

Digital

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Introduction

This section describes some research studies into career interventions designed to increase exposure to either the workplace or professionals within it, which offer learning opportunities or the chances for using evidence and ideas in approaches

In doing so, in the Practices and Outcomes section, we have noted the potential contribution that the study could make to practice, by identifying the type of challenge it addresses.

As well as publications showing implementations for this type of career intervention, we have included several resources from other media, including talks, interviews and case studies. These may not be “academically” rigorous, but can provoke reflection and understanding of further approaches. These are included in the “Further illustrations and perspectives” section.

Finally, from either discussions we have had with the CDI, or through research agendas suggested in careers or related fields, we include a section on some potential future “Research questions”.

Key learnings

Some of the papers that show the development and status of this area include:

- The question of how ICT complements face to face forms of career support were being asked more than decades ago ([Watts et al, 2002](#)).
- Career guidance delivered using ICT is more effective when a career counsellor is present ([Whiston et al, 2003](#)).
- There are many opportunities, but throughout the history of online guidance and wider therapeutic interventions, a wide ranging policy and practice implications have always been cited, spanning questions of client suitability and ethics to the dynamics of the counsellor-client interactions. (e.g. [Hooley et al, 2015](#), [Khan et al, 2021](#)).
- A review of career websites, used with young people, have been shown to offer a range of benefits including self-knowledge and career clarity. However, “career websites that provide automated interactions need to be embedded within a wider range of careers support services. Only by doing so can they increase users’ awareness of career support”. ([Vigurs et al, 2017](#)).
- COVID saw a rapid increase in online career provision, but a review of the situation that prevailed led to the view that there is a “dire need” for reconceptualisation of services where digital augments face to face/traditional guidance. ([Bimrose and Goddard, 2021](#)).
- The situation is arguably becoming ever more complex, given a wide range of enabling technologies now in use in career guidance settings ([Herath et al, 2024](#)), and different portals found internationally ([Hughes et al, 2024](#))

Practices and outcomes

Selected publications that describe practices and outcomes for different challenges are listed below, with links in the title column. We have mostly included open access sources, but where the sources requires payment, it is noted next to the link by "(Paid)".

Title	Insights	Brief description
<p>Watts, A. G. (2002). The Role of Information and Communication Technologies in Integrated Career Information and Guidance Systems: A Policy Perspective. National Institute for Careers Education and Counselling, 2, 139–155. (Link)(Paid)</p>	<p>Reviewing early ICT applications to identify subsequent trends and learning</p>	<p>This paper offers an opportunity to understand the state of play with online guidance two decades ago and therefore draw conclusions about subsequent trends: A perspective is provided from the time about "ways in which ICT can complement and/or be integrated with other ways of providing career services are explored. Finally, a number of key policy issues relating to the role of ICT in national and regional career information and guidance systems are identified, including issues relating to funding and quality assurance."</p>
<p>Whiston, S. C., Brecheisen, B. K., & Stephens, J. (2003). Does treatment modality affect career counseling effectiveness?. Journal of Vocational Behavior, 62(3), 390-410. (Link)</p>	<p>Evaluation of choices of modalities</p>	<p>This paper reported results from a meta-analysis that compared the evidence for impacts when different modalities were used in the provision of careers support. Results indicated that computer systems were more effective when a guidance practitioner was present.</p>
<p>Harris-Bowlsbey, J., & Sampson, J. P., Jr. (2005). Use of technology in delivering career services worldwide. The Career Development Quarterly, 54, 48–56. (Link)(Paid)</p>	<p>Reviewing early ICT applications to identify subsequent trends and learning</p>	<p>The paper is a review the trends in the use of computers in the delivery and support of career guidance and counselling, as seen from two decades ago. The source was a symposium International Perspectives on Career Development. The concepts of new applications, challenges and concerns of the time were described, providing opportunity for retrospection.</p>
<p>Gati, I., & Asulin-Peretz, L.</p>	<p>Considering lessons from</p>	<p>The paper discusses the implications of ICT on career interventions: "A major</p>

