INTERNATIONAL TRENDS AND INNOVATION IN CAREER GUIDANCE

Volume I.
Thematic chapters

In honor of Helmut Zelloth, ETF Senior Specialist

Rarely in our professional career do we have the privilege to work alongside someone who brings such passion and dedication to his work, together with a natural and instinctive interest in others and a desire to make a difference. Helmut's gentle and open disposition made every interaction with him memorable and enriching. Good humoured in all situations, always ready to share his expertise, Helmut combined advice with examples and stories from his huge experience built up over the years in many different countries. Going on work trips together was a good opportunity to hear all the stories and also talk about his other passions beyond work, from the mountains to winter sports, his native country, and his family at the centre of it all. Helmut will be missed in the European Training Foundation, in European Union circles where he was a regular contributor of ideas and inspiration, as well as in our partner countries. Career guidance was a special interest of Helmut's and this publication is just one of the ways in which his legacy will live on and continue to inspire our work.

Cesare Onestini
ETF Director

ACKNOWLEDGEMENTS

CONTENTS

1. INTRODUCTION

1.1 Context

Education, training and labour-market systems are increasingly challenged by developments such as globalisation, new and rapidly advancing technologies, demographic changes and environmental degradation. All these have a profound impact on the lives of individuals and on society as a whole.

Technology has transformed the way individuals learn and work. The idea of a job for life has been replaced by constant change and uncertainty. In a digital world, some occupations are becoming obsolete, while new occupations, as well as alternative or untypical forms of employment, are emerging. This is accompanied by a fragmentation of the employment landscape and often greater vulnerability for workers. Widespread automation and artificial intelligence, while beneficial for productivity and economic growth, mean many people need to upgrade their skills or even change their job to remain in employment.

This fast-developing world and the changing labour market require individuals to become real lifelong learners, to acquire new skills to cope with change and to adapt and build on their existing skills. It also brings a growing demand for valid information on labour-market evolutions and future prospects. Consequently, there is a need for greater support to enable people to manage their more frequent and complex transitions within and between education and work.

Many international organisations, including the European Training Foundation (ETF), are working intensively on the future of work and trying to detect the evolution of skills needs. There is a growing consensus that, among the new skills required, digital and social-emotional skills are essential for empowering individuals to improve their employability prospects, wellbeing and life fulfilment. New ways of strategic thinking are therefore required, and education and training systems, employment and social policies should be redesigned to develop people's new skills for the future.

In this context, there is a greater need than ever for career guidance. But, paradoxically, career guidance itself faces challenges in adapting to the new circumstances. Changes in delivery, and developing the innovation capacity of career-guidance services, are required to achieve greater effectiveness and to empower individuals to manage their own career paths. Technology is already having an impact on traditional career-guidance services, and the concept of career-management skills is increasingly gaining ground, not only in Europe but also on other continents.

1.2 Purpose and structure

The report follows up on the results of ETF international conferences on 'The Future of Work' (ETF, 2018) and 'Skills & Qualifications: benefits for people – how learning and guidance professionals make it happen' (ETF, 2019)[1]. Both conferences highlighted that it is essential for both young people and adults to be empowered to meet the new labour-market challenges. Career guidance will remain a highly valid mechanism to support people's transitions; however, it needs to adapt some of its delivery

---

[1] 'The Future of Work and Skills' ETF survey 2018 focused on ETF partner countries and included a total of 564 participants. The majority of respondents (324) were from ETF partner countries, with 239 from other countries, including the EU Member States. Responses from ETF partner countries were analysed separately and compared to the responses from other countries.

ETF Working together Learning for life

European Training Foundation

methods and to be faster and more effective in catering to the needs of individual learners and jobseekers in a quickly changing world.

In this report we use the term 'career guidance', which is defined as 'a range of activities that enable citizens of any age, and at any point in their lives, to identify their capacities, competences and interests; to make meaningful educational, training and occupational decisions; and to manage their individual life paths in learning, work and other settings in which these capacities and competences are learned and/or used' (Council of the European Union, 2008).

The report aims to present a collection of innovative or promising examples of how career guidance is changing around the world, in the context outlined above. The report aims to facilitate learning from these examples, to increase awareness and understanding of policy and practice in career guidance, and to provide policy inspiration to ETF partner countries and the international community. It also aims to stimulate reflection, to challenge practitioners and policymakers across the world to reflect on the risks and opportunities the future will bring, and to integrate these ideas into their policy and practice perspectives for career guidance.

The selected examples of innovative or promising policies and practices relate to the current mega-trends in career guidance and have an international coverage, though the bulk of examples comes from the European Union and ETF partner countries. In each case, innovation should be seen in the context of the country/region since career-guidance systems have different traditions and challenges and are at different stages of development. A functional career-guidance service or delivery form might be a strategic goal in one country or an innovative practice in another -(Barnes et al. 2020) Guichard (2003) showed that the methods of career guidance and the type of interventions might depend on the individual country or even on the educational system within a country (Whiston & Buck, 2008).

TABLE 1.1 THE ANALYTICAL FRAMEWORK AND GUIDING QUESTIONS OF THE STUDY

What are the current global challenges that might impact on career guidance?	What is the impact of these global challenges on education and training systems, employment and social policies, and the role of career guidance?	What changes are needed in education and training systems, employment and social policies and career guidance?	What are the current mega-trends in career guidance?	What innovative examples of policies and practices in career guidance could provide evidence and inspiration for future developments?

The report is structured as follows:

- Chapter 1 presents the context, purpose and methodology of the report and provides an overview of the analytical framework.
- Chapter 2 focuses on global challenges and responses given by the education and training systems, and employment and social policies; it then reflects on the role of career-guidance policies and practices in tackling these challenges.
- Chapter 3 identifies four mega-trends in career guidance, namely the use of information and communication technologies (ICT) in career-guidance systems, developing career-management skills (CMS), the importance of cooperation and coordination mechanisms between key stakeholders, and the role of parents in young people's career choices (informal career guidance). In addition, there is a brief presentation of other issues and approaches that are emerging as

ETF Working together Learning for life
European Training Foundation

trends in the international career-guidance debate. At the end of each section a table presents innovative or promising examples in the EU and internationally, which are explored in detail in Volume II.

■ Chapter 4 presents a policy overview from three selected ETF partner countries – Kazakhstan, Turkey and Ukraine – and an analysis of the evidence international trends and areas for improvement in those countries; tables present innovative or promising examples from these partner countries on each mega-trend, which are explored in detail in Volume II.

■ Chapter 5 draws conclusions and provides policy inspiration for partner countries and the international community.

1.3   Methodology

The methodology of the study combined desk research and analysis with interviews and field visits. While the innovative examples from the EU and internationally were developed using information collected through desk research and analysis, the examples from Kazakhstan, Turkey and Ukraine were identified by national experts through interview-based field work and targeted desk research prior to each field visit[2].

The literature was selected based on its relevance and topicality for the purpose of the report. Pertinent search and selection criteria were used for sourcing up-to-date studies, publications and policy documents from the EU and internationally that were relevant for the analysis applied in this study. The examples included in the report were chosen based on the degree of innovation with respect to the mega-trends (use of ICT, CMS development, cooperation-collaboration, the role of parents), evidence for positive impact and successful implementation, and the potential for transferability and adaptability to another context. The examples go beyond vocational education and training (VET), covering the whole lifelong learning (LLL) spectrum and all types of providers, including public employment services (PES), schools, universities and non-governmental organisations (NGOs).

The chapter on Kazakhstan, Turkey and Ukraine attempts to identify if similar initiatives exist in selected partner countries, what we can learn from them, and what are the potential areas for improvement in the light of international trends. To facilitate the reader's understanding of the country context, country overviews of career guidance are presented, and they are followed by a brief assessment of whether the international trends are emerging in the three partner countries.

In Volume II, the innovative examples in the EU, the three selected ETF partner countries (Kazakhstan, Turkey and Ukraine) and internationally are, as far as was possible, presented according to the following structure: context and introduction, content of the initiative, impact, effectiveness and success factors, challenges and future developments. Some examples, however, do not fit into this structure because they are a research project, are at the pilot stage or insufficient information was available.

By presenting initiatives that different countries have introduced to prepare and support innovation in the field of career guidance, ETF aims to facilitate information exchange and to stimulate national and

---

[2] Information was collected through desk research and three fieldwork visits in Kazakhstan, Turkey and Ukraine, which took place in the period September–November 2019 and were organised by the national experts involved in this study. Organisations active in the field of career guidance were visited and discussions with representatives of these organisations (decision-makers, practitioners, researchers, experts) took place. The field visits were very good opportunities to enrich the data collected through desk research.

ETF
Working together
Learning for life

European Training Foundation

INTERNATIONAL TRENDS AND
INNOVATION IN CAREER GUIDANCE | 8

international debates on practices, as well as on success factors, obstacles, and potential for transfer to another context.

ETF Working together Learning for life

European Training Foundation

2. GLOBAL CHALLENGES FOR EDUCATION AND TRAINING SYSTEMS, EMPLOYMENT AND SOCIAL POLICIES – DRIVERS OF CHANGE

Globalisation, technology, demographic change and environmental degradation have transformed the world of work and learning, creating massive shifts in the skills required to contribute to the economy and in the ways in which people work, with large implications for education, employment and social policies. Others have published extensively on this (Barnes et al. 2020, Cedefop 2019, Council of the EU 2011, EEEP 2019a, ETF 2018a–b/2019a–c/2017a–e, European Commission 2017/2019, Gardiner and Goedhuys 2020, Guadagno 2020, Harasty and Ostermeier 2020, Hirschi 2018, Hughes 2019, ILO 2018/2019b/2020, IOM 2019, IPCC 2018, Kose and Ohnsorge 2019, Mamede et al. 2020, Mann 2020, Messenger 2019, Mokyr 2015, Nair 2020, OECD 2019, Schwab 2016, World Bank 2015/2019, World Economic Forum 2020a, 2020b, 2020c, 2020d). Those most affected by these changes are low-qualified people, who often have limited career prospects and are at risk of unemployment (Cedefop, 2019). A critical reflection is needed on the extent to which prominent models and frameworks of competence and career development are suitable for addressing the occurring changes in the world of work, and how career-guidance practices might be affected by these changes (Hirschi, 2018).

