

This article was downloaded by: [80.223.154.136]

On: 11 December 2014, At: 08:10

Publisher: Routledge

Informa Ltd Registered in England and Wales Registered Number: 1072954 Registered office: Mortimer House, 37-41 Mortimer Street, London W1T 3JH, UK



## British Journal of Guidance & Counselling

Publication details, including instructions for authors and subscription information:

<http://www.tandfonline.com/loi/cbjg20>

### ICT - the new frontier? Pushing the boundaries of careers practice

Jenny Bimrose<sup>a</sup>, Jaana Kettunen<sup>b</sup> & Tannis Goddard<sup>c</sup>

<sup>a</sup> Institute for Employment Research, University of Warwick, Coventry, England

<sup>b</sup> Finnish Institute for Educational Research, University of Jyväskylä, Jyväskylä, Finland

<sup>c</sup> Training Innovations, Port Moody, BC, Canada

Published online: 05 Nov 2014.

To cite this article: Jenny Bimrose, Jaana Kettunen & Tannis Goddard (2014): ICT - the new frontier? Pushing the boundaries of careers practice, British Journal of Guidance & Counselling, DOI: [10.1080/03069885.2014.975677](https://doi.org/10.1080/03069885.2014.975677)

To link to this article: <http://dx.doi.org/10.1080/03069885.2014.975677>

PLEASE SCROLL DOWN FOR ARTICLE

Taylor & Francis makes every effort to ensure the accuracy of all the information (the "Content") contained in the publications on our platform. However, Taylor & Francis, our agents, and our licensors make no representations or warranties whatsoever as to the accuracy, completeness, or suitability for any purpose of the Content. Any opinions and views expressed in this publication are the opinions and views of the authors, and are not the views of or endorsed by Taylor & Francis. The accuracy of the Content should not be relied upon and should be independently verified with primary sources of information. Taylor and Francis shall not be liable for any losses, actions, claims, proceedings, demands, costs, expenses, damages, and other liabilities whatsoever or howsoever caused arising directly or indirectly in connection with, in relation to or arising out of the use of the Content.

This article may be used for research, teaching, and private study purposes. Any substantial or systematic reproduction, redistribution, reselling, loan, sub-licensing, systematic supply, or distribution in any form to anyone is expressly forbidden. Terms &

Conditions of access and use can be found at <http://www.tandfonline.com/page/terms-and-conditions>

## ICT – the new frontier? Pushing the boundaries of careers practice

Jenny Bimrose<sup>a\*</sup>, Jaana Kettunen<sup>b</sup> and Tannis Goddard<sup>c</sup>

<sup>a</sup>Institute for Employment Research, University of Warwick, Coventry, England; <sup>b</sup>Finnish Institute for Educational Research, University of Jyväskylä, Jyväskylä, Finland; <sup>c</sup>Training Innovations, Port Moody, BC, Canada

(Received 18 April 2014; accepted 8 October 2014)

Much progress has been made in integrating information and communications technology (ICT) into careers practice, but there is still room for improvement. An international lens is adopted to examine some key elements that contribute to the successful integration of ICT into careers practice. We start by exploring the role of policy, using the UK as a case study. Next, the perceptions that Finnish career practitioners have of ICT are reviewed using research findings into the different ways they think about social media and its purpose in career services. Finally, lessons learned from the design and integration of online services within career development programming in Canada are discussed that ensure accessibility both to practitioners and their clients.

**Keywords:** careers; practice; technology; design; policy; training

### Introduction

While careers work is embedded across a range of public and private contexts, from educational and training provision to outplacement, it is variable in nature. This is reflected in a nomenclature that includes: careers guidance, counselling, mentoring, coaching, advice and information giving. One-to-one careers interviews are difficult to standardise and their impact is notoriously difficult to quantify (Bimrose & Barnes, 2009). Yet the 'latent demand' (Roberts, 2013, p. 251) for careers work is growing as labour market volatility increases, bringing rising levels of unemployment and underemployment. Careers services are being fundamentally re-structured and changed in attempts to translate this latent demand into effective demand (Hughes, 2013a; Roberts, 2013) as efficiently and effectively as possible. A key driver is the imperative to engage with, and the need to exploit the potential of information and communications technology (ICT). A growing body of literature has investigated the increasingly important role of ICT in careers work (e.g. Harris-Bowlsbey & Sampson, 2001; Sampson, 2008; Watts, 1996; Watts & Offer, 2006) and the ways it can be used to deliver services (e.g. Harris-Bowlsbey & Sampson, 2005; Watts, 2002). It can be used as a tool, as an alternative to face-to-face delivery, or as an agent for change (Watts, 1986).

So the integration of ICT in the delivery of career guidance and counselling services is certainly not new. What is new, however, are the increasing pressures for services to design and develop cost effective and accessible and effective careers resource facilities

---

\*Corresponding author. Email: [jenny.bimrose@warwick.ac.uk](mailto:jenny.bimrose@warwick.ac.uk)

and services (Hughes, 2013b). Efficient careers services are viewed as crucial for boosting economic productivity and competitiveness in the labour market and increasing employment, career progression and educational attainment in the UK context (Hughes, 2012). The organisation for economic co-operation and development (OECD) argued for the need to harness ICT to increase access and improve the efficiency of careers guidance services at the international level (OECD, 2004). Implicit in the current emphasis on the importance of ICT in service delivery may well be the assumption that its introduction will not only extend access to services by clients by increasing the flexibility of delivery methods, but that it will also help reduce costs by lowering the demand for face-to-face support. Yet robust evidence on the actual impact of introducing Internet-based services is currently lacking (Barnes & La Gro, 2009; Howieson & Semple, 2013), with an indication that the potential for cost saving is likely to be limited (Madahar & Offer, 2003; Offer, Sampson, & Watts, 2001; Watts & Dent, 2006). Much is still to be learned about this aspect of professional careers practice with the careers profession yet to embrace ICT fully, in ways that exploit its full potential.

