a marketplace for career opportunities. They create new kinds of opportunities for individuals to interact with opportunity providers (employers and learning providers) through various forms of e-recruitment and selection (Holm & Haahr, 2018). They have also increasingly shaped the way that the labour market operates by allowing individuals to place themselves permanently 'on sale' through tools like LinkedIn or to access work directly through platform-based working, such as on Uber or Task Rabbit.

## Meeting Place

Digital technologies create a place for people to 'meet' and network. Such conversations can be used as part of career enactment as individuals converse with each other, share information and contacts, and build and maintain a career-relevant network (Utz, 2016). This can happen on more explicitly career-related sites, such as LinkedIn or Twitter, but might also involve individuals' developing relationships that impact their careers through more interest-driven sites, such as Reddit or YouTube.

## Arena

Finally, digital technologies create an arena within which struggle can take place between those with different interests and hegemony and norms can be established or challenged. Such a struggle can be both individual and collective and can interact with existing power structures in a range of ways. Law (2012) discussed how the web can move from being a place of play and exploration into a place of protests and critique. For example, the #MeToo movement raised awareness of how women's careers are often characterized by the experience of abuse and sexual exploitation and began a process of challenging these power relations. This form of hashtag activism (Yang, 2016) uses the Internet to challenge career norms (Wood & Pasquier, 2018) by allowing people to share experiences in ways that would not have been possible before, to connect with others, and to use the crowd as a form of protection. The ability of information to spread, and for individuals to connect quickly and freely, enables collective forms of action to be taken that challenge career norms and structures and seek to remake them in radical ways. However, alongside this, the Internet has also been a site for #MeToo to be contested and debated. The movement has been criticised from a variety of angles, including assuming victims should always be believed through to

concern that the movement has mainly focused on the experiences of White women in middle-class occupations. Others have argued that it has been focused too tightly on individuals' stories rather than on examining structural conditions (Donegan, 2018; North, 2018; Quart, 2018). The arena metaphor shows how the Internet both allows space for a movement and at the same time enables the critics of the movement to organize against it.

Individuals need to navigate their way through these metaphors as they make use of digital technologies whilst they enact their careers. One response is to encourage individuals to position themselves strategically to make effective use of the affordances of these technologies whilst avoiding or minimising the downsides. For career development professionals, this can often be seen as a call to spend time developing individuals' digital career management skills or digital career literacy (Hooley, 2012).

A focus on increasing individual digital career management skills can fall into adopting the kind of tool-based conception of technology described above. Staunton (2018) argued that we need to view digital technologies more critically, recognise the limits of what getting good at using the Internet (developing career management skills) can achieve, and encourage individuals to consider how the affordances and practices on the Internet might be transformed as well as accommodated. In the example of #MeToo discussed above, a digital career management skills approach would focus on how the Internet could be used to research the extent of gender harassment in a particular sector and successfully find a job that allowed an individual to escape oppression. A more critical approach highlights the ability of individuals to use the Internet to engage with alternative political narratives around career, and to work collectively, as is evidenced by #MeToo, towards transforming the context within which they are pursuing their careers.

### Using Technology to Deliver Career Development Support

Digital technologies also offer a range of possibilities and challenges for the delivery of career development interventions (Harris-Bowlsbey & Sampson, 2005). There are many advantages to providing career support through digital technologies. Hooley, Shepherd, and Dodd (2015) argued that such technologies can potentially be used by careers providers to:

- transcend geography
- provide equality of access to a range of clients
- provide immediacy of access to a range of different levels of service
- offer confidential and discreet services
- allow flexible provision with a greater capacity to manage and respond to peaks in demand
- provide 'specialist' services (for example, around the needs of specific sectors, redundancy, retirement, job change, apprenticeships, or different languages)
- provide campaign support by linking online service provision to national media campaigns about work and learning
- provide cost savings by making use of self-access, automation, or economies of scale.

Such services can take a variety of forms. As new technologies are developed, the range of approaches available continues to expand. Hooley, Hutchinson, and Watts (2010) have grouped the approaches into three main categories: the provision of information, the use of automated interactions, and the use of the Internet for communication.

The first way in which digital technologies can be used to support people's career development is through the provision of information and resources, as described in the library metaphor above. Such resources may include information about the labour market or education system and advice on

how to address particular issues. Information may be quantitative or qualitative and can include text, images, and multimedia content. While information has always been used as part of career development work, the Internet removes the kinds of physical restraints that are associated with maintaining a traditional careers library. Furthermore, it removes the requirement for the mediation of this information by a career development professional. Individuals can now self-serve in new ways developed by digital technology. This brings with it both massive opportunities for increased access and potential dangers, as professional facilitation is removed and individuals are potentially left to sift through the morass of online career information alone.