Since early 2020 an additional global challenge has arrived in the form of the Covid-19 pandemic and its effects, which include job losses and educational disruption. At the same time, the Covid-19 pandemic is accelerating what is often referred to as the '4th Industrial Revolution' – by necessity bringing technological solutions to the fore in the workplace, in education and at home (Cedefop, 2020).

2.1 Education and training reforms as a response to global challenges

Investment in education, VET and lifelong learning systems is a necessary precondition for successful economic development. Policies are needed to revamp education systems and better prepare young people for the future labour market through interventions in curricula, learning environments, teachers' capabilities and the transition between education and the workplace. Effective education systems will have to go beyond traditional teaching techniques to provide learners with competences relevant to future employment, and they will also have to develop the ability of learners to be personally effective in applying those competences in changing situations through the development of transversal skills and particular socio-emotional skills (Mann et al., 2020). In addition, in the wake of fast technological change, more targeted investment in adult learning is needed, including for reskilling and upskilling. This is especially true in a context of ageing populations and migration. Others have published widely on the above issues (ACVT, 2018; Barnes et al., 2020; Cedefop, 2019; EEEP, 2019a/c/e; ETF, 2018a–b/2019a–c/2017a–e; European Commission, 2019; European Council, 2018; European Education and Training Expert Panel, 2019; Gouëdard et al., 2020; Mann, 2020; OECD, 2019/2020a/2020b/2020c/2020; Schleicher, 2020; Stevenson, 2017; UNESCO, 2020; Voss, 2017; WEF, 2020; World Bank, 2019/2020).

Schools also need to create an environment where all students have access to career-guidance interventions. Even being exposed to a small amount of career guidance could make a big impact, particularly when it comes to providing information about new types of occupations emerging.

Repositioning of vocational education and training

Vocational education and training (VET) has to prepare people not only for existing jobs, but also for future employment and job creation. According to the European Advisory Committee for Vocational Training (ACVT), VET is expected to reposition itself and the future mix will likely be a strong foundation of basic skills, generic transversal and professional competences (ACVT, 2018). VET systems will have to react faster, anticipate skills needs and develop new and more flexible pathways for learners. Governance in VET is expected to move towards a multi-level model, with the participation of the main stakeholders at various levels (i.e. national, regional, local, sectoral). The ACVT's vision of the future of VET in Europe stresses that it should be 'excellent, inclusive and lifelong' and defines three core elements: (i) the acquisition of skills to ensure employability, adaptability, personal development and active citizenship; (ii) provision that is accessible, attractive, valued, innovative and quality-assured; and (iii) integrated, responsive and diversified VET, underpinned by governance, funding and guidance. Career guidance is assigned an important role in the promotion of VET pathways to learners and families. Potential learners should have clear and user-friendly information on the training offer.

2.2   Employment and social policies as a response to global challenges

Changes in the global labour market have major implications for labour protection, public policy and career guidance.

Targeted employment programmes

Targeted programmes that promote skills development and social inclusion are needed to help foster inclusive and sustainable long-term growth and poverty alleviation. Most countries have target-group employment programmes that combine career information, work choice, search and maintenance, skills-development activities, life-skills development activities and support services. These types of programmes are explicitly tailored to the special circumstances of groups of individuals (OECD, 2019). Profiling tools can help the public employment services (PES) to target intensive services at the jobseekers most at risk of becoming long-term unemployed, to tailor services to the individual needs of jobseekers, and, using statistical models, to assess the prospects of jobseekers to find work (OECD, 2018).

Individualised approaches to support the long-term unemployed include: financial advice and help, rehabilitation, social support services, care services, migrant integration, and housing and transport support. These measures are aimed at addressing barriers to work and empowering long-term unemployed people to reach clear goals leading to employment. Public employment services should encourage employer involvement in the integration of long-term unemployed persons, accompanied by well-targeted financial incentives and the involvement of social partners (European Council, 2016).

Other measures are directed at re-employment, retraining and income support for displaced workers, especially for older and long-tenure workers in blue-collar jobs. These measures need to be calibrated to the individual needs of these workers, who can experience large earning losses due to long periods out of work and re-employment at a lower wage. Early intervention measures for re-employment can be initiated during the notice period by setting up a temporary PES office in the factory that is due to close. Employers must be required to provide an adequate notice period in advance of layoffs and should ensure that notified workers register with the PES. Re-employment measures for displaced workers are typically delivered by a combination of general active labour-market programmes (ALMPs)

ETF Working together Learning for life
European Training Foundation

and programmes targeted at this specific group. Another intervention consists of providing adequate income support for displaced workers while also encouraging their rapid re-employment. For example, a temporary wage supplement can be offered to displaced workers who return to work rapidly but accept a new job at a lower pay level (OECD, 2018).

Support for ageing workers and migrants

It is crucial to promote decent work for all, including ageing workers, migrant workers, refugees and displaced people. Employers should be encouraged to implement age-sensitive workplace design and management concepts, and to promote lifelong learning for ageing workers. Effective policies and measures should be implemented in relation to the trend of population ageing, for example: providing incentives for companies to encourage longer careers, introducing flexible working and retirement schemes, promoting more inclusive labour markets, providing conditions that enable intergenerational working and learning, and supporting lifelong learning for all – irrespective of age – through investment in continuing vocational education and training (CVET) and the development of workplaces as spaces for lifelong learning (Cedefop, 2012).

International and national policies need to ensure that enterprises and society benefit from the skills potential and qualifications of the migrant workforce. This requires measures that help match the demand and supply of skills and make it easier for migrants to integrate into, and move within, the labour market of the new country (Cedefop, 2014). Well-coordinated migration and employment policies can contribute to the elimination of recruitment fees and costs for migrant workers and the prevention of human trafficking and debt bondage (ILO, 2020).

Awareness of climate change and sustainability in employment policy

Adaptation to climate change also influences policy and career guidance. A recent Communication of the European Commission (2019) presents an initial roadmap of the key policies and measures needed to achieve the European Green Deal. The Just Transition Mechanism (JTM) proposed by the European Commission in 2020 plans to provide targeted support to regions and sectors that are most affected by the transition towards the green economy, like carbon-intensive regions and regions with many people working in fossil fuels. The most vulnerable workers will be protected by facilitating employment opportunities for them in new sectors, or offering re-skilling opportunities (European Commission, 2020).

Outreach strategies to the 'invisible'

Outreach services target people who lack basic life and work skills (e.g. non-registered unemployed, inactive young people, marginalised individuals, ethnic minorities, etc.). These services allow them to benefit from career guidance and learning activities by adapting the methodologies to their particular needs. Holistic and proactive strategies requiring the collaboration of health, social and psychological services, and a delay in the application of standard employability measures, such as job search and traineeship placements, are needed. It is important that PES collaborate with other organisations like youth services and non-governmental organisations (NGOs) to contact people who are marginalised, involved in criminal activities and need medical, psychological and employment support. A clear acknowledgement of long-term unemployment issues is required in national policies so as to ensure support and access to activation measures for long-term unemployed people. Outreach strategies should rely on strong cooperation and exchange of information between public, private- and civil-

sector organisations at local and regional levels, promoting individualised services for disadvantaged groups (Cedefop, 2018b).

Solutions from employment services in relation to the new forms of work

Employment and social policies need to include solutions that take account of new technological developments so as to harness their benefits and blunt the negative effects of their disruptions (World Bank, 2015). The new forms of work (part-time, remote, platform, project-based work or work on demand via apps) can facilitate better access to the labour market for disadvantaged groups, encourage participation among those with other responsibilities and foster self-employment and entrepreneurship.

The potential of new forms of work to benefit individuals and society may depend, however, on greater protection for workers. For example, there are growing concerns relating to platform workers' social protection, working time and health and safety standards, with the work itself often characterised by low income, low-skilled work and individual small-scale tasks (Eurofound, 2019). A new vision of PES is required in order to rethink their role in supporting people engaged in these new forms of work.

Public employment services and their repositioning

In view of the changing world of work and emergence of new forms of employment, public employment services (PES) have a major role to play in career guidance and lifelong learning, especially considering the increased demands for a skilled labour force (Borbély-Pecze, 2019). PES counsellors need to understand the needs of clients, who are the main stakeholders in the field, and how the services should be organised to enhance the individual's active participation in labour-market transitions. A practitioner's toolkit was prepared for the European network of PES with the aim of assessing the Career Guidance (CG) and Lifelong Learning (LLL) development needs in their respective country contexts and making practical plans and steps to strengthen the CG and LLL system and services (Arnkil et al., 2017).

The European Competence Profile for PES and European Employment Services (EURES) counsellors presents the competences around major tasks performed by employment counsellors and describes the competences in an operational way. It contains three corresponding competence areas: foundational competences (general practitioners' values and skills); client-interaction competences (working with jobseekers and employers); supporting competences (systems and technical), (European Commission, 2014). The European Competence Profile can bring a strong contribution to the professionalisation of services provided by employment counsellors.

2.3   The role of career guidance – innovative approaches needed

Career-guidance services reflect the economic, political, social, cultural, educational and labour-market contexts – as well as the professional and organisational structures – in which they operate (Watts, 1996 apud Watts & Sultana, 2004). Changes in society and the labour market therefore have important implications for career-guidance services.

Many reports underline that we live in a world that is increasing in complexity. The consequences of instability, precarity and unpredictability are cutting across social groups but hitting the least privileged hardest. Paradoxically, while environments are becoming less tractable and responsive to individual efforts, people are pressed to develop adaptability, flexibility and increased agency and self-management (Bakshi & Goss, 2019).

Career-guidance models and practices should consider the global challenges and support both public policies and individuals in addressing these. It is crucial that career guidance is better integrated into multiple policies and strategies, e.g. lifelong guidance (LLG), lifelong learning (LLL), social policy, up- and reskilling, whole-government approach – in a harmonised and coordinated model. Providing citizens with access to quality career-development programmes and services should be seen by governments as a strategic policy measure and as a way to address inequalities, to increase the employment rates of high-risk groups and to support college- and career-readiness efforts (Solberg, 2017). The majority of high-quality evaluations of career-guidance activities show evidence of positive economic, educational and social outcomes for young people. And previous research confirmed that career guidance can make significant contributions, not only to individuals but also to the achievement of public-policy goals in education, employment and social inclusion (Cedefop, 2019; Hooley, 2014; Hooley/Dodd, 2015; OECD, 2004).