### **Integrating ICT into careers practice**

The extent to which the organisational outcomes of technological change are chosen and negotiated by individuals, or determined by the wider market, technical and/or historical forces is contested (McLoughlin & Clark, 1994). Actually, technological, social and cultural factors all have to be considered and negotiated when implementing change involving ICT (Williams & Edge, 1999) because the process of the integration of ICT into careers work and careers organisations (like any other area) is a complex, inherently social and developmental process.

Despite a degree of consensus regarding its importance, there is little agreement on what the integration of ICT in careers practice actually comprises. Reflecting this uncertainty, various terms are used to describe its use in careers guidance, for example, web-based guidance, e-guidance and Internet guidance (Bimrose, Barnes, & Attwell, 2010). Types of services listed under these overall terms also vary. Eight Internet based tools were identified by Watts and Offer (2006) and Barnes, La Gro, and Watts (2010): email, chat, newsgroup, website, SMS (text messaging), telephone, software (i.e. CD-ROM and free-standing computer programmes) and video-conferencing. At the heart of all these tools is Web 2.0, which offers various functionalities, including the ability to aggregate user data, track and filter content, collaborate, 'mashup' data or construct a social network (for a more detailed account of Web 2.0 functionalities, see Bimrose et al., 2010).

In addition to the range of different tools, three main purposes have been identified for their deployment in careers guidance. The first is as a resource; the second is as a medium for communication and the third is for the development of materials (Barnes et al., 2010). When reviewing these purposes, it becomes apparent how Web 2.0 technologies can be, and are being, harnessed. The potential for using ICT as a resource, for example, is enormous. It transforms access to high quality labour market information (LMI), enabling practitioners and their clients to acquire relevant information quickly and at the times that suit them. Social networking, web-chat and online video content all offer ways for users to gain insights into different careers. Interactive technology also enables a more personalised delivery of careers guidance, responding directly to the users' information needs. So the use of the Internet as a resource, especially for LMI, is already common in careers services. Yet the potential to use ICT to interrogate a wide

range of sources, by developing the expertise to judge the efficacy of different sources has not been fully realised. The use of ICT for communication with users is relatively underutilised. Research evidence indicates that young people would like greater use of texts and emails (Bimrose et al., 2010) and the increasing use of social media for communication has led careers organisations to acknowledge the need to expand their understanding of new technologies and to modernise its services (Hooley, Hutchinson, & Watts, 2010; Kettunen, Vuorinen, & Sampson, 2013). The third purpose of ICT in careers work, developing customised materials, is probably the most under-developed currently, with considerable untapped potential for the enhancement of materials. This is not to suggest that this is not happening at all, but knowledge (for example about local labour markets) could be refined, shared and stored within organisational structures so that it is not lost (e.g. when individual employees with particular expertise move on) and could be formally developed and enriched for use with individual clients by collaborative endeavour. With the next generation technology (Web 3.0) already on the horizon, the need to begin to align new technologies more closely with service delivery for careers practice is becoming more urgent. The open data agenda (for example, in England) is also opening up new possibilities for the types of Internet based applications that are likely to be available in the near future for the more effective integration into practice of LMI from high quality and reliable sources (UKCES, 2012). A key question is, therefore, how ready and equipped is the broad community of careers practice to embrace and deploy the potential of ICT?

This article will argue that its successful integration into career practice is contingent on three key factors: policy support, at both the macro and micro levels; workforce development, so that career practitioners feel confident and competent in this aspect of their work; and for the design of ICT systems that ensure that they are fit for purpose.

### **Policy and practice**

Whilst the uptake of ICT within careers practice is now relatively well documented (see, for example, Bimrose et al., 2010), its integration is neither coherent, nor uniform. Significant variation can be found in the degree of ICT integration across and within different country contexts (for example, comparing the four countries of the UK: England, Northern Ireland, Scotland and Wales); across and within different sectors delivering careers services (like higher education, services for young people) and across different types of career interventions (that is, group work compared with face-to-face; Bimrose, Hughes, & Barnes, 2011).

#### ***Policy at the macro level***

The push for increased integration of ICT has coincided with the move towards the promotion of self-help by clients of careers services. Increasingly differentiated levels of provision are delivered, according to individual client need (Sampson, 2005; Sampson, Peterson, Reardon, & Lenz, 2000), with an emphasis on making services more flexible and accessible. Such changes in service delivery have sometimes occurred alongside other developments, like an emphasis on measurable outcomes and a dilution of professionalism within careers work (Mulvey, 2013). At the macro level of policy, an appreciation of the coercive power of the state and the relationship between power and the control of knowledge (Foucault, 1977, 1980) is particularly relevant to an understanding of the shifts that have occurred regarding the integration of ICT in careers

work. For example, in England, the recent reduction in numbers of career practitioners who delivered one to one careers guidance (Roberts, 2013) and the promotion of career websites that promote particular commercial enterprises, like plotr (<https://www.plotr.co.uk/>) illustrates how government is actively encouraging the private sector to shape the direction of career support for young people, without state regulation or centralised quality monitoring (for example, see HM Government, 2013). It has been argued that career practitioners are positioned to use technologies to strengthen public policy and career service delivery, by making proven techniques more efficient and self-directed (Savickas, 1999). Similarly, from an ethical perspective, Davidson (2001) emphasised the professional responsibility of career practitioners to ensure that students derive positive benefits from online information. However, the policy to reduce public funding for face-to-face services that are freely accessible, alongside stimulation of the marketplace to develop career websites, some of which use websites to promote particular employers, has become a trend in England. Drawing back state control of both the content and structure of commercially based websites represents a fundamental challenge to the core values of impartiality and objectivity that lie at the heart of professional careers guidance practice. Foucault argued: 'There is no power relation without the correlative constitution of a field of knowledge, nor any knowledge that does not presuppose and constitute at the same time power relations' (1983, p.76). Power to determine the nature and structure of the knowledge included in these websites has now been appropriated, at least in some measure, by web managers and developers who shape the careers support available, promoting particular employment opportunities, rather than maintaining impartiality and objectivity. Such policy implementation at the macro level is based on ideology, rather than evidence-based research. We need to know much more about the use (or non-use) of ICT by different individuals (Howieson & Semple, 2013) before we can be confident that career websites make a positive contribution to supporting career transitions. Without such research evidence, policy will continue to be based on assumptions, which may very well be misguided.