Evidence suggests that the provision of online career information resources has limited efficacy, as many users are unaware of such resources, choose not to use them, or do not receive much benefit from using them (Galliot, 2017; Vigurs et al., 2017). As Osborn (2019) pointed out, the provision of information, or indeed any online career resource, becomes meaningful only when an individual engages with it and is able to derive some career learning from it. Osborn utilised Sampson, Lenz, Reardon, and Peterson's (1999) cognitive information processing approach to explain how such learning takes place. But, regardless of the learning model deployed, Osborn's point is well made: the transmission of information or resources, whether online or otherwise, should not be assumed to lead to career learning.

Information and resources are static in nature and provide the same content to all users. The second category of digital career development practice makes use of automated interactions and forms of artificial intelligence to tailor the provision of information and resources to the individual. This might include the provision of online assessments and diagnostics that are designed to replicate elements of traditional advice and guidance services (Harris-Bowlsbey, 2013). Such automated interactions can also provide experiences like work simulations and online (serious) gaming, which support career learning in new ways. So, McGuire, Broin, White, and Deevy (2018) described how the use of a gamified workplace simulation can help develop new opportunities for students to explore different occupations, to learn what skills they require, and to demonstrate their learning through simulated recruitment processes. McGuire and colleagues argued that this kind of gamified learning can increase student motivation to engage with career learning.

Finally, it is possible to use digital tools to facilitate communication and interaction around career development. Such online communications can increase individuals' access to career support in ways that do not necessarily require people to be in the same place or interacting at the same time. Such approaches may facilitate communication in one-to-one, one-to-many, or many-to-many formats. This could include placing traditional career counselling interactions online, perhaps by facilitating them through video conferencing or chat technologies (Bimrose, 2016). Digital technology can also be used to allow individuals to interact with people who are not career development professionals but who offer them resources for their career building (Hooley, Hutchinson, & Neary, 2016). This could include digitally facilitated mentoring relationships, opportunities to ask questions of more experienced people, and more happenstance forms of career development, such as the building of online networks through tools like LinkedIn.

Dividing technologies up in this way can lead towards viewing digital technologies as a toolbox from which careers practitioners can select a tool. However, the development of digital technologies has been far more transformative. Both practitioners and clients increasingly deploy, combine, and use the technologies in a wide variety of ways. Vigurs et al. (2017) argued that it is important not to view digital forms of practice as alternatives to analogue and face-to-face forms of practice, but to see them as complementary and mutually reinforcing. In practice, a variety of career development interventions are often integrated (Bakke, Haug, & Hooley, 2018) and bring together digital and

nondigital approaches. Nota, Santilli, and Soresi's (2016) online life design intervention provides a good example of this: it combines online digital content with face-to-face facilitation and writing exercises. Nota et al. reported that this kind of integrated intervention increased students' career adaptability, life satisfaction, and aspirations more than conventional face-to-face interventions.

## Pedagogy for Digital Career Learning

Individuals' careers interact with digital technologies in a variety of ways, and the technologies have also supported the emergence of new forms of career development practice. This section draws on contemporary thinking in digital pedagogy to propose new ways that the practice of digital or integrated career development can be conceptualised. This is done by referring to three possible approaches to linking technological pedagogy to career: instrumental, connectivist, and critical pedagogies.

Instrumental approaches focus on individual's career learning needs and ask how they could be met through technology. Such an approach is informed by the idea of outcomes-based teaching and learning (Biggs & Tang, 2011), which focuses on aligning learning strategies to specified learning outcomes, and by Trouche's (2005) theory of instrumental genesis, which argues that any technology remains inanimate and passive by itself and needs to be transformed into something useful through an appropriate pedagogy. Technologies are viewed as tools that can be deployed by educators to achieve defined ends. Koehler and Mishra (2009) argued that digital technologies have some important differences from previous kinds of technologies because they are multipurpose, constantly changing, and often highly opaque in how they work. But, despite this, they remain tools that skilled educators can deploy to deliver learning if they have sufficient technological knowledge, pedagogic knowledge, and content knowledge.

Instrumental pedagogy is strongly linked to tool-based conceptions of technologies. For career development professionals, using such tools is about figuring out where and when they can best be deployed to advance career learning. In such a conception, the fundamental aims, objectives, and approaches of career development learning stay constant, but they are delivered through new tools that require some professional adaptation and discussion of how the tools can be integrated into existing ethical frameworks (Sampson & Makela, 2014).

The instrumental approach is challenged by connectivist approaches to digital career learning, which redirect the focus from the professional to the learner. Learners can self-serve, visit career websites, and drive their own learning in digital environments, which do not necessarily accord the career development professional a special status. So, a learner can access LinkedIn, gather information, seek mentoring and advice, and engage in career transitions without needing to ever come into contact with a career development professional.

Connectivist approaches link to the conception of technology as shaper of society. A focus on the learner highlights the fact that there has been a significant departure from the previous order. Learners pursue their careers in different ways, and this requires career development professionals to embrace the paradigm shift and rethink their role. Wheeler and Gerver (2015), along with others like Siemens (2005) and Cormier (2008), have described how the Internet challenges existing repositories of formal knowledge held by institutions like schools, universities, and libraries and instead allows individuals to freely connect to information and networks in new ways that will support them in their own learning journeys. They celebrate this 'connectivism' and argue that it empowers the learner and places educators in a supportive and facilitative role.