Career-development programmes and services should change the focus from supporting individuals in making appropriate career decisions to helping them develop decision-making, proactive and resiliency skills (Solberg, 2017; European Lifelong Guidance Policy Network, 2015). The role of career guidance will become more demanding, and it has to adapt more rapidly and flexibly to the changing needs of citizens and the world of work. A 'green guidance' approach (Plant, 2014) is advocated in view of global warming and environmental challenges. New guidance concepts are needed to question the mainstream, individualistic career-development theories and practices.

This will also require a rethinking of current practices and the introduction of innovative methods of career-guidance delivery, some already being developed and under implementation. The International Centre for Career Development and Public Policy (ICCDPP) recommends countries across the world to support innovation in career development. This may include: providing resources to support innovation and space for piloting new career-development programmes and services; adopting a multi-channel approach to the delivery of career-development programmes and services; ensuring training and support for career-development professionals to innovate and develop their practice (ICCDPP, 2019a).

Practitioners should be well-prepared for their role of 'keeping hope alive and affirming the dignity of their clients' (Herr, 1997) by: supporting young people in tackling career confusion; dealing with a higher diversity of clients (disadvantaged youth, older workers, migrants, adults involved in new forms of work, etc.); implementing a more individualised service provision; introducing the sustainability dimension; developing clients' transversal skills for the future; and making more use of new technologies in career guidance.

Evidence on the impact of career guidance

There is a considerable evidence base in the field of career guidance. Examples of studies which demonstrate that career guidance has impact are presented below.

Hooley (2014) and Hughes et al (2016) showed that career guidance has a positive impact on: educational outcomes (increasing participation in education and training, or improving attainment rates); economic and employment outcomes (increasing salary, improving employee retention, increasing someone's likelihood of finding work, transition from education to work, social mobility, and a reduction in the number of citizens 'not engaged in education, employment or training' [NEETs]); social outcomes (reducing the likelihood of engaging in criminal activity, community engagement, confidence, resilience, self-esteem, improved non-cognitive skills and/or mental health wellbeing).

ETF Working together Learning for life
European Training Foundation

In line with that evidence, longitudinal studies in Australia, the United Kingdom and the United States showed that teenagers who combine part-time employment with full-time education do better in school-to-work transitions. Therefore, career-development programmes in schools that include a workplace experience bring positive benefits to students, such as the opportunity to apply their skills and knowledge in unfamiliar situations or to understand what it means to be effective in the workplace (Mann et al., 2020).

A literature review focusing on studies adopting quasi-experimental and experimental approaches (Hughes et al, 2016) showed that the outcomes linked to schools' careers education provision, including employer engagement, are primarily positive: this was the case for 60% of studies looking at educational outcomes (only 2% primarily negative); 67% of studies looking at economic outcomes (none of them primarily negative); and 62% of studies looking at social outcomes (only 3% primarily negative).

Research undertaken by Whiston et al. (2017) and Blustein et al. (2017) demonstrated that career development programmes and services for adults have an effect on positive development outcomes (e.g. life satisfaction, psychological and emotional distress, proactivity, preventing the recurrence of depressive symptoms). Longitudinal studies found that exposure to five-session employment/job search curricula decreased the incidence of depressive episodes (in the case of adults with a history of significant depression) and psychological/emotional distress. The involvement of unemployed adults in purposeful and structured social activities during the employment programme contributed to their wellbeing (Blustein et al., 2017 apud Solberg & Ali, 2017).

Research demonstrated how lifelong-guidance interventions can impact positively on career-management skills. The impact of a group intervention on career management, mental health and job retention was examined in Finland. The intervention took place within employing organisations and sought to better prepare employees for the management of their own careers. The participants were 718 individuals randomly assigned to either an intervention group (N = 369) or a comparison group (N = 349). Those in the intervention group took part in group intervention workshops, whereas those in the comparison group received printed information about career and health-related issues. The seven-month follow-up results showed enhanced career-management skills which led to a significant decrease in both depressive symptoms and intentions to retire early (Vuori et al, 2012 apud Hooley, 2014).

In measuring the impact of career-guidance programmes, it is crucial to take into consideration the ways in which the programmes are delivered, for example: individually, group-based, face-to-face or at distance. Whiston et al. (2003) compared different intervention modalities (e.g. individual career guidance, career classes) through meta-analysis and found that interventions involving a counsellor were significantly more effective than those based solely on the use of a computerised guidance system. Access to online career information produces positive outcomes if combined with discussions with professionals to help clients interpret information. Whiston (2002) highlighted that the most effective modalities for providing career interventions were individual counselling and career classes. Brown & Ryan Krane (2000) emphasised critical methods and techniques for career interventions: written exercises, individualised interpretations, occupational information, career modelling, and attention to building support (apud Whiston & Buck, 2008).

Another study examined the influence of participation in career-education interventions on career-development skills and school success in South Korean high-school students over a two-year period. This study highlighted that students who participated in 'six different types of career education twice

over a two-year period made the greatest gains in career-development skills and school success, defined as increased creativity and academic achievements' (Choi et al, 2015).

A Swiss study investigated the impact of career guidance over the course of a year, using mixed methods with 199 clients. The study analysed participants' levels of decisiveness about their career, satisfaction with their life, and their ability to act on plans to impact positively on their career. Results indicated a continual decrease of career indecision in the long term, and stabilisation with regard to clients' satisfaction with life (Perdrix et al, 2012 apud Hooley, 2014).

Finally, and summarising the above, a study of the European Lifelong Guidance Policy Network (Hooley, 2014) on the existing evidence of lifelong guidance concluded that guidance is most effective when it meets the set of features below:

1. is lifelong and progressive;
2. connects meaningfully to the wider experience and lives of the individuals who participate in it;
3. recognises the diversity of individuals and provides services relevant to their needs;
4. combines a range of interventions (e.g. one-to-one and online support);
5. encourages the acquisition of career management skills;
6. is holistic and well-integrated into other support services;
7. involves employers and working people, and provide active experiences of workplaces;
8. is delivered by skilled, well-trained and motivated practitioners;
9. draws on high-quality career information;
10. is quality-assured and evaluated.

Tackling career confusion

A recent OECD study highlights that, with labour markets undergoing rapid and fundamental changes, decision-making becomes more important but also more difficult. While the world of work has undergone major changes in the past 20 years, the career expectations of young people have changed little and become even more concentrated (OECD, 2020). International survey data reveals that 30% of teenagers globally are interested in just 10 occupations (IAG, 2019), and many young people aspire to jobs that are at risk of automation.

Results of the Programme for International Student Assessment (PISA) 2018 showed that young people from the most disadvantaged backgrounds are more likely to show signs of confusion about how education and qualifications are related to jobs and careers. They tend to aspire to a level of education and qualification lower than that typically required of their occupational goal. Career aspirations are often narrow and distorted by gender and social background. PISA 2018 also demonstrated that young people from disadvantaged backgrounds are still consistently less likely than their more privileged peers to participate in career-development activities such as job fairs, job shadowing and meeting with a career adviser (Mann et al., 2020).

More informed teenage career aspirations are linked with better academic results (IAG, 2019). Across OECD countries, clear relationships were observed between benefiting from career guidance and more positive attitudes about the usefulness of schooling (Mann et al., 2020). A longitudinal study following more than 80 000 individuals in the United States (Tracey & Robins, 2006 apud Musset & Mýtna Kureková, 2018) showed that choosing the wrong educational paths does lead to disengagement from education.

ETF
Working together
Learning for life
European Training Foundation

Young people therefore need effective and targeted career-guidance measures. Collaboration between schools and employers can help young people understand occupations and careers.

Dealing with a higher diversity of clients

Career guidance is challenged when it comes to providing support for all categories of clients, e.g. migrants, ethnic minorities, low-skilled workers, citizens with a low socioeconomic status, NEETs, unemployed adults or people involved in new forms of work (platform work, self-employed, online work). Career-guidance services need to become more diverse and tailored at the same time, with the aim of enhancing the employability of individuals and connecting them to the needs of the labour market (Arnkil et al., 2017).

It is essential that disadvantaged groups (e.g. migrants, ethnic minorities, low-skilled workers, citizens with a low socioeconomic status) have access to free career-guidance support. Programmes specifically designed for disadvantaged school-age groups, such as young people at risk of becoming NEETs, migrants, refugees, etc., work best when they are targeted, located in the community, monitored and highly individualised (Musset & Mytna Kurekova, 2018).

Career-guidance services have an important mission of supporting migrants by offering information on legislation and institutions, and issues relating to housing, healthcare and social protection. Information about equivalence of qualifications, assistance during recognition processes, and support to get professional experiences and skills validated are also crucial for successful integration into employment, education and training (Cedefop, 2014).

People involved in new forms of work (platform work, self-employed, online work) are difficult to reach in current career-guidance structures. Nevertheless, they encounter difficulties such as a lack of opportunities for advancement and for the development of occupational skills, grey areas over their employment status (whether employee or self-employed) and a lack of definition on their rights and entitlements, for example as regards social protection, working time, earnings or representation (Eurofound, 2019). Offering different types of online assistance can be a viable solution for guidance practitioners to reach this group of clients.

A more individualised service provision of career guidance

Career-guidance programmes and services should support individuals to accomplish multiple life goals that include work, family and leisure, as well as offering commitment on lifelong learning, adaptability and learning to learn. It is important that career-guidance practitioners support their clients to shape their lives and work by becoming proactive in developing their skills, knowledge and attitudes, and combining knowledge from different sectors and types of careers.

A more individualised service provision of career guidance, taking into consideration the actual life situations of individual service users, would help achieve this. Employers should be supported to better use the talents and skills of their staff and to engage their employees more actively in career planning at work (Cedefop, 2011b). Moreover, a better coordination between career guidance and the validation of non-formal and informal learning will contribute to the most appropriate support to individuals' career decisions and personal development (Cedefop, 2019). The involvement of clients in designing and developing career-guidance provision will support more effective systems for them and better meet their requirements and needs.

The 'green guidance' approach

The 'green guidance' approach is concerned with sustainable development, environmental conscientiousness, and responsibility for the ecosystem. It deals with the choice of work and jobs that minimise environmental harm and enhance awareness of the importance of green careers. It also encourages individuals to consider the environmental implications of their career choices and to balance work and other aspects of their lives, thereby sustaining a way of life that promotes health, economic security and social justice (EEEP, 2019c). 'Green guidance could be proactive, questioning, probing, reflexive, and client-centred in the new sense. Green guidance questions a simplistic economic growth agenda and points to wider and greener growth approaches' (Plant, 2014).