<p>(2011). Internet-based self-help career assessments and interventions: Challenges and implications for evidence-based career counselling. <i>Journal of Career Assessment</i>, 19(3), 259-273. (Link)(Paid)</p>	<p>earlier online career applications, i.e. self-assessment tools</p>	<p>characteristic of the 21st century with significant implications on career decision making is the growing prevalence of Information and Communication Technologies (ICTs). Challenges involving ICT-based self-assessment and self-help interventions aimed at facilitating career decision making are discussed..The paper covers online career assessment. developing online evidence-based career interventions, and challenges of incorporating self-assessments and self-help interventions into face-to-face career counselling. The paper provides a milestone to review the subsequent progress and outstanding challenges.</p>
<p>Longridge, D., & Hooley, T. (2012). An experiment in blended career development: the University of Derby's social media internship programme. <i>Journal of the National Institute for Career Education and Counselling</i>. (Link)</p>	<p>Running a career digital literacy programme to help higher education students maximise their opportunities</p>	<p>The paper sets the context of digital career skills with a description of the different digital skills which enable an individual to manage their career e.g. evaluating resources, communicating and networking. The novel research study in the paper involves analysis of a social media programme run at Derby University. aimed at increasing students' "career literacy" - the cluster of skills related to how well students can gather and create online information to aid their career. It is concluded that both new and adapted versions of traditional skills are required by students to make the most of the digital opportunities available. .</p>
<p>European Commission (2014), Online career counselling (Link)</p>	<p>Reviewing general opportunities and risks of online guidance</p>	<p>This is a practice guide, based on an evidence review, conducted for the EU in 2014 as part of a project called Prometheus. Its main purpose is to provide additional resources, which will help career advisors enhance the quality of their services offered to clients. It discusses the advantages, disadvantages, challenges, and limitations of using online channels, and culminates in suggestions and tips for practitioners.</p>
<p>Hooley, T., Shepherd, C. and Dodd, V. (2015). Get Yourself Connected: Conceptualising the Role of Digital Technologies in Norwegian Career</p>	<p>Reviewing the opportunities and evidence for applying different online tools to deliver guidance</p>	<p>Contextualised somewhat by the passing decade, this report was a review for the Norwegian Government into the way that online tools could be considered and the evidence for the effectiveness and recommends a series of high level policy actions. The body of the report includes a contemporary view of web technology trends, the important role of digital literacy,</p>

<p>Guidance. Derby: International Centre for Guidance Studies, University of Derby. (Link)</p>		<p>the forms and opportunities and considerations for automated interactions, communication technologies, mobile technologies and their potential, and blended services.</p>
<p>Kettunen, J., Vuorinen, R., & Sampson, J. P. (2015). Practitioners' experiences of social media in career services. <i>The Career Development Quarterly</i>, 63, 268–281. (Link)</p>	<p>Deliberate selection of the various factors in a social media application based on opportunities and challenges.</p>	<p>Focus group interviews were conducted with 16 Danish and Finnish career practitioners from different settings but all with experience using social media in career services. Four broad, different ways of using social media were identified, as: (1) a means for delivering information, (2) a medium for one-to-one communication, (3) an interactive working space, and (4) an impetus for paradigm change and reform. The paper provided a classification system for evaluating and considering different factors within the application of social media (i.e. role of social media, function of social media, attitude, rationale, perception, intervention paradigm, nature of interaction, and practitioner's role.) For each of the four "ways of experiencing social media", challenges were also raised. The findings provide insights that career practitioners can use to deepen their reflection on the application of social media, and also promoted deliberate selection of the different parameters available.</p>
<p>Galliot, N. (2017). Online Career Guidance: Does Knowledge Equate to Power for High School Students? <i>Journal of Psychologists and Counsellors in Schools</i>, 27(2), 190-207. (Link)</p>	<p>Risks of ineffectual applications of digital tools (in schools).</p>	<p>The motivation for this study is that the usefulness of digital systems in improving the career uncertainty of young people is under-researched. A survey conducted with high school students in Years 9–12 (N = 706) from 12 schools in New South Wales, Australia found that the majority of students are unaware of the online career guidance services targeted towards them. Results were, overall, showing little value. The discussion provides consideration of risks for career practitioners.</p>
<p>Wessels, C. J., & Diale, B. M. (2017). Facebook as an instrument to enhance the career construction journeys of</p>	<p>Using social media (Facebook) to supplement career education in schools</p>	<p>The authors noted the research gap: "Although most adolescents spend time on Facebook, this form of social media is inadequately used to enhance their teaching, learning and counselling experiences... few studies have explored the use of Facebook as an instrument for career development." Using a qualitative</p>