The connectivists' focus on the Internet as a transformative space that increases learners' autonomy links with career-specific research published by Kettunen and colleagues (Kettunen, Vuorinen, & Sampson, 2013, 2015), who focused on social media and career practice and looked at the different ways in which career professionals can respond to changing technologies. After surveying various ways of using digital technologies for careers work, Kettunen, Sampson, and Vuorinen (2015) argued that practitioners should recognise that there has been a paradigm change and this necessitates a new approach, which they describe as 'co-careering'. This is a form of pedagogy that (i) moves away from a focus on the delivery of information, (ii) is nonhierarchical and learner-centred, and (iii) is based on learners' using digital tools in an autonomous manner, drawing on a range of online resources for their career. The role imagined for the career development professional in co-careering is facilitative and developmental, but it is also a role that is shaped by technological change, rather than one that seeks to shape or critique such technologies.

Critical approaches to online pedagogy link to the third conception of technology, technology as a social practice. Critical approaches recognise the way in which technologies shape human behaviours, but they also view these as contestable and subject to change and renegotiation. They question how far the openness of the Internet is empowering for individuals in the way that the connectivist co-careering perspectives suggest. Selwyn (2016) raised the concern that calls for education to be more flexible and personalised assume that individuals have the capacity to make use of this new form of learning. This overlooks critiques that the digital environment requires access to technological hardware disproportionately owned by more affluent individuals in society (Warschauer, 2010); that the competencies required to make effective use of digital tools are not equally distributed; that participation in these networks requires individuals to give up privacy and, in doing so, disproportionately benefits individuals who are more socially acceptable (Keen, 2012; Van Dijck, 2013b); and, finally, that these networks have winning and losing hardwired into them at a design level and so benefit a minority anyway (Keen, 2012; Meijas, 2013).

These critiques raise important points about the need to consider how individuals actually go about building their careers in digital environments and what enables and constrains the process. There can be a danger in adopting an overly optimistic and positive approach to digital environments that ignores individuals' social positions. Furthermore, this can overlook how digital technologies carry with them ideological imperatives to encourage individuals to behave in a certain way (Meijas, 2013) that encourages individualism, competitiveness, and gamelike behavior (Keen, 2012). The apparent new frontier of the Internet can mask the way it replicates existing neoliberal tendencies in society (Van Dijck, 2013a).

Buchanan (2018) raised the concern that, if career development interventions solely seek to help individuals to adapt to the digital world, they run the risk of socialising individuals into dominant but oppressive logics. This suggests that there is a need for career development interventions to critique existing forms of digital career development and encourage individuals to think about how they might renegotiate their positions within surveillance capitalism (Zuboff, 2019). Law (2012) and Staunton (2016, 2018) argued that effective digital career development education should help students to arrive at a critical understanding of technology and a consideration of how it shapes their careers in both positive and negative ways. In practice, this might involve helping clients debate the pay-off between advancing their career through social media sites and dealing with the resulting loss of privacy, or exploring digital platforms that are not dependent on surveillance to create profit, such as MeWe and Ello.

## Conclusion

This chapter explores the complex interrelationships between digital technologies and career development. The career development profession has increasingly embraced new technologies, recognising that they both shape the way that individuals pursue their careers and offer new opportunities for the development of practice. Thinking about the use of digital technologies in careers practice needs to begin with an understanding of how technologies relate to the societies within which they operate. We have challenged the idea that technologies are just tools for individuals to pick up and use, but also the idea that they determine the shape of societies wholesale. Digital technologies are a dynamic part of a society, both acting on and shaping people's careers, but also being shaped by the way that we use such technologies and by the wider political and economic environment.

For individuals, digital technologies bring new opportunities for career development, but they also bring challenges. Career development services can use these technologies to help individuals through the provision of information, by automated interactions, and by facilitating communication with career development professionals and other forms of support. But important pedagogic questions remain about how to best use these technologies and to what end they should be employed. Career professionals can take an instrumental, a connectivist, or a critical stance when delivering digitally mediated career development education.

We believe that critical approaches ultimately open up the most opportunities for individuals. Such approaches recognise that digital technologies are not just neutral tools through which career development can be enacted and career support given. Rather, technologies shape our worlds and our subjectivities and so the choice of different technologies and the ways that we use them have both personal and political implications. Given this, it is important that career development professionals both help individuals recognise the ways in which digital technologies shape the opportunity structure and foster careful consideration about where it is best to adapt and where it is best to resist.

Ultimately, we are optimistic about the possibilities for digital technologies in careers work. Learners now have the opportunity to draw on information about jobs and careers across the world, to build connections and common cause with others unhampered by geography and time, and to gain greater control over the learning that they want to do. Nonetheless, we need to also recognise the dark side of this new digital world and to notice the ways in which it shapes our careers and fosters the illusion of democracy and empowerment. In such a world, career development professionals, as providers of insights into the operation of the system and facilitators of critical enquiry, exploration, and career enactment, continue to be essential.

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