The transition to environmental sustainability (the 'green transition') continues to affect existing occupations, where reskilling or upskilling is needed; and – more rarely – to create new green occupations. New occupations tend to emerge at higher skill levels, whereas lower-skilled occupations tend to require more environmental awareness or simple adaptations to work processes (ILO, 2019b).

It is important to include the sustainability dimension in activities at all education levels, and to support teachers and career-guidance practitioners to develop their own skills in order to be able to orient their students/clients towards more sustainable lifestyle and career choices.

Developing transversal skills through career guidance

Social and emotional skills and career-management skills are becoming increasingly critical to helping citizens develop the competences needed to become employable within the emergent 4th Industrial Revolution. This is recognised by the European Union in its Council recommendation on key competences for lifelong learning, where the 'personal, social and learning to learn competence' is included (Council of the European Union, 2018). Jobs requiring a combination of digital and non-cognitive/transversal skills are better paid than others (Joint Research Centre, 2019). The skill most sought-after by European employers is adaptability to change, mentioned in three out of four vacancy notices in a sample of over 30 million vacancies (Cedefop, 2019).

Citizens need social skills and social awareness to interact with different managers and work environments, as well as self-management skills to engage in lifelong learning. Therefore, career-guidance activities in schools, universities, PES, companies, etc. should focus on the development of social and emotional skills: self-awareness, social awareness, self-management, relationship skills, and decision-making (CASEL, n.d.). The ability to work effectively in project teams, for example, demands that individuals understand their unique talent and how it contributes to the team work plan (self-awareness), the ability to negotiate and address differences (social awareness, relationship management), and the ability to work independently and seek out resources and supports as needed (self-management skills). Relationship and communication skills refer to the ability to establish and maintain healthy and rewarding relationships with diverse individuals and groups (e.g., communication and tea work). Decision-making is the ability to make constructive and respectful choices about personal behaviour and social interactions based on ethical standards, safety concerns, social norms, the realistic evaluation of consequences, and the wellbeing of self and others (CASEL, n.d.).

The concept of 'career-management skills' (CMS) assumes that individuals can influence their own careers, that there are a range of skills which help an individual to manage his/her career in ways that are personally advantageous, and that these skills can be acquired through learning and experience. CMS are based on a lifelong process rather than a single event (e.g. choosing a career pathway),

(Neary and Dodd, 2016). They are 'a range of competences which provide structured ways for individuals and groups to gather, analyse, synthesise and organise self, educational and occupational information, as well as the skills to make and implement decisions and transitions' (ELGPN, 2012). Examples of CMS are: capacity for self-knowledge and self-evaluation, knowledge about occupations and businesses, understanding the systems of education, training and qualifications, capacity of an individual for describing their own skills, critical thinking, budget management, project management, etc. Further reflection is needed on how far it is possible to develop these skills through purposeful interventions in career guidance, while the development of CMS to empower individuals to manage their own careers is seen as the future direction of support.

Career guidance in the context of the Covid-19 pandemic

The Covid-19 pandemic has suddenly caused an increase in unemployment, occupational shifting, and a change of job content. With the temporary closure of schools and leisure opportunities, the pandemic has also influenced conceptions of the nature of work, leisure, family life and society. In a world where going into the office, networking and attending an interview are no longer possible or incur risks, career guidance has quickly had to adapt its messages (Hooley et al., 2020).

In such a situation, the role of career-guidance workers is to help people to find solutions to the impact of the crisis on their lives. Qualified career-guidance advisers should also be able to refer clients to other appropriate services, mental-health organisations or welfare support. Moreover, the Covid-19 crisis emphasises once more the importance of implementing ICT and AI solutions in the field of career guidance. Virtual solutions should be explored and adopted by schools, counselling and guidance centres, PES, universities, etc. Digital educational solutions based on AI and other learning analytics techniques should be designed and implemented in the near future. It is time to reflect on the role digital technology should have in the future of education and career guidance, not only as a solution that enables the continuance of services during such a pandemic, but also, e.g. for the personalisation of learning/career guidance. AI-powered systems could have helped teachers, students and parents, employers and unemployed people navigate the range of digital learning resources out there if they had been more available and ready to use. This pandemic has shown us that training and preparing the school/PES's counsellors to undertake their work online is absolutely necessary (also see IAG 2020b, Cedefop 2020).

3. MEGA-TRENDS IN CAREER GUIDANCE AND INNOVATIVE EXAMPLES IN THE EUROPEAN UNION AND INTERNATIONALLY

This chapter discusses four mega-trends in career guidance: the use of ICT in career-guidance systems; developing career-management skills; cooperation and coordination mechanisms between key stakeholders in career guidance; and the role of parents in young people's career choices. In addition, there is a brief description of other issues and approaches emerging as trends in the international debate: social justice as an issue in career guidance; bringing career guidance closer to communities; 'co-constructing' the careers of guidance counsellors; providing evidence and accountability of career-guidance practices; and the recent 'co-careering' approach. For each mega-trend, examples of promising policies and practices from the EU, selected ETF partner countries and internationally are outlined in a table and explored in greater detail in Volume II.

3.1   Use of ICT in career-guidance systems

Information and communication technology (ICT) is an umbrella term encompassing a number of different technologies and tools (e.g. email, SMS/text messaging, websites, chat, newsgroups, telephony), which have quickly become core to the delivery of career guidance. The rapid expansion of technology, including the growth of open data and mobile devices like smartphones, apps, tablets and wearables (e.g. smart watches), enables new methods of learning about careers (Attwell & Hughes, 2019). Use of ICT ranges from the very familiar – such as audio or videotape tools (Clark, 2016) –, to chatrooms and instant messaging (Nagel and Anthony, 2016), forums (Carlson-Sabelli, 2016), or more specialist applications like massive open online courses (MOOCs) (Bakshi & Goss, 2019).

Anthony Watts, a pioneer in the field of career guidance, emphasised 'the transformational potential of ICT' (Watts, 2010) and the potential roles of ICT as a tool, as an alternative, or as an agent of change in career guidance (e.g. Watts, 1986, 1996, 2010). As a tool, ICT supplements the other tools used in career services; as an alternative, ICT replaces other career-services elements; and, as an agent of change, ICT fundamentally alters the design of the career service (e.g. Watts, 1996, 2010 apud Kettunen, 2017). ICT is used in the delivery of career information and guidance services, and it can complement and/or be integrated with other ways of providing career services. ICT and social media are also used in collaborative career exploration and co-careering (Kettunen, Vuorinen & Sampson, 2015) in which shared expertise and meaningful co-construction on career issues take place with and among community members (Kettunen, 2017, p. 41). Moreover, ICT generates discussion of key policy issues relating to its role in national and regional career-information and guidance systems (e.g. Watts, 2001).

Kettunen, Vuorinen and Ruusuvirta (2016) examined European Lifelong Guidance Policy Network (ELGPN) representatives' conceptions of the role of ICT in relation to national guidance policies across the EU. The results demonstrate that the extent to which countries use ICT in career services varies widely from unexploited to strategic.They emphasise that the implementation of a strategic approach for the use of ICT in relation to lifelong guidance requires a jointly agreed cross-ministerial strategy for lifelong guidance and a common conceptual framework for service delivery and funding. The study presented a matrix which may help in discussing and formulating a common conceptual framework for integrated all-age guidance services.

The ELGPN has described the possible roles of ICT as follows (see ELGPN Tools No 6 (2015): Guidelines for Policies and Systems Development for Lifelong Guidance, p. 26):

■ as a tool to assist, enhance, and further develop traditional approaches to the provision of career development services, resources and tools;

■ as an alternative to traditional approaches to such provision;

■ as an agent of change on how existing career development services, resources, and tools can be transformed, accessed, used, and managed;

■ as an administrative tool to support, among others, evidence collection, evidence-based policy development, accountability, quality assurance, and policy and systems co-ordination and coherence within and across sectors;

■ as an integrative agent, providing a common conceptual framework for the design and delivery of lifelong guidance services, resources and tools across different sectors (education, training, employment, and social).

There is evidence of significant progress in integrating ICT into career guidance services and related practices; however, there is potential for further improvement. With the continuous proliferation of new technologies, improving the implementation of ICT in career services has become increasingly important. Recent research reveals that challenges in implementating ICT in career services include various issues from (1) inadequate access to ICT, (2) inadequate access to information, and (3) inadequate skills and competencies, to (4) inadequate integration (Kettunen & Sampson, 2019). Implementation is an ongoing process; problems can be avoided by anticipating them better.

The following sub-chapters discuss: online career information and its sub-types; the uses of ICT in career-guidance provision; and the professional development of practitioners in career guidance in relation to ICT.

3.1.1 Online career information and its sub-types

A variety of digital career information systems has emerged in recent years, and some typical models are presented here.

Digital career information systems (CIS)
Digital CIS have a great potential to assist individuals. It is crucial to understand that the user experience with ICT systems can be tailored to be as strong as it is with face-to-face counselling, which offers the possibility of more effective and useful systems (Bright, 2015).

CIS are an important part of – if not a prerequisite for – effective career guidance. These are usually 'designed to aid an individual or a group in their choice of career, employment, occupation or work by gathering together, organising and providing information about specific occupations, professions or organisations, including descriptions of pay, conditions, training, qualifications and experience required. Career information systems are often computer-based or online but they are also available in print'. (ELGPN, 2014). CIS also comprise the databases that are used as sources of information. The design and organisation of CIS should take into consideration the diversity of users and ensure access and quality of delivery for these groups.

Labour-market information (LMI) systems
Career information systems use data from labour-market information (LMI) systems, translated in a user-friendly way. LMI systems are 'systems, mechanisms or processes for gathering, organising and providing information about the state of the labour market and/or professions and jobs. This includes

recording changes taking place within the labour market, employment, jobs and the professions' (ELGPN, 2014).

The role of LMI systems is to help the work of career-guidance practitioners, teachers and trainers who support: young people in choosing their education and training pathways; employed adults to manage their careers in an informed and strategic way; or unemployed adults to rejoin the labour market. They have access through LMI to information about employment trends, data on the structure of the labour market and the way it functions, information about different occupations and training courses available, as well as job opportunities (e.g. Attwell, 2017 apud Attwell and Hughes, 2019; Barnes, 2018). The use of online LMI does not replace the support of career-guidance professionals but it does require investment in specialised training for them.