<p>adolescent learners. South African Journal of Education, 37(4), 1-12. (Link)</p>		<p>multiple case study design, this article explores the use of Facebook as an instrument that can enhance the career construction journeys of adolescent learners. Findings suggest that Facebook can contribute to career construction journeys. This study identified themes that are consistent with other career assessment instruments, such as the Career Interest Profile (CIP) and the Jung Personality Questionnaire (JPQ). The information found in Facebook profiles and statuses can be used as supplementary tools to identify alternative career narratives.</p>
<p>Vigurs, K., Everitt, J., & Staunton, T. (2017). The evidence base for careers websites. What works?. (Link)</p>	<p>Building a careers website - or using careers websites as part of career education - for young people.</p>	<p>This paper provides a literature review on the use of career websites with children and young people in a range of educational settings. It draws out good practice that may be used by students and education institutions. Examples are given of the few evaluation studies conducted thus far, which show social mobility benefits. Some good practices were found, such as providing self-assessment opportunities alongside career information, and tailor such websites for the unique needs of young people.</p>
<p>Bakke, I. B., Haug, E. H., & Hooley, T. (2018). Moving from information provision to co-careering: Integrated guidance as a new approach to e-guidance in Norway. Journal of the National Institute for Career Education and Counselling, 41(1), 48-55. (Link)</p>	<p>Strategic decisions about developing integrated or blended online-offline models of provision.</p>	<p>The paper was written as Norway embarked on investing in a new digital career guidance facility, with the goal to drive improvements and innovation in career guidance provision. The authors review the definition of “integrated guidance”, different forms of online guidance, reviewed the “mixed” evidence at the time for its effectiveness and proposed that online provision is most effective when used alongside face to face provision. Such principles are then applied to the transitioning Norwegian system, with an exploration of different models where the online components play different roles. Principles of (1) integrated guidance, (2) instructional design and (3) co-careering (i.e. collaborative forms of insight creation between professionals and clients using technology) are introduced as desirable characteristics of the ultimate model.</p>
<p>Cobelli, N., Bonfanti, A., Cubico, S., &</p>	<p>Evaluation of an career e-service</p>	<p>Students from the University of Verona participated in a quantitative survey, and 119 questionnaires were collected to assess</p>

<p>Favretto, G. (2019). Quality and perceived value in career guidance e-services. <i>International Journal of Quality and Service Sciences</i>, 11(1), 53-68. (Link)(Paid)</p>		<p>the perceptions of respondents on e-service quality, information quality and perceived value about the career guidance e-service.</p> <p>The paper provides a framework for evaluation and indicates the most important factors in satisfaction perceptions of users - which in this case lead the authors to recommend designing “e-platforms that are easy to use, appealing, efficient and with continuous system availability.”</p>
<p>Hooley, T., & Staunton, T. (2020). The Role of Digital Technology in Career Development. In P. J. Robertson, T. Hooley, & P. McCash (Eds.), <i>The Oxford Handbook of Career Development</i>. Oxford University Press. (Link)(Paid)</p>	<p>Strategic decisions by practitioners in adopting digital tools for different jobs within CEIAG provision.</p>	<p>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 paper classifications for the role of technologies as seen by clients, by practitioners (provide information, automated interactions, or communication) and “pedagogical stances” that careers professionals can adopt when choosing how/where to use technologies (instrumental, connectivist, or critical). The paper also discusses some of the unique features and capabilities of digital technologies (e.g. location independence) and the challenges.</p>
<p>Kettunen, J et al (2020) “Enhancing Career Practitioner Understanding and Use of ICT in Guidance and Counselling” <i>Career and Career Guidance in the Nordic Countries</i>, edited by Erik Hagaseth Haug et al., Brill, 2020, pp. 163–75. JSTOR, (Link)</p>	<p>Overview of digital capabilities for career guidance professionals</p>	<p>“This chapter describes the Nordic jointly developed international course on ICT in guidance and counselling. Firstly, the rationale for developing such a course is discussed. Secondly the use of research-based framework is elaborated and application of it to the curriculum development is demonstrated.” The course was aimed at raising awareness of the many ways that technology impacts career practice. Research into practitioners’ conceptions of digital technologies, particularly social media, informed the development of the content.</p>
<p>Kholiq, A., & Solehuddin, M. (2020, May). The use of Facebook as a media for career guidance</p>	<p>Using Facebook to increase student career maturity</p>	<p>This case study research looked at applying Facebook as a career development aide for supporting secondary school students. The data were collected through an interview. The result of the study indicated that guidance and counselling in schools was</p>