### ***Policy at the micro level***

From a more micro perspective of policy, research in the UK has examined factors that facilitate and hinder ICT integration into career organisations across a range of different professional careers contexts (Bimrose et al., 2011). A broad interpretation of ICT was adopted for this study that included (p. 6): the routine use of information management systems (both government and corporate); emails (for communication with clients and for delivery of guidance); online forums; social networking (Facebook, Twitter, LinkedIn); telephone guidance; the use of a wide range of website software programmes (including diagnostic packages); the use of camcorders, skype and video conferencing; e-portfolios; dissemination of information (especially LMI); and different approaches to client self-help (e.g. providing direct access to clients to the Internet through resource centres). The levels of ICT integration were located along a 'high to low' continuum. At one end of the spectrum were those organisations that did not feel that ICT was integrated all that much in their practice. Specific reasons varied across delivery contexts, though a common thread was identified as the impact of policy. For example, where financial survival depended on achieving certain targets and where these targets could be met without the use of ICT, then its integration in practice more broadly had become a second order priority. At the other end of the spectrum were those organisations where ICT is already integrated into practice to a high level. In these cases, its use is built into the very fabric

of service delivery through organisational policy that has come from the top down. Because of the degree of senior management commitment, then resources had followed to support this aspect of service delivery. From the user perspective, the online environment available to users is engaging and coherent. Services are personalised and responsive to user need, supporting customers/clients to be more self-reliant. It is very easy for users to contact careers specialists and experts in different ways (email, telephone, chat rooms, messaging, etc.).

Factors affecting levels of integration were found to be: timelines available for implementation; main drivers (e.g. improving quality, cost effectiveness, policy pressures); the extent to which the impact of ICT in practice has been evaluated (i.e. evaluating client satisfaction generically compared with scrutinising the impact of different types of uses of ICT); the organisational implications of integrating ICT in practice (e.g. infrastructure cost); future plans for the introduction of ICT (whether these were proactive or reactive); visions for the future landscape (e.g. a pressing need to rebrand and re-market careers services, with ICT a central feature compared with the view that the role of ICT in the future would likely be limited to information dissemination); and finally workforce capacity issues (for full details of methodology and findings, see Bimrose et al., 2011). Despite a steady increase in the integration of ICT in careers practice, its most common usage was found to be the dissemination of information (e.g. LMI) and various administrative tasks (e.g. client tracking through Management Information Systems).

From emergent data, four scenarios were identified from this study (Bimrose et al., 2011), operating along two core dimensions: first, levels of integration of ICT within the organisation (that is, the extent to which ICT had been integrated into service delivery) and second the workforce capacity to integrate ICT in practice (that is, the extent to which the workforce were trained and supported in their use of ICT in their practice). In the first of these four scenarios, ICT integration appeared high, but workforce competence remained low. Here, the use of ICT was essential to collect, for example, management information on service delivery. However, usage of ICT beyond this purpose was neither systematically, nor consistently, reflected in the policy or practice of staff development and there was no long-term strategy in place to increase and enhance the levels of integration that already exist. The second scenario was where ICT integration was low and skill levels were correspondingly low. Organisations either lacked the interest in ICT or were deeply sceptical that ICT could be used to improve performance. Consequently, the use of ICT required by practitioners was limited to a minimal level, typically by individual practitioners who felt a commitment to ICT and recognised its potential to enhance their work. There was no drive from management for changes in practice to maximise the potential of ICT and the workforce was correspondingly lethargic about its adoption. In the third scenario, ICT integration was high and workforce competence was also high. Here the use of ICT was integral to all aspects of service delivery and there was a genuine conviction, top down, from management to the workforce, that the full integration of ICT in practice was both possible and desirable to maximise the impact of effective services to clients. Finally, the fourth scenario relates to organisations where ICT integration is low, even though workforce competence was high. These organisations employ individuals with a high level of competence and motivation to use ICT. They also typically have a clear vision of what services the market demands and how these could be delivered. However, higher levels of ICT integration into practice remained somewhat restricted in these cases, mainly because of economic and/or technological constraints.

This study of the integration of ICT into the practice of careers work at a micro level, together with an examination of the impact of policy on practice at a macro level, illustrates the complex interaction and relationships of internal and external factors in shaping approaches to ICT implementation by careers organisations, strongly influenced by the policy context in which the organisations operate. Factors such as size, strategy and business age are all relevant in this process. Additionally, cultural influences, like alignment with professional associations are important, as well as the overall policy context in which services is delivered. There is a clearly a crucial role for policy-makers in facilitating ICT integration in ways that are better informed by evidence. In all of this, the capacity of the workforce to deliver on this important agenda is crucial and is examined more fully in the next section.

### **Research-led practice**

Workforce capacity building is crucial for the successful integration of ICT in careers practice and the approach to building capacity for practitioners needs to be informed by the particular needs of the careers organisation in which they are operating. In career service delivery, five different ICT functions have been identified: delivering online guidance; offering distance learning online; funnelling users into the existing off-line services; acting as a diversion by taking the pressure away from existing off-line services that are in short supply; and providing a forum for individuals to discuss with others or with practitioners (Offer & Sampson, 1999). More recently, Hooley et al., (2010) have identified three ways in which career practitioners generally use ICT: to deliver information, to provide an automated interaction, and to provide a channel for communication. Keeping up to date with the rapid development and usage of digital technologies is a challenge in itself. The skills required by both practitioners and their managers to the changing technological interfaces are currently 'broadly underdeveloped' (Hughes & Graton, 2009, p. 7). There is a need of a technological catch-up from careers work on the Internet (e.g. Barnes & La Gro, 2009).