Reliable LMI is essential for young people thinking about their careers or considering starting up businesses, and for unemployed or employed people who are thinking about a career change. LMI informs them about: economic and labour-market conditions, education, qualifications, training and skills, current and future demand and supply of labour and jobs, vacancies and recruitment (e.g. Attwell and Hughes, 2019; Barnes, 2018).

LMI also supports policymakers to develop strategies for the labour markets of the future. Many countries across the world invest significantly in gathering and handling LMI with the aim of supporting labour-market policy and individual career decisions. To be effective, career-guidance programmes should combine the use of LMI digital resources with a variety of media and face-to-face channels. Skills-forecasting exercises are developed to foresee future demand for skills, identifying obstacles, the changing requirements of occupations and the reshaping of qualifications. Information on sector-specific realities, available vacancies and employer perspectives is also being made available to a wider spectrum of jobseekers, policymakers, employers and school administrators (Cedefop, 2016).

Web-based interactive systems in career guidance

From a general resource for facilitating communication and disseminating information, the internet has evolved into a tool for the collaborative construction of knowledge through social media and mobile devices (e.g. Kettunen, Vuorinen & Sampson, 2013; Kettunen, 2017). Web-based interactive systems use internet technologies to deliver information and services to users or other information systems/applications in an interactive way. They offer information on occupations and learning opportunities, combined with assessments of personal skills and attitudes. Many include the possibility of creating personal portfolios detailing skills, qualifications, experiences and aspirations. They can contain matching engines, linking personal traits and skills to advertised vacancies and allowing people to draft their CVs and apply for jobs (Cedefop, 2019c).

There are comprehensive websites which have factual information and career-development material, including diagnostic self-assessment, and which may also offer a helpline or chat contact with career-guidance professionals. Impact evaluation of these websites on individuals' career-related knowledge and skills is required. Literature shows that many evaluations of websites have focused on users' awareness and satisfaction levels, or users' views on career websites and how they use them (Howieson & Semple, 2013).

Use of big data in career guidance

The harnessing and trade of big data via artificial intelligence (AI) is enabling the digital transformation of many activities. Big data (megadata or massive data) refers to data sets that have become so voluminous that they are beyond human intuition and analytical capabilities, and beyond even those of

ETF
Working together
Learning for life
European Training Foundation

conventional computerised database or information-management tools (Fondation Robert Schuman, 2020). Big data is useful in career guidance for analysing 'real-time' educational or labour-market information from online platforms with the aim of supporting individuals in making career and training decisions. However, the application of AI remains largely under-researched in career development' (Bright, 2015).

Expert Systems (ES) are a branch of AI that attempt to emulate the behaviour of human. In the domain of career guidance, ES technology has been successfully used in the context were it guides the students for the selection of their undergraduate courses after the completion of higher secondary school education. The method of computerisation of the dialogue between a student and a human adviser can be conveniently emulated, i.e. the reasoning of the academic adviser can be successfully emulated by the reasoning power of ES (Saraswathi et al., 2014).

Use of chatbots in career guidance

Chatbots, backed by machine-learning technology, can automate customer services by determining how to resolve a problem based on knowledge of the topic and the process involved. If the 'AI worker' cannot answer a question, it will alert a human colleague, observe the following interaction and learn how to respond to comparable questions in the future.

A chatbot system is able to respond to repetitive and typical questions and can improve the efficiency of a career-guidance service, allowing the practitioners to focus on the in-depth counselling of their clients.

Use of apps in career guidance

Apps can use the GPS capabilities of mobile devices to deliver local employment and training-opportunity information and facilitate to focus on a particular aspects of career development, or a specific industry or occupational area, offering flexibility and targeted career-development services. The LMI provided by apps is automatically and readily updatable (Bright, 2015). Apps also have the advantage of presenting complex information for young people in an attractive, understandable and accurate way. App navigation on many brands of smartphone and tablet is intuitive, making use of swiping and touch interfaces.

Career simulators with enhanced AI

Career simulators with enhanced AI can contribute to the development of appropriate risk-taking behaviour in relation to career options (e.g. Bright, 2015; The Real Game, see Jarvis & Keeley, 2003). Career simulators with enhanced AI can also help decision-makers understand the dynamic and ongoing nature of decisions and their implications.

3.1.2 Aims and outcomes of ICT use in career-guidance provision

ICT is used in career guidance with the following aims: to deliver information, to automate interaction, and to provide channels for communication (Watts, 2002). 'Using ICT to deliver information eliminates time and space constraints and increases individuals' access to information. Using ICT to automate interactions can enable practitioners to provide more personalised support to those individuals who need it. Finally, using ICT to provide channels for communication increases individuals' access to professional support via building communities of learning and using different channels, methods and models such as one-to-one, one-to-many and many-to-many' (Kettunen, 2017, p. 21).

Another way of conceptualising the expanding role of ICT is to focus specifically on its contribution to the guidance process. In this context, Barnes, La Gro & Watts (2010) suggested that ICT could serve four functions: informing, experiencing, constructing and communicating:

1. informing – use of ICT to help clients access and make use of careers information, e.g. courses and jobs databases;
2. experiencing, which includes both gathering information and interacting – use of ICT to help clients learn from virtual experiences, e.g. online simulations;
3. constructing – after accessing information and experiences, the clients use ICT to better understand themselves and their situation, e.g. building e-portfolios;
4. communicating or providing channels for communication – after accessing information, having experiences and understanding themselves, the clients use ICT to connect with their networks of support by various channels, e.g. video calls, emails, online application forms.

ICT is highlighted in the scientific literature as a tool that 'can transform counselling assistance activities and decision-aid practices' (Savard et al, 2002). For example, the practitioner uses ICT tools (e.g. databases, websites, etc.) to help clients, or the practitioner refers the client to a specific ICT tool (e.g. websites, databases, etc.) to use on their own. ICT can also be employed as a medium to communicate with the user, through email, videoconference, chat ,etc. (Cogoi, 2005).

Other research (Vuorinen, Sampson & Kettunen, 2011) examined data collected in 2001–02 and in a follow-up study in 2010 to analyse changes in the perceptions of guidance practitioners regarding their role and the role of the internet in meeting guidance goals and delivering career-guidance services. The outcomes of 2010 showed higher expectancies from practitioners to extensively use the internet in their practice, for example: to develop online career courses, to produce career information on institutional websites or to get involved with social media. Both in 2001–02 and, again, in 2010, the practitioners indicated a distinct need for in-service training and peer support in the use of ICT in counselling and guidance.

Bimrose and Brown (2019) analysed European research (2014–18) that examined how career-guidance counselling and employment practitioners can be supported at a distance, using technology-enhanced learning (TEL) to facilitate their professional identity transformation. ICT applications were developed to support practitioners with online reflection, peer coaching and the use of LMI in their practice. The TEL approach emphasised the role of facilitation (Bimrose et al., 2014) and included the use of blended learning programmes or MOOCs, complemented by the use of online LMI tools and online support for reflection and peer coaching. The TEL online course showed the high value placed on peer learning support and the research study demonstrated that the same effect can be achieved virtually, at a distance, with colleagues who are located in different countries and who share group-based professional identities that transcend organisational contexts and national boundaries (Bayerl, Horton, & Jacobs, 2018 apud Bimrose and Brown, 2019).

3.1.3 ICT and the changing role of career-guidance practitioners

Delivering career guidance and employment interventions to clients at a distance and/or supporting clients in their search for labour-market information (LMI) require transformation of practices and a new way of thinking and working. To accommodate these changes, the professional identity of career-guidance practitioners needs to be transformed (Bimrose and Brown, 2019). To embrace the innovation and change brought by ICT, career-guidance practitioners need adequate training and

support. For example, Cedefop has developed a set of training modules specifically aimed at facilitating changes in attitudes to ICT among those working for career-guidance services (Cedefop 2019c).

At the same time the EUs Digital Competence Frameworks (DigComp, DigCompEdu, DigCompOrg) can be used as tools to improve citizens', educators' and career guidance practitioners' digital competence. DigComp describes which competences are needed to use digital technologies in a confident, critical, collaborative and creative way to achieve goals related to work, learning, leisure, inclusion and participation in the digital society, covering the following key components: information and data literacy; communication and collaboration; digital content creation; safety; and problem solving. DigComp can help citizens, educators and professionals with self-evaluation, setting learning goals, identifying training opportunities and facilitating job search. DigComp can help policymakers to monitor citizens' digital skills and to plan and design education and training offers, for example by including the digital skills in the school curricula or in the initial and continuous training of teachers.

The skills required for practitioners to use ICT in counselling and guidance include: learning in virtual environments; developing and managing user-friendly web resources; 'animating' chats and videoconferences; participating in newsgroups; administrating electronic tools (e.g. tests, questionnaires); using software for processing client information; distinguishing valid, reliable and good-quality material; and operating specific careers software packages (Botnariuc & Făt, 2011). Bright (2015) also underlined new skills requirements for career-guidance practitioners such as: working with developers to produce websites, apps, streaming video and interactive online learning environments.

A study conducted with Danish and Finnish practitioners (Kettunen, Sampson and Vuorinen, 2015) highlighted the role of four social-media competences that career-guidance practitioners should acquire: delivering information (media literacy); delivering career services (online writing); collaborative career exploration (interactive working spaces) and co-careering (online presence). Co-careering involves 'the shared expertise and meaningful co-construction of career issues among community members' using social media (Kettunen, 2017). The findings of this study show that social media competences in career services are not only about a particular set of new skills, but require a dynamic combination of cognitive, social, emotional and ethical factors. It also underlines the importance of developing pre-service and in-service training of career practitioners, and support for deepening their social media competences. Kettunen (2017) therefore establishes an empirically derived, evidence-based foundation for the design of pre-service and in-service training curricula within a coherent career practice framework (see Kettunen et al., 2020). It includes the use of ICT both on a self-help basis and as part of face-to-face and distance service delivery (e.g. Sampson & Makela, 2014).

The competences practitioners needs for a proper use of social media include: proficiency in locating, evaluating and using online content; being a versatile and thoughtful writer; capacity to generate and maintain engaging and constructive online discussions; creating a visible and trusted online presence; fostering collaborative processes in career learning among peer group members (Kettunen, 2017; Sampson et al., 2018).