<p>and counseling services in junior high school. In 4th Asian Education Symposium (AES 2019) (pp. 224-228). Atlantis Press. (Link)</p>		<p>developing to be more successful as Facebook was involved in providing students' services.</p>
<p>Schieber, J. (2020). Counselling in Times of the Coronavirus and Beyond. In European Distance and E-Learning Network (EDEN) Conference Proceedings (No. 2, pp. 323-331). European Distance and E-Learning Network. (Link)</p>	<p>Motivating career practitioners to adopt digital technologies through education</p> <p>Learning from digital applications in the wider field of education.</p>	<p>This paper did not concern itself with the direct application of digital technology per se, but rather asked "Which e-learning theory can support the intrinsic motivation of counsellors to deal with digital content and methods?". n=84 career guidance counsellors in Germany, Portugal, the United Kingdom, Ireland and Finland were surveyed by means of an online questionnaire and 19 career guidance counsellors by means of a personal (face-to-face) interview. The results confirmed the value and potential of providing open educational resources (OER). The particular potential is discussed for supporting guidance professionals in addressing hard to reach groups. (The proceedings in which this paper is presented also provides many case studies of applications in education, where some offer relevant learning to CEIAG.)</p>
<p>Turcotte, M., & Goyer, L. (2020). Distance career counselling: reflections of career counsellors on this practice. Sustainable Employability and continuous career development; experiencing the value of Core Qualities, 426. (Link)</p>	<p>Deriving advantages from online approaches while recognising areas that require adaptation</p>	<p>The paper researchers perceptions of career guidance practitioners (n=13) in Canada about the use of ICT to hold guidance sessions. The counsellors describe that they use similar techniques offline as online, but recognise the need for their practice to change. The research asked counsellors a series of questions, including a) how they got into online guidance, b) what tools are used, c) what skills and knowledge did they use, d) what are the perceptions of ethical issues created, Researchers examined the practice through a social justice perspective and expressed a feeling of competence at using the tools.</p>
<p>Osborn, D. S., Brown, C. A., & Morgan, M. J. (2021). Expectations,</p>	<p>Setting expectations of online applications.</p>	<p>This paper reports on a study at Florida State University where n=90 students engaged in a computer assisted career guidance exercise, with the students expectations measured beforehand and</p>

<p>experiences, and career-related outcomes of computer-assisted career guidance systems. <i>Journal of Employment Counseling</i>, 58(2), 74-90. (Link)</p>	<p>Anticipating results where systems fail to meet expectations</p>	<p>their experiences measured afterwards. The results indicated high expectations but low satisfaction levels. The post study analysis also discerned that when the experience exceeded a student's expectations, they tended to report a greater career decision-making self-efficacy.</p>
<p>Barker, G. G., & Barker, E. E. (2021). Online therapy: lessons learned from the COVID-19 health crisis. <i>British Journal of Guidance & Counselling</i>, 50(1), 66–81. (Link)</p>	<p>Preparing for effective provision of online counselling</p>	<p>This study explored counsellors' experiences with online therapy during the COVID-19 crisis, which presented an opportunity to examine how counsellors evaluated the drawbacks, benefits, and appropriateness of online therapy. Data collected through surveys from 114 professional counsellors, school counsellors, addiction counsellors, clinical social workers, and marriage and family therapists in the United States were analysed. Results indicated the level of preparation for online therapy varied. The process was heavily impacted by technical functionality and perceived as more effective face-to-face. Counsellors found clients disengaged and distracted rather than comfortable and open. Implications are concluded for practice.</p>
<p>Bimrose, J., & Goddard, T. (2021). The career development profession in Canada & the emergence of Online/ Multi-modal practice delivery. <i>Blueprint & Future Skills Centre</i>. (Link)</p>	<p>Requirements for a multi-modal and online career system</p>	<p>Against the backdrop of COVID, and turbulence in the job market, career development practitioners are being asked to interpret the labour market for clients despite a lack of training. Services are also moving online. "This paper addresses fundamental issues related to career development support and the integration of online practice." The authors describe that career services were slow to adopt ICT, but this changed with COVID. However, "There is a dire need for thoughtful reconceptualization of service models that can use the best of technology alongside face-to-face delivery."</p>
<p>Khan, S., Shapka, J. D., & Domene, J. F. (2021). Counsellors' experiences of online therapy. <i>British Journal of</i></p>	<p>Preparing for effective provision of online counselling</p>	<p>This study involves three depth interviews with guidance practitioners to understand the factors involved in online provision: The topics covered include (a) counsellors' experience of negotiating the therapeutic relationship online, (b) their experiences of utilising and adapting their clinical skills to</p>