Practitioners' willingness to accept the changes that new technology brings is crucial, irrespective of whether the focus is service delivery or careers practice. The importance of them gaining competence and confidence, both in existing and emerging technologies has been highlighted in research (e.g. Bimrose, et al., 2010; Osborn, Dikel, & Sampson, 2011). Some practitioners are not convinced of the relevance of technology in delivering career services and others do not have the skills or confidence to do so effectively (Kettunen et al., 2013). Recent research on practitioners' experiences of social media in career services (Kettunen, Vuorinen, & Sampson, *in press*) indicates that new technology is not just a tool or an alternative; it is an interactive working space where collaboration, with and without practitioners, increasingly occurs and it is being recognised for its significance.

Within the broad spectrum of available technologies, the use of social media is growing exponentially across the career services sector. Career centres and practitioners are increasingly embracing various social media tools and a variety of technical means to provide services and real time communication. There is evidence to suggest that the latest wave of technology, especially social tools, have considerable potential for career guidance (e.g. Dyson, 2012; Hooley et al., 2010). However, additional studies are required to support professionals in their need for models that enable them to combine guidance practices with new technologies (e.g. Bimrose et al., 2010). It is essential that career professionals not only have competence and confidence in using of existing and

emerging technologies, but that they are also able to evaluate its usefulness and potential for a range of clients (e.g. Bimrose et al., 2011; Osborn et al., 2011). This includes not only the speculative clients who come through the door, but all citizens who require more in-depth career support (Sampson, Dozier, & Colvin, 2011). Success in developing competency for social media in career services requires a dynamic combination of interwoven cognitive, social, emotional, and ethical factors (Kettunen, Sampson, & Vuorinen, 2014).

The willingness of practitioners to accept the changes that new technology may bring to service delivery is also critical. Five orientations have emerged from recent research, providing a basis for understanding the different ways in which career practitioners think about social media, its character, and its purpose in career services (Kettunen et al., 2013). These varying orientations can be conceptualised on a continuum ranging from highly negative to highly positive; on one end of the spectrum is the perception that social media in career services is a threat, or a passing fad; while at one end of the spectrum it is perceived as desirable, possessing indispensable positive potential. At the positive end of the continuum, the use of social media is embraced and viewed as an increasingly important way to extend career services. Emphasis is placed on a customer-centred holistic approach that allows greater levels of self-help and values the social support gained by individuals through their peers. In the middle of the continuum rests ideas of the potential usefulness of social media in career services. It offers new possibilities for reaching people and initiating communication; however, practitioners remain unsure as to how these technologies can best be used. At the negative end of the continuum, practitioners regard social media as a passing fad, with little or no importance to the delivery of core career services. The research study (Kettunen et al., 2013) indicated an association between the orientation and practice of career practitioners. In career services, negative conceptions of new technology appeared to be closely linked with a 'directive' approach and to a strong preference for individual, face-to-face, or one-to-one career intervention. A similar relationship seems to exist between clearly positive conceptions and a more holistic approach in practice. These results are consistent with a study by Kettunen et al. (*in press*), that explores practitioners' experiences of social media in career services.

The study by Kettunen et al. (2013) emphasised the importance of understanding the orientations of career practitioners regarding their role and purpose in relation to ICT, and their technological skills. If social media is to play an increasingly important role in career services, it is necessary to support career practitioners and trainers awareness of the variation in their current ways of experiencing social media and the more advanced ways they may be moving towards so that they may optimise their competence development in the best possible way.

In addition to policy and appropriate continuing professional development support for career practitioners, the design of the technological tools available for their use in practice needs careful consideration. The next section explores some of the core factors in designing ICT for careers practice.

### **Designing for practice**

As noted above, the potential of web technologies as interactive spaces for careers guidance is now well documented (Barnes & La Gro, 2009; Bimrose et al., 2011; Harris-Bowlsbey & Sampson, 2005). Less explored in the research literature are the factors that contribute to the effective design of interactive online career guidance interventions,

where practitioners and clients engage online in a guidance relationship. Utilising technology as a space to support online interaction and communication between career practitioners and clients requires a purposeful process. The importance of defining pedagogical models for the delivery of online career services was formally documented by an International Transformational Technology Working Group that met over a period of two years (2009 to 2011), with participants from 10 countries. All members of the group noted that individuals within their countries were accessing career information online, often without the support of a career practitioner. Questioning how effectively users were applying the information in a personal and meaningful manner followed. A key finding identified in the final report from this initiative relates to the importance of developing a common language and taxonomy for understanding the pedagogical approaches for designing online Career Services (International symposium on career development and public policy, 2011).

For over four decades, career guidance services have utilised technology as a vehicle for providing access to information and automated processes. The field is now expanding and utilising a range of new communication technologies to provide distance career counselling and guidance services. Sampson (2008) defines distance career counselling as the 'provision of brief or longer-term individual counselling to clients via the telephone or the Web that is often augmented by the use of career assessments and information available on the Internet' (p. 15). Web-based communication technologies can also be configured as interactive working spaces (Kettunen et al., 2014). This affordance offers the ability to design a space that integrates self-directed materials with interactive communication between clients and practitioners in a secure and purposefully designed online space. Littleton and Häkkinen (1999) recognise design as a process for creating an environment where interaction and learning can occur. Considering online career interventions from this perspective highlights the importance of constructing a pedagogically thoughtful environment that can enable an individual's capability to enhance his/her career development. This point is powerfully illustrated by the Career Motion demonstration research project, which was conducted in Canada. It explored the use of a web-based career intervention to enhance under-employed Post-Secondary Graduates' career development (de Raff, Shek-wai Hui, & Vincent, 2012). The intervention was built using a needs-based design model, taking inspiration from Sampson et al. (2003) allowing the participants to interact with targeted information and activities related to their identified career planning and/or job search needs. The participants found that the provision of tailored information and personal application activities were helpful in increasing their confidence and ability to make informed career decisions. However, additional focus-group follow up interviews indicate that having the online presence of and interaction with a skilled practitioner during the intervention would have been helpful to create relevant meaning of the information and activities and to establish an effective plan forward. This research suggests that an interactive model for online career interventions can benefit from three key design factors: (i) provision of relevant and targeted information; (ii) inclusion of self-application activities that can assist users in making meaning of the information provided; and (iii) integration of practitioner presence to provide opportunities for purposeful communication throughout the intervention to support meaning-making, prioritisation and action taking.