TABLE 3.1 ICT-RELATED TASKS OF CAREER-GUIDANCE PRACTITIONERS AND THE SKILLS REQUIRED TO CARRY THEM OUT

ICT-related tasks of career-guidance practitioners	Skills required
Developing online career guidance/career courses	■ facilitating learning in virtual environments ■ 'animating' chats and videoconferences ■ participating in newsgroups ■ administrating electronic tools (e.g. tests, questionnaires) ■ using software for processing client information ■ distinguishing valid, reliable and good-quality material ■ operating specific careers software packages (Botnariuc & Fặt, 2011)
Producing online career information and resources	■ working with developers to produce websites, apps, streaming video and interactive online learning environments ■ developing and managing user-friendly web resources (Bright, 2015)
Using social media	■ proficiency in locating, evaluating and using online content ■ being a versatile and thoughtful writer ■ capacity to generate and maintain engaging and constructive online discussions ■ creating a visible and trusted online presence ■ fostering collaborative processes in career learning among peer group members ■ designing and implementing the social media strategy for their organisation (Kettunen, 2017; Sampson et al., 2018)

3.1.4 Implementing digital innovation in career guidance

Concluding from previous sections, the challenges faced through changing labour markets and related changing skills demands as well as the challenges faced by career guidance to remain relevant in this setting, highlight the use of ICT as appropriate means to adapt career guidance systems and services. Thereby, ICT shall not only be perceived as tool but also as agent of change and integrative agent supporting the necessary adaptation of systems and services by systematising the use of ICT, like in the case of Denmark, Finland and Sweden (see Barnes et al., 2020, p. 35).

The current mega-trends in most countries regarding the use of career information systems in career guidance (digital and online CIS, LMI systems, web-based interactive systems, use of big data) target the following issues:

■ offering access to quality LMI and intelligence for guidance practitioners, teachers and trainers with the aim of supporting young people in choosing their education and training pathways;
■ providing practitioners with support in transferring LMI to individual users (e.g. resources, toolkits);
■ providing clients with access to comprehensive and integrated educational, occupational and labour-market information;
■ promoting the design and use of digital and web-based tools and systems in career guidance;

- adopting an integrated multi-channel approach in career guidance, e.g. face-to-face approach combined with digital technologies, interactive tools, mobile apps and social media with the aim of increasing clients' access and the quality of career-guidance services;
- professionalising career-guidance practitioners – ensuring that professionals are highly trained to innovate and develop their practice, e.g. through the use of the LMI systems, use of ICT, web-based interactive systems, use of big data;
- increasing the quality of career-guidance provision (e.g. designing and implementing common standards for the use of LMI systems, use of ICT, use of web-based interactive systems in career guidance).

3.1.5 Innovative examples of ICT use in career-guidance systems

For the purpose of this report, the following 23 innovative examples illustrating various aspects of the mega-trend 'ICT use in career-guidance systems' have been selected from the EU Member States and internationally. The innovative examples summarised in Table 3.2 are expanded on in Volume II.

TABLE 3.2 INNOVATIVE EXAMPLES OF ICT USE IN CAREER-GUIDANCE SYSTEMS

Type of initiative	Name	Country/ region	Key features	Page in Vol. II	Web link
Online CIS	Blended information at public career-guidance centres	Switzerland	Customers in career centres are introduced to using online information services and e-counselling via face-to-face counselling, 'themed islands' and printed QR codes.	9	https://rb.gy/9wwthb
Chatbot **	Career Chat	United Kingdom	Incorporates AI technology to offer friendly and flexible access to high-quality LMI.	9	https://rb.gy/dwvloe
Use of AI	Career Choice	Croatia	Calculates person-environment fit using algorithm rooted in Expected Utility Model (EUM).	10	https://rb.gy/9wwthb
Use of AI*	Career guidance through university admissions procedures using artificial neural networks (ANN)	Nigeria	Counsellor-driven model using Artificial Neural Network (ANN) to help practitioners advise students on university course selection.	10	https://rb.gy/uwoy5k
Online CIS	Careerhelp	South Africa	Combines an information resource for jobseekers and learners, and an information hub for career-guidance practitioners to share information and resources.	11	https://rb.gy/oa6dne

ETF
Working together
Learning for life

European Training Foundation

App	CareerMe app	Australia	Constantly updated labour market information, job descriptions, training requirement and job opportunities.	12	https://rb.gy/eu6iyn
Digital communication apps	eGuidance (eVejledning)	Denmark	Career counselling by practitioners using digital communication channels. Includes JobCityand My Competence Portfolio apps.	12	https://rb.gy/0jixbh
Online CIS	e-guidance and service integration	Estonia	Reforms to join up career-guidance services in a digital-first environment.	13	https://rb.gy/ofyqvr
Use of AI (expert system)*	iAdvice	Sri Lanka	Analyses students' past performance, career goals and industry alignment with subjects to propose career paths. AI has ability to reason, question, provide alternative solutions and take account of uncertainty.	14	https://rb.gy/tw6xdh
Matchmaking tool	Inspiring the Future	United Kingdom	Connects schools with professionals willing to visit and speak about their job.	14	https://rb.gy/ja7v8x
Matchmaking app	Mentor App	Belgium	Connects young jobseekers to professional mentors.	15	https://rb.gy/cklkry
App	MigApp	UN member states	Contributes to the wellbeing of migrants through information and a remittance transfer service; provides governments with data.	16	https://rb.gy/nztj7t
Web-based interactive system, use of AI	Mindler	India	Advanced online career assessment using AI and analytics. Online training and certification programme for career-guidance professionals.	17	https://rb.gy/soaqse
Web-based interactive system	Myfuture	Australia	User-centric design, business and industry profiling, personalised career-development tools.	18	https://rb.gy/1all6n
Online CIS	MySkillsFuture and MyCareersFuture	Singapore	Two national online portals to promote self-awareness and facilitate job search. Online training of career-guidance professionals.	19	https://rb.gy/otkypy https://rb.gy/hwgrlg

ETF Working together Learning for life

European Training Foundation

Online CIS	O*NET	USA	Database of more than 1000 occupation descriptions with self-assessment tools for career exploration.	20	https://rb.gy/z3knei
LMI system	Occupational Outlook Handbook	USA	Database of occupations searchable by pay, training requirements and growth rate.	21	https://rb.gy/ddd2uh
Use of AI (expert system)	Pondicherry University expert system for course selection	India	Expert system (ES) used to collate data about different colleges affiliated to one university, to aid prospective students in their choices.	22	https://rb.gy/2dcthg
LMI system	Skills-OVATE	European Union	Pan-European system for online job vacancy analysis using real-time labour-market information (LMI).	22	https://rb.gy/ev7aer
LMI system	Skills Panorama	European Union	Online central access point for skills needs across EU Member States.	23	https://rb.gy/c1wevg
Digital platform	The new Europass	European Union	Platform for learners and jobseekers to share information and apply for jobs and courses across the EU.	24	https://rb.gy/zshegi
Career simulator with enhanced AI	The Real Game	Canada	Role-play video game to develop career-management competences and life skills.	25	https://rb.gy/kqgbcd
Use of AI*	Using digital fingerprints to match people with jobs	Australia	Data shared by 100,000 Twitter users employed to create a Vocations Map and match personalities to occupations.	26	https://rb.gy/hhjdje

*Research project **Pilot project

3.2 Developing career-management skills

The International Centre for Career Development and Public Policy made recommendations for countries across the world to ensure that career-development programmes and services develop citizens' ability to manage their own careers (ICCDPP, 2019). Countries should identify what career-management skills are important in their context and integrate them into the education system and skills-development policies.

At European Union level, numerous policy documents in the education and employment sectors have acknowledged the role of career guidance and laid down measures for its development. A key aim of career guidance is to help individuals to manage their careers, and the learning outcomes should be the acquisition and development of career-management skills (CMS). CMS enable citizens at any age or stage of development to manage their learning and work life paths (ELGPN, 2015a).

The new European Key Competences for Lifelong Learning framework (2018) introduced the 'personal, social and learning to learn competence', which contains aspects related to career-management skills, and is defined as 'the ability to reflect upon oneself, effectively manage time and information, work with others in a constructive way, remain resilient and manage one's own learning and career. It includes the ability to cope with uncertainty and complexity, learn to learn, support one's physical and emotional wellbeing, to maintain physical and mental health, and to be able to lead a health-conscious, future-oriented life, empathise and manage conflict in an inclusive and supportive context' (Council of the European Union, 2018). LifeComp further specifies in detail the competence area 'personal, social and learning to learn'. The personal competence includes self-regulation, flexibility, wellbeing; the social competence includes empathy, communication, collaboration; and the learning to learn competence includes growth mindset, critical thinking, and managing learning (Cedefop, 2020; Sala et al., 2020).

Two Resolutions of the Council of the European Union on guidance (2004, 2008) drew attention to the importance for citizens of developing career-management skills (CMS). These refer to 'a range of competences which provide structured ways for individuals and groups to gather, analyse, synthesise and organise self, educational and occupational information, as well as the skills to make and implement decisions and transitions' (ELGPN, 2012). Examples of CMS are: capacity of self-knowledge and self-evaluation, knowledge about occupations and businesses, understanding the systems of education, training and qualifications, capacity of describing own skills, critical thinking, budget management, project management, etc.

The first priority area of the EU Guidance Resolution (2008) recommended EU Member States to take action for the lifelong acquisition of CMS, as follows: introducing teaching and learning activities which foster the development of career-management skills in general, vocational, higher education, adult education programmes; preparing and supporting teachers and trainers to conduct such activities; encouraging parents and involving civil society organisations and social partners to support these activities; facilitating access to information about training opportunities and their links to professions, and about the skills needs anticipated at local or regional level (Council of the European Union, 2008).

The work of the European Lifelong Guidance Policy Network (2007–15) highlighted the importance of an early development of career-management skills and the need to include them as mandatory elements in the school curriculum.

Consequently, CMS have been promoted, particularly through the delivery of career-guidance services in the education and labour-market sectors in different countries (Sultana, 2012). Many countries have made efforts to define a set of CMS to ground it in the national context and set it out in a national CMS framework (ELGPN, 2015a). The operationalisation of the concept of CMS empowers all citizens – at all ages and in a variety of settings – to formulate and put into practice personal action plans for further learning, career management and other life goals, with the ultimate aim of getting economic and social benefits to the Member States, such as higher educational attainment, increased employability and more active civic engagement (Cedefop, 2011a).