<p>Guidance & Counselling, 50(1), 43–65. (Link)(Paid)</p>	<p>Reflective practice re: online counselling</p>	<p>assess clients in an online capacity, and (c) ethical issues associated with practicing online. Open-ended interviews were conducted with three counsellors located in Canada and one in the United States. Narrative analysis revealed eight major themes: convenience, therapeutic alliance, online counselling skills, assessing client suitability, reaching diverse clients, assessing client satisfaction, legal and ethical concerns, and personal and professional goals.</p>
<p>Margevica-Grinberga, I., & Šmitina, A. (2021). Self-Assessment of the Digital Skills of Career Education Specialists during the Provision of Remote Services. World Journal on Educational Technology: Current Issues, 13(4), 1061-1072. (Link)</p>	<p>Self-assessment of digital skills and applications</p>	<p>This study in Latvia was a mixed method investigation (qual and quant) into the digital skills of career guidance professionals in secondary school settings. The aim was to understand digital competences. The study showed that most CEIAG professionals were adopting and using digital technologies effectively (e.g. at least 77% of the specialists use digital tools to organise the consultation process). The paper also contains a survey instrument that practically tests digital competences, and forms a useful contribution to self-assessment.</p>
<p>Launikari, M. (2022). Towards more effective career guidance processes: the CREAR digital tool improving client-oriented interventions (37). Towards European Standards for Monitoring and Evaluation of Lifelong Guidance Systems and Services (Vol 1) 93 (Link)</p>	<p>Developing digital applications that avoid weaknesses and pitfalls in their development</p>	<p>The focus of this paper is on an application used for adults with career development and upskilling/reskilling needs in Finland: “As a response to this, a research-based early-detection tool for career guidance practitioners, teachers and student welfare professionals has recently been developed and piloted in Finland. The CREAR digital service need indicator helps these groups of professionals to strengthen the wellbeing, agency and resilience of adult learners. Based on the results that clients receive from CREAR, guidance practitioners can make interventions on issues that may influence an individual’s learning and/or career progress, and offer timely, targeted and need-based guidance and counselling services.” The report produces various learning points through risks and weaknesses of the project.</p>
<p>Hakim, D. L. (2022, March).</p>	<p>Reviewing the evidence (in a</p>	<p>This study involves a literature review that covers how career intervention and digital</p>

<p>How Career Interventions and Digital Career Counselling Affect Students' Career Maturity. In 4th International Conference on Innovation in Engineering and Vocational Education (ICIEVE 2021) (pp. 4-9). Atlantis Press. (Link)</p>	<p>secondary school setting)</p>	<p>career guidance can affect the development of career maturity of high school students. The final sample of 9 articles led to the conclusion that both career guidance and digital career guidance were highly effective at helping to develop students' career maturity.</p>
<p>Idowu, A., & Elbanna, A. (2022). Digital platforms of work and the crafting of career path: the crowdworkers' perspective. Information Systems Frontiers, 24(2), 441-457. (Link)</p>	<p>Considering the role of digital platforms on career clients' career options</p>	<p>The paper is contextualised by the trends of the rise of digital platforms in both labour market and careers environments. This particular paper addresses the idea of crowd work as an emerging way of working that is witnessing exponential growth. This paper involves qualitative research into digital platform users to tackle different perspectives in the literature about crowdsourcing work, and relating their narratives to career crafting.</p>
<p>Lahoud, C., Moussa, S., Obeid, C. et al. A comparative analysis of different recommender systems for university major and career domain guidance. Educ Inf Technol 28, 8733–8759 (2023). (Link)</p>	<p>Critically reviewing career recommender systems</p>	<p>In this paper, an extensive comparative study is conducted to investigate five approaches of recommender systems for university study field and career domain guidance. The developed approaches considered user-based and item-based collaborative filtering, demographic-based recommendation, knowledge base supported by case-based reasoning, ontology, as well as different hybridizations of them. A case study on Lebanese high school students is analysed to evaluate the effectiveness and efficiency of the implemented approaches.</p>
<p>Meyer, H. (2023). What is best practice in online coaching?. International Journal of Evidence Based Coaching and</p>	<p>Embedding broad aspects of “best practice” into online coaching</p>	<p>The authors find that there is little evidence on how to do online coaching well. This study explored how coaching is affected by the online environment using a constructivist grounded theory approach, to produce a practical support framework for coaches. Two categories emerged for 1) reflection, and 2) best practices. The latter theme are expanded into three practical</p>