This conceptual design framework suggests the ability to utilise technology as a space to create interactive online guidance and career learning interventions that enable and empower independent navigation by the user at his/her own pace along with the

opportunity to interact with a professional career guidance practitioner. When the decision has been made to create an online intervention that utilises client-practitioner interaction, a key aspect of designing the intervention is considering how the space will be created to enable the client to become aware of the practitioner and to know in what manner the communication will occur. To bridge the distance and create the ability for a working alliance to develop, the design process needs to consider how the practitioner's presence will be conveyed in the online environment. Presence can be understood as two interrelated phenomena: *telepresence* or the sense of being there and *social presence* the sense of being together with others (Biocca, Burgoon, Harms, & Stoner, 2001). When designing online guidance interventions, it is important to consider how the space and communication interactions will foster the feelings of presence between the client and practitioner. This need to convey presence through distance not only requires design consideration but also requires thoughtful and skilful communication strategies from the practitioner.

To create an on online space that fosters a sense of human touch and presence, Lehman and Conceicao (2010) identify the following design determinants as factors that increase a sense of presence in online learning:

- (1) the type and focus of content;
- (2) the format of the learning experience;
- (3) the interactive strategies;
- (4) the role of the facilitator;
- (5) the type of technology being used, and
- (6) the kinds of support being provided.

This framework provides a model for considering key aspects of online intervention design that will bring together the client and practitioner over time and space. These key design factors have been utilised in the development of online interventions in British Columbia, Canada. Within these factors, key practice and application strategies have provided based on feedback gleaned from practitioners and clients over the past decade of online intervention delivery.

### ***Type and focus of content***

The intended outcomes of the intervention will influence the selection of, and format for, the presenting content and information. The purpose behind the intervention will impact on the type of information selected for the intervention and depth of information provided. Most careers guidance processes such as self-assessment, labour market research, occupational decision-making and action planning will require that content is presented both to explain the relevance of the process to the career situation while also providing context appropriate content that will guide the user through a learning process related to the specific career activity. Establishing an effective strategy for presenting content is important for engaging the client with the service. The client needs to feel that the content is appropriate to his/her career situation and have confidence that the materials being presented are of high-quality, trustworthy and relevant. Considerations about the intended end-user should inform key aspects of content selection; this includes both the career information itself and the medium of presentation (ie. text, audio, video). The content will be a key mechanism through which the practitioner and client base

discussions; thus, the content must also be selected for the value it can bring to the online guidance relationship.

### ***Format of the experience***

The format of the intervention will be affected by the goals of the service as well as available budget, technology and the skills of the practitioners. Interactive online careers services can be delivered as a group-based model that allows participants to interact for sharing and co-construction of meaning with individualised one-to-one support from a practitioner or as a completely individualised service. Communication can occur asynchronously where there is a delay in the receipt of message or as synchronously where people communicate in real time, simultaneously (Alessi & Trollip, 2001). Services can have structured start and end dates or be more tailored in time and scope to the individual context of users. Every available technology has strengths and weaknesses and these will impact upon the options available when designing an intervention based on the reason for integrating technology (that is, to extend reach; to provide a more conveniently accessible services; to utilise intentionally alternative process strategies through writing; to achieve cost savings).

### ***Interactive strategies***

As in face-to-face interventions, decisions will need to be made regarding the points of interaction. This could include interaction between practitioners and clients; client to client interaction and overall interaction strategies for clients to engage with the presented content. Examples of interactive options include: personalising content (that is, making specific information available as the career development process unfolds); strategically reviewing a user's online activities and posing questions to the client from the practitioner to target further meaning making; establishing threaded dialogue between the practitioner and client to explore specific aspects of the intervention and to provide space for the practitioner to utilise counselling skills in supporting the client moving through the process; creating group discussion boards to encourage support and facilitate the co-construction of meaning between users; providing access to a guest such as an employer or practitioner with specialised knowledge to support a user; allowing users to rate and comment on the relevancy of particular aspects of the intervention; creating personalised application activities to enable users to move from reading or listening to information to applying it to their personal context. With a wide range of interactive possibilities, the design process requires a clear understanding of available resources and the intended intervention goals to ensure the most effective interaction strategies are selected. Also critical is ensuring that the strategies selected are aligned to the skills of the practitioners facilitating the services and that they are appropriate in terms of clients' technology access and ability for online communication.

### ***Facilitator role***

The role of the practitioner within online career interventions will be influenced by the theoretical position the practitioner or service assumes and the nature of the intervention being delivered. Within online interventions, the practitioner will not only be an engager and facilitator of process but will also hold some aspects of design responsibility which include needing to make decisions about processes of engagement as the intervention

unfolds. Because technology can offer a variety of tools for communication, making careful considerations about the strategy best suited to the context is an ongoing responsibility of the practitioner. Roles and actions that practitioners may engage in online include: assessing needs, administering assessments, sharing resources, presenting concepts, helping generate ideas, exploring meaning and relevance of the intervention, providing feedback, modelling techniques, practicing techniques and referring to services. Within these roles practitioners will need to choose from a variety of counselling skills to convey their intention and engage their clients such as: paraphrasing, clarifying, summarising, empathising, sharing observations, supporting, open-ended questioning and reassuring (Amundson, 2003).

Strategies that can enhance the communication exchange in online, text-based counselling include: summarising the dialogue and linking to previous discussions or content; enquiring about and revisiting the development and changes in a client's online narrative; and sharing observations of a client's online engagement patterns to learn more about life patterns and demands for the client and where support might be required. Online practice presents multiple decision points for the facilitator. Adopting a highly reflective orientation to the practice will support practitioners to become aware of interactive patterns and the communication and counselling approaches that positively impact the clients they are serving.