A taxonomy of career-guidance intervention models prepared by the ETF distinguished five different approaches to career-guidance delivery: the curriculum model, the centre model, the individual model (specialist or semi-specialist) and the virtual model. Each of these models can be provided in seven modalities: career information, career-management skills/career education, work tasting, testing, individual guidance, group guidance, career counselling (Zelloth, 2014b). One of the most appropriate ways to deliver career-management skills is the curriculum model. CMS should be included in the

ETF Working together Learning for life
European Training Foundation

school curricula at different education levels (primary, secondary, post-secondary, VET, higher education). In some countries, CMS have already been introduced in the school curricula during school reforms. Parallel to the development of a national CMS framework, the development of tools for assessing personal CMS development should be undertaken (ELGPN, 2015a).

The current mega-trends in most countries regarding career management skills target the following issues:

- integrating career guidance development within wider reforms in education, training and the labour market;
- developing guidance that supports human capital development (including lifelong learning, CMS, employability skills, international learning and career mobility);
- supporting the development of CMS so that individuals are able to access, understand and use information in their decisions;
- ensuring that career development programmes and services support the ability of citizens to manage their own careers;
- designing and implementing CMS programmes for students in schools and in further and higher education settings, as well as for youths and adults in such contexts as public employment services;
- including CMS in school curricula at different education levels (primary, secondary, post-secondary, VET, higher education);
- providing practitioners/teachers with methodological support (e.g. methodological guides, open educational resources, evidence-based research examples, etc.) for implementing career guidance in school curricula/offering career education at different educational levels; Supporting transitions (between different education levels, school-to-work, etc.) through the development of CMS.

3.2.1 Innovative examples of developing career-management skills

For the purpose of this report, the following six innovative examples illustrating the mega-trend 'developing career-management skills' have been selected from the EU Member States and internationally. The innovative examples summarised in Table 3.3 are expanded on in Volume II.

TABLE 3.3 INNOVATIVE EXAMPLES OF DEVELOPING CAREER-MANAGEMENT SKILLS

Type of initiative	Name	Country/ region	Key features	Page in Vol. II	Web link
Career-guidance programme in schools	Academic and Career Planning in Wisconsin	USA	Four-stage programme for middle- and high-school pupils administered by an advisory teacher in schools.	27	https://rb.gy/35t4ep
Competency framework	Careers Management Skills Framework	Scotland	Document containing definition and description of career-management skills to inform organisations involved in the planning, management and delivery of career-guidance services.	28	https://rb.gy/tgjzua

School curriculum	CMS as an integrated part of national core curricula	Finland	CMS is integrated into the national core curricula from primary to upper secondary school as a compulsory subject similar to other school subjects.	30	https://rb.gy/vpq8 qx
School curriculum	Counselling and Personal Development on the middle-school curriculum	Romania	Five domains in which pupils' competences should be developed throughout middle school.	30	https://rb.gy/y7ip g7 https://rb.gy/s5vn hz
School Curriculum	NCGE Whole School Guidance Framework	Ireland	Career services are differentiated on the basis of learners' readiness for decision making	31	https://rb.gy/pyeh pi
Self-assessment tool	My Competence Folder	Denmark	Electronic folder in which school pupils gather documentation of their competences.	32	https://rb.gy/8ne 2kk

3.3 Cooperation and coordination in career guidance

Across the world, countries are looking to find ways to enable different institutions in charge of career guidance, service providers and employers to work together effectively with the aim of empowering citizens with the best skills and preparation for their working lives. In 2002 the European Commission established the Expert Group on lifelong guidance which involved collaboration between officials from education and employment ministries, international guidance experts and representatives of European associations in the field. The Expert Group aimed to strengthen information, guidance and counselling policies, systems and practices at European level. It played an important role in ensuring that lifelong guidance is mentioned in relevant EC communications, joint reports or Council resolutions (Vuorinen, 2017).

The Guidance Resolutions of the Council of the European Union (2004, 2008) recommended European Union countries to ensure effective cross-sectoral cooperation and coordination of guidance policies. Thematic key areas, such as policy-level coordination and cooperation, are addressed in these strategies. Priority area 4 of the Council guidance resolution (Council of the European Union, 2008) recommends encouraging coordination and cooperation among various national, regional and local stakeholders.

The European Lifelong Guidance Policy Network (ELGPN, 2007–15) supported guidance policy cooperation in education and employment sectors between the 30 member countries (data of 2015) and Switzerland (as observer). It analysed how lifelong guidance as a transversal element can contribute to EU policy development in six policy fields: schools, VET, higher education, adult education, employment and social inclusion. The ELGPN developed a comprehensive range of EU tools and publications for European lifelong guidance policy and systems development at EU and national levels. One of these tools is the European Resource Kit on lifelong guidance policy development (ELGPN, 2012), aiming to help policymakers review the existing lifelong guidance provision within their country/region, identify gaps and issues requiring attention and draw from good practices in other European countries. A comprehensive framework that links together all the tools developed by the ELGPN in 2007–14 is included in the 'Guidelines for Policies and Systems Development for Lifelong Guidance: A Reference Framework for the EU and for the Commission'

(ELGPN, 2015b). The guidelines cover transversal issues (ICT, funding, etc.), sector issues (schools, unemployed, etc.) and offer suggestions for improving lifelong guidance policies.

As a result of this EU-wide collaboration, legislative and strategic measures were initiated and national guidance policy forums were created in many countries. A national lifelong guidance forum joins together different authorities and stakeholders with the aim of creating effective policy development and adequate service provision. The national forums have the potential to contribute to the common understanding of shared terminology and goals for a coherent national LLG system.

The added value and mutual learning encouraged by this European network are grounded in the similar challenges faced by the member countries and common characteristics of their LLG systems. Most ELGPN countries reported in the ELGPN impact evaluations that the work programmes (2008–14) had either significant impact or some impact on the communication and cooperation processes between ministries and other policymaking organisations (social partners, NGOs), (Vuorinen, 2017).

Euroguidance is a European network of national resource and information centres for guidance in 34 European countries. Its main target group consists of guidance practitioners in education and employment, among them professionals who provide information and guidance on international learning mobility to end-users seeking studying and training opportunities abroad. All Euroguidance centres share three common goals: to support the development of the European dimension of lifelong guidance; to support competence development of guidance practitioners and raise their awareness on the value of international mobility; to provide information and communication on the European dimension of guidance. Euroguidance promotes cooperation among different stakeholders in guidance and education and supports the national and international networking of guidance practitioners by organising seminars, training, and study visits on different themes. It collects, disseminates, and exchanges information on: international mobility opportunities; education, training, and guidance systems in the EU and EEA Member States and candidate countries; European initiatives and programmes within the fields of education, training, and mobility; project results, innovative working methods, and good practice in the field of lifelong guidance.

The international symposia are collaborative initiatives aiming to develop mechanisms to carry out the dialogue between career-guidance policy and practice. The last International Symposium for Career Development and Public Policy (2019) made recommendations for countries across the world to establish mechanisms to support cooperation and coordination between government departments and agencies responsible for career guidance, as well as to develop and resource a national body to support consultation and coordination in career development. The establishment of formal structures which facilitate dialogue and cooperation between different actors and stakeholders in the career-development field build effective policy. These structures should include representatives of government, employers, trade unions, education, career-development providers, the career development profession and users of programmes and services (ICCDPP, 2019).

CareersNet, Cedefop's network for lifelong guidance and career development, was established in 2017 with the aim of: providing access to harmonised, comparable evidence of relevant practices and promoting their transfer and adaptation; facilitating cross-national comparative analysis of national systems and initiatives; supporting countries in national policy development. Among the key discussion topics for future EU policy (CareersNet, 2019) the following were considered: providing support to holistic models for integrated services in lifelong guidance; promoting coordination between social support, validation and guidance; offering training of professionals for holistic services.

The current mega-trends in most countries regarding the cooperation and coordination mechanisms between different institutions in charge of career guidance and providers of services can be summarised as:

■ developing national cross-sectoral strategies for career development linked to skills, education, employment and social policies;
■ enhancing cross-sectoral and multi-professional network-based cooperation;
■ developing and resourcing a national body to support coordination in career guidance;
■ promoting regional cooperation across sectors and administrations (e.g. education, training, employment, youth, social and health care) to meet local challenges and demands;
■ establishing mechanisms to support coordination and cooperation between government departments and agencies with responsibility for career development and associated fields;
■ ensuring effective cooperation between educational institutions and public employment services (PES), between career services and the business community, etc.;
■ creating mechanisms of cooperation between other organisations involved in career guidance: e.g. representatives of government, employers, trade unions, youth organisations, NGOs/civil society/community organisations.

3.3.1   Innovative examples of cooperation and coordination in career guidance

For the purpose of this report, the following six innovative examples illustrating the mega-trend 'cooperation and coordination in career guidance' have been selected from the EU Member States and internationally. The innovative examples summarised in Table 3.4 are expanded on in Volume II.

TABLE 3.4 INNOVATIVE EXAMPLES OF COOPERATION AND COORDINATION IN CAREER GUIDANCE

Type of initiative	Name	Country/ region	Key features	Page in Vol. II	Web link
Employer engagement	Education and Employers charity	United Kingdom	Links mentors from the world of work with schools and helps recruit highly skilled volunteers to support governance of disadvantaged schools.	33	https://rb.gy/7ky yrb
Broadcasting partnership	Khetha radio programme	South Africa	Partnership with SABC Education to broadcast a weekly radio programme in 10 of the country's official languages, reaching rural populations.	34	https://rb.gy/3ls ccl
Stakeholders' forum	National Guidance Forum	Austria	Stakeholders from government, social partners, educational and career-guidance services meet annually to monitor progress of the national lifelong guidance strategy.	34	https://rb.gy/szs fiv https://rb.gy/6gc eyw
Stakeholders' forum	National Guidance Forum	Croatia	Promotes cooperation, monitors implementation of the national lifelong guidance strategy.	35	https://rb.gy/f3fe ei

ETF Working together Learning for life
European Training Foundation

Integrated service provision	One-Stop-Shop Guidance Centres (Ohjaamo)	Finland	Private, public and third-sector service providers are brought together in one place to help young people into work.	36	https://rb.gy/4q5ebv https://rb.gy/vwgy1z
Employer engagement	Service Centres for Learning and Working (Leerwerklokketten)	The Netherlands	Career advice, workshops and outreach through a partnership between government, educational institutions and entrepreneurs.	37	https://rb.gy/qhe44r https://rb.gy/vyzc9p

3.4 The role of parents in young people's career choices

The distinction between formal and informal career guidance is made in an ETF report (Zelloth, 2009) with reference to career-guidance systems in EU Member States and EU neighbouring countries. Career guidance is delivered as a formal service by PES, schools, NGOs and some private-sector organisations. Informal guidance is delivered by peers, the family (mostly parents) and by representatives of the broader community (relatives, friends, private tutors, authorities, people regarded as successful, etc.) in which the individual concerned lives (Zelloth, 2009).