Mentoring, (S17), 77-90. (Link)		further themes: a) caring (the self-care of the coach) and b) contracting (key areas for coach and coachee to establish pertaining to the online space) and c) communicating.
Hughes, D. (2024), An International Evidence Review: Targeted and Effective Careers Support Interventions. DMH Associates Adopting international best practices. Report by dmh Associates for The Department of the Economy, Northern Ireland (Link)	Reviewing the use of digital portals in public career services	This study was commissioned so that the Northern Irish career system could learn from the experiences and initiatives of international practices and apply this learning to the Careers Service in Northern Ireland. This was a relatively far reaching review with a focus mainly on career guidance in secondary schools, technology-focused provision, work with vulnerable individuals and professionalisation arrangements. The review does, however, contain a section on international case studies for digital platforms across 16 countries and territories where provision was reviewed.
Parola, A., Di Fuccio, R., Marcionetti, J., & Limone, P. (2023). Digital games for career guidance: a systematic review using PRISMA guidelines. Behaviour & Information Technology, 43(3), 475–485. (Link)(Paid)	Using digital games in career guidance that have been shown to be effective	The authors carry out a review into the evidence for the use of digital games in career guidance. This review included seven studies published between 2008 and 2021. User experiences suggest a positive effect of digital games on career development, and specifically on enhancing career adaptability. Implications for practitioners and researchers are outlined.
Herath, G., Kumara, B., Ishanka, U., & Rathnayaka, R. (2024). Computer-Assisted Career Guidance Tools for Students' Career Path Planning: A Review on Enabling Technologies and	Review of digital technologies and their use in career guidance between 2011-24	This study aims to investigate the enabling technologies and applications of computer-assisted career guidance (CACG) tools in the career planning activities of students. A systematic literature review was conducted based on a standard guideline for the period of 2011 through 2023. Then search results were narrowed down to 46 scholarly articles by applying predefined selection criteria. The key findings of this study revealed experimentation with a wide range of enabling technologies and techniques in the implementation of CACG tools for students' career path planning.

Applications. J. Inf. Technol. Educ. Res., 23, 6. (Link)		Key technologies used in the tools are also referenced, including AI.
Stavropoulou, E., Pezirkianidis, C., Kounenou, K., & Stalikas, A. (2024). A Pilot Strength-based group counselling intervention in career calling and wellbeing. Hellenic Journal of Psychology. 21(1), 98-121 (Link)	Delivering and testing the effect of an online group career exercise (in a higher education setting)	The purpose of this study was the pilot implementation and investigation of the effectiveness of an internet-delivered group counselling intervention called "What is your superpower?", which aimed to enhance career calling, well-being, and character strengths among n=25 Greek undergraduate university students. The experimental group attended the six-week program, while the control group did not. The results showed that the intervention group reported increased levels of career calling, well-being, and character strengths. The increased levels were maintained up to one month later.