### ***Technology selection***

As discussed above, the selection of ICT will be effected by the purpose of building online career interventions, the budget available and the capacity of the practitioner workforce to effectively engage with technology. Although the selection of technology will affect the design options available, it is important to recognise that the goal is to make the technology transparent (Lehman & Conceicao, 2010) and to create a space for a real working alliance to develop in the support of guidance.

Considering the intention of a technology tool will inform the potential uses within the development of an online system. For example, a-synchronous tools such as email, threaded discussions and bulletin boards allow for the designer to leverage the potential of reflection in the service. Clients can be provided content and personal application activities and given space to work through the process and summarise and share personal reflections back to a practitioner at a later time. The practitioner also gains the benefit of being able to review the client's progress and previous communications before responding; enabling the practitioner to fully consider the clients context and situation before responding. Synchronous communication provided immediate contact with another person on the other side of the computer. This type of communication can be beneficial for enquiries about a service, to receive quick answers to direct questions or to engage in a real-time counselling discussion. Blending a selection of a-synchronous and synchronous communication can offer different engagement opportunities within the online intervention and together will increase a sense of connection and presence.

### ***Support strategy***

Repositioning the guidance relationship online, requires careful consideration about the supports required for practitioners and clients. When the familiar visual cues of a reception greeting and an office or workshop counselling space are removed, it can create nervousness and uncertainty regarding the navigation and engagement in the online

intervention. These uncertainties can be rooted in concerns about how to use the technology and also how to show-up and interact through the various communication channels. For practitioners, it may be a new experience to articulate in writing messages that have been familiarly conveyed in face-to-face session. For clients, the sharing of career circumstances and personal feelings in writing may create anxiety about communication skills and also draw greater awareness to the current reality. In the rush to deploy services, the support strategy can be overlooked, creating the potential for negative user experiences.

Key support strategies needed to shift a client into an online service include: establishing clear agreement with the client on how quickly and frequently a practitioner will respond to a client's submissions prior to the intervention beginning; providing documentation that describes how to log in and initially navigate in the online system; asking for and discussing client feedback early in the process; and offering 'help' materials within the online space. Users will typically range in technical capability and a secondary line of support for technical trouble-shooting, via telephone, will ensure that users are not left potentially isolated or frustrated due to technical challenges. Information should also be available online that informs clients of other face-to-face and telephone crisis support services that are accessible should a client need support at a time when the online guidance practitioner is not available. Although this support strategy and materials will assist a client in adjusting to guidance in an online space, it is also important to create pathways for clients to utilise the online service in a manner most conducive to their learning styles.

As practitioners recognise and begin to utilise online interactive working spaces (Kettunen, et al., *in press*), they will also require support to transition their work context. Most critically, online practitioners require professional development training to learn how to transfer their practice into an online, significantly text-based, environment. Practitioners also require supervision to support their ongoing practice. Online practice presents a unique opportunity to provide transparent supervision because communications between the client and practitioner are recorded and accessible for review. This provides an opportunity to seek input from trusted and skilled supervisors to provide 'real-time' and 'rea-context' case conferencing. Building strong support strategies for practitioners is an essential component within design to ensure the process is productive for clients.

### ***Design reflections***

These six design factors provide a framework for designing online career interventions that integrate a sense of presence across time and space that will support the online guidance process. This discussion also highlights the complexity of skills required by practitioners to effectively design, develop and deliver technology-enabled career services. The core preparatory training, available to career practitioners, and competency definitions published by professional associations have not yet integrated the range of cognitive, digital and technical skills required to succeed within online career guidance (Bimrose et al., 2010). Practitioners will require the ability to transfer their guidance and counselling skills from face to face processes to online experiences. This will require the acquisition of new approaches for: creating a safe, secure, and productive online environment within which the guidance exchange can occur; developing a working alliance (Bordin, 1979); facilitating career learning; and evaluating the effectiveness of the services provided.

## Conclusion

The careers profession needs to embrace innovation and change, so that the full potential of ICT can be used to deliver 'more for less' in a manner that enhances services for users. However, to embrace the innovation and change brought by ICT efficaciously, career practitioners will need to be supported on a number of levels. The policy context within which they are operating is crucial. At a macro level, the manner in which governments supporting the labour market transitions of their citizens needs to be based on evidence, rather than ideology. Marginalising the professional expertise of career professionals in proliferating careers websites is likely to be counterproductive. At a micro level, career organisations need to attend to a number of operational issues that support practitioners, rather than impede enthusiasm and creativity. Workforce development for careers is critically important. Practitioners are not a homogeneous group, and have a wide range of training and support needs. Key to successful training support will be the orientations of practitioners to ICT, which need to be taken carefully accommodated. Finally, and often overlooked, are the design parameters of technological based systems to deliver careers support. The six design components outlined above must be considered in the development of any system. Purposefully designed, technology-enabled career services can expand access and connection between clients and practitioners. Taken together, attention to the policy context, workforce development for careers and design parameters are minimum requirements to achieve a successful implementation of ICT in careers practice.

## Notes on contributors

Jenny Bimrose is Deputy Director of the Institute for Employment Research (IER), University of Warwick. Previously, she was Head of Centre for Training in Careers Guidance at the University of East London. With over 30 years of experience teaching, researching and managing in higher education, she has extensive experience of external project management and consultancy, both in the UK and Europe. Many research projects on which Jenny has worked have focused on the area of the theory and practice of career counselling and guidance and on gender: <http://www2.warwick.ac.uk/fac/soc/ier/people/jbimrose/>

Jaana Kettunen is Researcher at the Finnish Institute for Educational Research of the University of Jyväskylä, Finland. In her work she has been focusing on the design and pedagogical use of ICT in learning and working environments. She has extensive experience on training, supporting and working with practitioners throughout Finland. Her current research focuses on the career practitioners' ways of experiencing and conceptualising social media in career services, and aspects that are seen as critical in the successful use of these new technologies in career services.

Tannis Goddard is the founder and President of Training Innovations, a career development organisation that delivers community-based career services in British Columbia. Tannis has pioneered the use of online technologies within Career Development Services and now provides consulting support to governments and career agencies related to effective use of ICT within Career Services. In 2007, Tannis won the Award of Excellence from the Career Management Association of BC and in 2011 she was member of Canada's Country Team at the International Symposium in Budapest. Tannis holds a MA in Education and is currently completing her Ph.D.

## References

- Alessi, S. M., & Trollip, S. R. (2001). *Multimedia for learning: Methods and development* (3rd ed.). Needham Heights, MA: Allyn & Bacon.
- Amundson, N. E. (2003). *Active engagement: Enhancing the career counseling process* (2nd ed.). Richmond, VA: Ergon Communications, pp. 56–63.

- Barnes, A., & La Gro, N. (2009). Using ICT: A step change in career guidance or a sop to the twittering classes? *Constructing the Future: Career Guidance for Changing Contexts*. Stourbridge: ICG, 1, 70–78. Retrieved from [http://www.partnershipforyounglondon.org.uk/data/files/Resource\\_Library/Workforce\\_Development/contents20and20introduction1.pdf](http://www.partnershipforyounglondon.org.uk/data/files/Resource_Library/Workforce_Development/contents20and20introduction1.pdf)
- Barnes, A., La Gro, N., & Watts, A. G. (2010). *Developing e-guidance competences: The outcomes of a two-year European project to transform the professional development of career guidance practitioner*. Cambridge: Spring, Career Research and Development.
- Bimrose, J., & Barnes, S.-A. (2009). Measuring the effectiveness of career counselling. In R. Arnold, W. Gieseke, & C. Zeuner (Eds.), *Bildungsberatung im dialog* (pp. 79–96). Baltmannsweiler: Schneider Verlag Hohengehren GmbH.
- Bimrose, J., Barnes, S.-A., & Attwell, G. (2010). *An investigation into the skills needed by connexions personal advisers to develop internet-based guidance*. Reading: CfBT Education Trust. Retrieved from <http://cdn.cfbt.com/~media/cfbtcorporate/files/research/2010/r-skills-needed-connexions-personal-advisers-full-2010.pdf>
- Bimrose, J., Hughes, D., & Barnes, S.-A. (2011). *Integrating new technologies into careers practice: Extending the knowledge base*. London: UK Commission for Employment and Skills. Retrieved from <http://www.ukces.org.uk/assets/ukces/docs/publications/integrating-new-technologies-into-careers-practice.pdf>
- Biocca, F., Burgoon, J., Harms, C., & Stoner, M. (2001). *Criteria and scope conditions for a theory and measure of social presence*. Lansing, MI: Media Interface & Network Design Lab. Retrieved from [http://www.temple.edu/ispr/prev\\_conferences/proceedings/2001/biocca1.pdf](http://www.temple.edu/ispr/prev_conferences/proceedings/2001/biocca1.pdf)
- Bordin, E. (1979). The generalizability of the psychoanalytic concept of the working alliance. *Psychotherapy: Theory, Research and Practice*, 22, 252–260. doi:10.1037/h0085885
- Davidson, M. (2001). The computerization of career services: Critical issues to consider. *Journal of Career Development*, 27, 217–228. doi:10.1177/089484530102700308
- de Raff, S., Shek-wai Hui, T., & Vincent, C. (2012). *Career motion: How web-based technologies can improve the career choices of young people*. Retrieved from [http://www.srdc.org/media/8355/careermotion\\_final\\_report\\_en.pdf](http://www.srdc.org/media/8355/careermotion_final_report_en.pdf)
- Dyson, E. (2012). Face-to-Facebook: A blended approach to careers work. *Journal of the National Institute for Career Education and Counselling*, 29, 27–32.
- Foucault, M. (1977). *Discipline and punish*. London: Vintage.
- Foucault, M. (1980). *Power/knowledge*. New York, NY: Pantheon Books.
- Foucault, M. (1983). *Marxism a critique*. London: Routledge and Kegan Paul.
- Harris-Bowlsbey, J., & Sampson, J. P. Jr. (2001). Computer-based career planning systems: Dreams and realities. *The Career Development Quarterly*, 49, 250–260. doi:10.1002/j.2161-0045.2001.tb00569.x
- Harris-Bowlsbey, J., & Sampson, J. P. (2005). Use of technology in delivering career services worldwide. *The Career Development Quarterly*, 54, 48–56. doi:10.1002/j.2161-0045.2005.tb00140.x
- HM Government (2013). *Inspiration vision statement*. Retrieved from [https://www.gov.uk/government/uploads/system/uploads/attachment\\_data/file/238841/bis-13-1176-inspiration-vision-statement-R2.pdf](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/238841/bis-13-1176-inspiration-vision-statement-R2.pdf)
- Hooley, T., Hutchinson, J., & Watts, A. G. (2010). *Careering through the web. The potential of Web 2.0 and 3.0 technologies for career development and career support services*. London: UKCES. Retrieved from <http://derby.openrepository.com/derby/bitstream/10545/198269/1/careering-through-the-web.pdf>
- Howieson, C., & Semple, S. (2013). The impact of career websites: what's the evidence? *British Journal of Guidance & Counselling*, 41, 287–301. doi:10.1080/03069885.2013.773960
- Hughes, D. (2012). *Improving lifelong career guidance and ICT support project: Legislation on career guidance in EU member states*. EU-funded project on behalf of the croatian public employment service and tribal education Ltd. Retrieved from [http://ktl.jyu.fi/img/portal/10954/A3\\_9\\_Legislation\\_on\\_career\\_guidance.pdf?cs=1346413705](http://ktl.jyu.fi/img/portal/10954/A3_9_Legislation_on_career_guidance.pdf?cs=1346413705)
- Hughes, D. (2013a). The changing UK careers landscape: Tidal waves, turbulence and transformation. *British Journal of Guidance & Counselling*, 41, 226–239. doi:10.1080/03069885.2013.788131
- Hughes, D. (2013b). An expanded model of careers professional identity: Time for change? *British Journal for Guidance and Counselling*, 41, 58–68. doi:10.1080/03069885.2012.743964