Further illustrations and perspectives

Title	Insights	Brief description
NCDA (n.d.), Internet Sites for Career Planning (Link)	Looking at the range of available career platforms	This is a list of digital platforms that show a relatively wide range of websites that support career planning.
OECD (n.d.), Observatory on Digital technologies in Career guidance for Youth (Link)	Learning about the range of latest tech developments for careers	The OECD Observatory on Digital technologies in Career guidance for Youth (ODiCY) is an open-access repository on the use of digital technologies in career education and guidance by primary and secondary schools. This is designed to enable the global community of policy makers, schools and guidance practitioners to gain easy access to up-to-date practice examples, and insights on effective commissioning, development and use.
Connectedu. Virtual Work Experience Opens New Doors (Link)	Using a digital platform to manage careers education	Connectedu provide careers services to the schools sector. Their case studies involve a case study of a virtual work experience with a focus on Marketing and Communications, Business and Finance delivered to a Year 12 group at a Manchester school.
Acceleration coaching and counselling through e-tools and innovative training (ACCEnT) (Link)	Open resource learning content for career practitioners to support digital adoption	Career counsellors and coaches are the key to providing job opportunities and increasing the chances of labour market integration. ACCEnT is an EU-funded project that aims to support career counsellors, guidance practitioners and coaches working with “hard-to-reach groups” through an innovative online learning environment. The intention of the ACCEnT online seminar is to enable practitioners to facilitate the integration of hard-to-reach groups into the labour market.
Edinburgh College Career Coach (Link)	Careers portal	Career Coach is an online career and course matching portal that enables students to make educational and career choices.
Morrisby, Case studies (Link)	Using a digital platform to manage careers education	This company provide careers education, information, advice and guidance (CEIAG) service to schools, colleges and careers institutions across the UK and Europe, and also make extensive use of their digital platform and associated tools . Case studies demonstrate the various applications and benefit cases.
National Careers Service (Link)	Careers information website	The National Career service itself offers a plethora of online materials. (User

		satisfaction reports provide strong feedback for online services).
Start Profile (Link)	Careers information and planning website	Allows users to build career profiles through their skills and characteristics, which are then “matched” to jobs. Users can examine information such as jobs that are similar and numbers of openings.
iCould (Link)	Careers information website	This website provides career ideas and information aimed at school-age. There are advice videos, teaching resources and advice and guides.
Career Box (Link)	Careers information website	This website provides videos of different occupations to give students the opportunity to understand more about different careers.
Prospects: Options with your degree (Link)	Career idea suggestion tool	As part of the Prospects website, which contains a wide array of information on different courses, it also provides a tool that allows users to find jobs that match their degree. Each job profile includes work experience and typical employers.
Tomprou, M., Dabbish, L., Kraut, R. E., & Liu, F. (2019, May). Career mentoring in online communities: Seeking and receiving advice from an online community. In Proceedings of the 2019 CHI Conference on Human Factors in Computing Systems (pp. 1-12). (Link)	Evaluation of an online peer to peer mentoring platform	The paper researches users of a platform, Stackexchange, allows users to post questions visible to anyone, comment on others posts, and upvote/downvote questions and answers. The authors develop a taxonomy of career advice requests based on a qualitative analysis of posts in a career-related online forum, identifying three key types: best practices, career threats, and time-sensitive requests.
Jynge, J., Bakke, I., & Hooley, T. (2024). Exploring Practitioners’ Pedagogic Stances in Relation to Integrated Guidance: A Q-Method Study. Nordic Journal of	Reflecting on the impact of digital delivery to pedagogic stances	This article explores how experience with integrated guidance frames practitioners’ pedagogic stances. Integrated guidance is an approach to delivering career guidance that combines face-to-face and digital approaches. The article discusses three groups of careers professional who, while recognising the value of digital approaches, respond differently to implementing them in practice based on, amongst other factors, their enthusiasm.

<p>Transitions, Careers and Guidance, 5(1), 55-72. (Link)</p>		
<p>Ratcliffe, K., & Kaluzeviciute-Moreton, G. (2023). Telesupervision in counselling and psychotherapy: a systematic review of the literature. British Journal of Guidance & Counselling, 52(5), 801–814. (Link)(Paid)</p>	<p>Learning from wider studies into the use of tele-supervision in counselling</p>	<p>This paper is motivated by the perceived lack of coverage in technology assisted supervision for counselling and psychotherapy. Although not covering the area of career counselling explicitly, the literature review raises consideration and potential learning points, particularly including the components of successful practices and supervisor characteristics.</p>

Future research questions

In our discussion with stakeholders, the question was raised on the relative pros and cons of digital vs traditional delivery methods for a wide range of careers interventions. In summary, the question is:

- How does digital vs traditional delivery of key interventions affect the outcomes?

Research agendas that have been published in adjacent disciplines to career guidance, which highlight some potentially relevant themes and questions.

- The digital divide ([Lythreatis et al, 2022](#))
- Information systems ([Vassilakopoulou and Hustad, 2023](#))
- Children's digital opportunities ([Livingstone et al, 2017](#))
- Digital learning environments ([Schobel et al, 2021](#))
- Child empowerment with digital technologies ([Smith et al, 2023](#))
- Digital and AI technologies in coaching education ([Passmore, 2023](#))