- Hughes, D., & Gration, G. (2009). *Literature review of research on the impact of careers and guidance-related interventions*. Reading: CfBT Education Trust. Retrieved from <http://www.cfbt.com/evidenceforeducation/pdf/Literature%20Review.pdf>
- International symposium on career development and public policy. (2011). *Reports of the international work groups established to follow up the themes: 1) Transformational technology 2) Prove it works*. Retrieved from <http://eletpalya.munka.hu/web/eletpalya-folyoirat/iccdpp1>
- Kettunen, J., Sampson, J. P., Jr., & Vuorinen, R. (2014). Career practitioners' conceptions of competency for social media in career services. *British Journal of Guidance and Counselling*. Advance online publication. doi:10.1080/03069885.2014.939945
- Kettunen, J., Vuorinen, R., & Sampson, J. P. (2013). Career practitioners' conceptions of social media in career services. *British Journal of Guidance & Counselling*, 41, 302–317. doi:10.1080/03069885.2013.781572
- Kettunen, J., Vuorinen, R., & Sampson, J. P., Jr. (in press). Practitioners' experiences of social media in career services. *The Career Development Quarterly*.
- Lehman, R., & Conceicao, S. (2010). *Creating a sense of presence in online teaching: How to be there for online learners*. San Francisco, CA: Josey-Bass.
- Littleton, K., & Häkkinen, P. (1999). Learning together: Understanding the processes of Computer-based Collaborative Learning. In P. Dillenbourg (Ed.), *Collaborative learning: Cognitive and computational approaches* (pp. 20–30). Pergamon: Oxford.
- Madahar, L., & Offer, M. (2003). *Managing e-guidance interventions within HE careers services: A new approach to providing guidance at a distance*. Manchester: HECSU. Retrieved from [http://www.nicec.org/nicec\\_managing\\_eguidance\\_interventions.pdf](http://www.nicec.org/nicec_managing_eguidance_interventions.pdf)
- McLoughlin, I., & Clark, J. (1994). *Technological change at work* (2nd ed.). Buckingham and Philadelphia, PA: Open University Press.
- Mulvey, R. (2013). How to be a good professional: Existentialist continuing professional development (CPD). *British Journal of Guidance & Counselling*, 41, 267–276. doi:10.1080/03069885.2013.773961
- OECD. (2004). *Career guidance and public policy: Bridging the gap*. Paris: OECD. Retrieved from <http://www.oecd.org/education/innovation-education/34050171.pdf>
- Offer, M., & Sampson, J. P. (1999). Quality in the content and use of information and communications technology in guidance. *British Journal of Guidance and Counselling*, 27, 501–516. doi:10.1080/03069889908256286
- Offer, M., Sampson, J. P., & Watts, A. G. (2001). *Careers services: Technology and the future*. Manchester: Higher Education Careers Service Unit.
- Osborn, D. S., Dikel, M. R., & Sampson, J. P. (2011). *The internet: A tool for career planning* (3rd ed.). Broken Arrow, OK: National Career Development Association.
- Roberts, K. (2013). Career guidance in England today: Reform, accidental injury or attempted murder? *British Journal of Guidance & Counselling*, 41, 240–253. doi:10.1080/03069885.2013.773962
- Sampson, J. P. (2005). *Differentiating career services for young people and adults: The CIP approach*. Glasgow: Exposition of the Career Planning Journey and the Differentiated Service Delivery Framework.
- Sampson, J. P. Jr. (2008). *Designing and implementing career programs: A handbook for effective practice*. Broken Arrow, OK: National Career Development Association.
- Sampson, J. P., Carr, D. L., Panke, J., Arkin, S., Minvielle, M., & Vernick, S. H. (2003). *Design strategies for need-based internet web sites: Technical report number 28*. Tallahassee, FL: Center for the Study of Technology in Counseling and Career Development: Florida State University.
- Sampson, J. P., Dozier, V. C., & Colvin, G. P. (2011). Translating career theory to practice: The risk of unintentional social injustice. *Journal of Counseling and Development*, 89, 326–337. doi:10.1002/j.1556-6678.2011.tb00097.x
- Sampson, J. P., Peterson, G. W., Reardon, R. C., & Lenz, J. G. (2000). Using readiness assessment to improve career services: Assessment to improve career services: A cognitive information processing approach. *Career Development Quarterly*, 49, 146–174. doi:10.1002/j.2161-0045.2000.tb00556.x
- Savickas, M. L. (1999). *Career development and public policy: The role of values, theory and research*. Retrieved from [http://inpathways.net/\\_acrna/cd&pubpolicy.pdf](http://inpathways.net/_acrna/cd&pubpolicy.pdf)

- UKCES. (2012). *LMI for All' career database project – Processes adapted and lesson learned*. Retrieved from [https://www.gov.uk/government/uploads/system/uploads/attachment\\_data/file/305175/lmi-for-all-phase2a-report.pdf](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/305175/lmi-for-all-phase2a-report.pdf)
- Watts, A. G. (1986). The role of the computer in careers guidance. *International Journal for the Advancement of Counselling*, 9, 145–158. doi:10.1007/BF00129409
- Watts, A. G. (1996). Computers in guidance. In A. G. Watts, B. Law, J. Killeen, J. M. Kidd, & R. Hawthorn (Eds.), *Rethinking careers education and guidance: Theory, policy and practice* (pp. 269–286). London: Routledge.
- Watts, A. G. (2002). The role of information and communication technologies in integrated career information and guidance systems: A policy perspective. *International Journal for Educational and Vocational Guidance*, 2, 139–155. doi:10.1023/A:1020669832743
- Watts, A. G., & Dent, G. (2006). The “P” word. Productivity in the delivery of career guidance services. *British Journal of Guidance and Counselling*, 34, 177–189. doi:10.1080/03069880600583204
- Watts, A. G., & Offer, M. (2006). *The current and potential role of ICT in delivering information, advice and guidance*. IAGWP6. Derby: Centre for Guidance Studies, University of Derby.
- Williams, R., & Edge, D. (1999). The social shaping of technology. In W. H. Dutton (Ed.), *Society on the line, information politics in the digital age* (pp. 53–67). Oxford: Oxford University Press.