The large informal sector existing in EU neighbouring countries can place some limitations on the scope of formal guidance services. There is the risk that, through the influence of parents, relatives and friends on students' career decisions, social class models will be reproduced or unfulfilled ambitions of parents or relatives will be taken into consideration (Zelloth, 2009). It is important that policymakers and practitioners acknowledge the role of the informal guidance provision when shaping or restructuring formal career-guidance services.

The international trends underline the importance of engaging parents and carers in activities to support students' career choices, such as:

■ undertaking collaborative interventions in schools, communities and families;
■ Intensifying efforts to improve the communication between teachers, guidance counsellors and parents;
■ developing cooperation between parents, teachers and other school staff, psychological-pedagogical centres, other schools, organisations and institutions working for the family, children and youth;
■ engaging parents in their children's learning and participation in daily school life, to the benefit of the student;
■ providing support from schools and colleges to parents and carers so that they feel more informed and confident about the advice they give to their children;
■ raising parents' awareness of the various career pathways and the labour market in such a way that they become more confident in the advice and support they provide to their children;
■ actively communicating with parents and providing them with information about the education system, occupations and labour market;
■ offering career guidance for parents and children.

Warps (2013 apud. Oomen, 2019) calculated and demonstrated that involving parents in career education and guidance, even in one-off, information-centred sessions, contributed to increasing the study success of Dutch students in the first year of higher education. However, evidence (Barnes et al., 2020) shows that parental involvement in career-guidance activities is currently more

aspirational than systematised or mandated. Some countries have a specific policy for involving parents in the career decision-making of young people, but more often this is part of a broader strategy (e.g. with the aim of improving educational outcomes, preventing drop-out, supporting socially disadvantaged children, etc.). There is also need for more research into this important aspect of career guidance.

3.4.1 Innovative examples relating to the role of parents in young people's career choices

For the purpose of this report, the following eight examples of research, studies, policy-led programmes, strategies and practices addressed to parents on how they can support their children in improving their skills and making career decisions have been selected from the EU Member States and internationally. The examples summarised in Table 3.5 are expanded on in Volume II.

TABLE 3.5 INNOVATIVE EXAMPLES RELATING TO THE ROLE OF PARENTS IN YOUNG PEOPLE'S CAREER CHOICES

Type of initiative	Name	Country/ region	Key features	Page in Vol. II	Web link
Programme in schools*	Bridging the dialogue between parents and children for career counselling and guidance	Pakistan	Questionnaire, dialogue and workshops with parents arranged through schools.	39	https://rb.gy/jfh22r
Qualitative study*	Parental involvement in career education and guidance in secondary education	The Netherlands	Six careers teachers designed and implemented a parent-centred careers intervention in their schools.	40	https://rb.gy/zfj56u
Report*	Parents and Carers Research	Scotland	Results of a survey of parents and carers on awareness of career-guidance services.	40	https://rb.gy/wu36vg
Programme in schools	Parents' counselling programme	Romania	UNICEF-supported programme to implement school-family partnership in 200 schools.	41	https://rb.gy/ty3pgh
Report*	Research on influences on student career choices	Ireland	Findings from a 2019 Department of Education and Skills-commissioned review of career guidance.	41	https://rb.gy/7ko1pk
Report*	Research on the influence of parents on students' career choices	United Kingdom	Two surveys, one of students and one of parents, reveal degree of parental influence on students' career choices.	42	https://rb.gy/3efyfn
Research project*	Research on the role of parents in providing career education and guidance	United Kingdom	International report on the role of parents and carers and how they can be better supported, compiled from literature and interviews.	43	https://rb.gy/vm6tou

ETF
Working together
Learning for life
European Training Foundation

| National skills agency | Skills Development Scotland | Scotland | One-to-one counselling for parents and carers on school subject choices, and a dedicated website for parents. | 44 | https://rb.gy/leay90 |

*Research project

3.5   Other key issues and emerging trends

Other relevant approaches have been selected for the purposes of this report to illustrate the contemporary mega-trends in the career-guidance landscape. Two theoretical models, a phenomenographic study, a qualitative study and a monitoring and follow-up tool are briefly presented in this section and in detail in Volume II. These recent innovative approaches in career guidance have great potential to stimulate reflection and discussion, and to generate new research and new forms of practice.

Career Guidance in Communities (Thomsen 2012) promotes the development of a critical, reflexive and democratic career-guidance practice. It presents career guidance within a community framework by providing a context in which beneficiaries collaborate with career-guidance practitioners, social workers, community workers and volunteers. It encourages the development of reflexive practice to support career-guidance practitioners in their critical analyses and the development of collective and context-sensitive activities, especially those addressed to people from disadvantaged communities (Thomsen et al., 2013; Thomsen, 2017). Among the advantages of this approach, the following can be mentioned: the possibility of influencing young people in their immediate environment; the opportunity to change the perception of the community; and widening the scope of settings in which career guidance can take place (i.e. classes and workshops in schools, workplaces, canteens at universities, local libraries, cafes, sports/youth clubs, etc.).

Career Guidance for Social Justice (Hooley, Sultana & Thomsen, 2018) approached the theoretical basis for social justice as an aim and outcome of career guidance. Five signposts towards social justice through career guidance were identified: building critical consciousness (helping people to understand the world as it is and to consider what can be changed); naming oppression (i.e. exploitation, marginalisation, powerlessness, cultural imperialism, violence); problematising norms – questioning what is normal and opening up new possibilities; encouraging people to work together and to recognise the importance of cooperation; and working at a range of levels to help people (i.e. by individual support, by system change or by both at the same time). Among the advantages of this model, the following can be mentioned: identifying and reducing stereotypes and bias in LMI; challenging known avenues; encouraging individuals to reflect on what they see as normal and to consider whether they are satisfied with this; and encouraging career-guidance practitioners to reflect on their own use of norms, etc..

The co-careering approach was first introduced in phenomenographic study (Kettunen et al., 2015) investigating career-guidance practitioners experiences in the use of social media in career guidance. Kettunen (2017) identified four types of use of social media by practitioners: to deliver expert information (information approach); to have a one-to-one dialogue (communication approach); to facilitate interaction among groups of individuals (collaborative career exploration approach); and to actively engage in online communities of individuals were discussions and support around career issues takes place. The latter was named 'co-careering' and defined as 'the shared expertise and meaningful co-construction of career issues taking place with and among community members' using

social media (Kettunen, 2017). This approach requires professionals to have an online monitored presence and to participate within the relevant online communities. The findings of this research can be used to develop the professional training of career practitioners, especially on ICT and social-media competences (Kettunen, 2017).

'Co-constructing the careers of guidance counsellors' (Bimrose et al., 2019) is an approach that was developed during a qualitative study involving professionals from the international career-guidance community. The participants attended a learning programme on the changing world of work and then took part in online career conversations, co-constructing meaning around their careers and identities. This research showed how dialogue on careers and identities can contribute to the development and revision of practitioners' professional identities.

The Employment Radar is an online, interactive instrument developed in 2015 by the Finnish Ministry of Employment and the Economy for PES clients, career-guidance counsellors and managers across Finland. It involves the beneficiaries in the design of career-guidance activities with the aim of providing evidence and accountability of career-guidance practice. The client makes a self-assessment on eight dimensions of the Radar, assessing both their own progress and the progress and quality of the career-guidance service. Employment Radar can be used for future developments by collecting data both from online platforms and face-to-face interventions.

3.5.1   Innovative examples addressing other key issues and emerging trends

The above examples of research and practice with the potential to influence future developments in career guidance are summarised in Table 3.6 and expanded on in Volume II.

TABLE 3.6 INNOVATIVE RESEARCH AND PRACTICE ADDRESSING OTHER KEY ISSUES

Type of initiative	Name	Country/ region	Key features	Page in Vol. II	Web link
Publication*	Career Guidance for Social Justice	Various	Collection of essays addresses the theoretical basis of career guidance's involvement in social justice.	45	https://rb.gy/u4usyf
Theoretical model*	Career Guidance in Communities	Denmark	Examples from and influence of Rie Thomsen's 2012 book.	45	https://rb.gy/7cbrku
Phenomenographic study*	Co-careering approach	Finland	Results of a study using focus groups on use of social media in the practitioner role.	48	https://rb.gy/zkvhrb https://rb.gy/cjxczx (original source)
Qualitative study*	Co-constructing the Careers of Career Counsellors	UK/Europe	International study on how co-constructing their own careers can help career-guidance counsellors in their work with others.	48	https://rb.gy/npek2k
Monitoring and follow-up tool	Employment Radar (Työelämätutka)	Finland	Self-assessment tool for PES customers and counsellors that could serve as a model for wider use across sectors.	49	https://rb.gy/pziaop

*Research project

4. MEGA-TRENDS IN CAREER GUIDANCE AND INNOVATIVE EXAMPLES FROM SELECTED ETF PARTNER COUNTRIES

4.1 Kazakhstan

4.1.1 Overview of career guidance in Kazakhstan

In his address to the people of Kazakhstan on 2 September 2019, the President of the Republic of Kazakhstan, Kassym-Zhomart Tokayev, emphasised the importance of career guidance and its integral role in what should become a labour market demand-driven approach to education. The State Education Development Programme (SEDP) 2020–25 acknowledges the lack of uniform approaches to career guidance and that it effectively takes the form of an advertising campaign by TVET and higher-education providers. The insufficiencies in the career-guidance system are cited as one of the reasons for the low participation of young people in the TVET system (which is seen as the driver of economic growth and productivity). The programme document also cites the results of the 2016 sociological survey 'The future is my choice' (Bilim, Central Asia), which found that no more than 15% of high-school students were able to decide on their future professional activities. To address these issues, the SEDP provides for the establishment of the Republican Centre for Vocational Guidance and Careers. A mobile app called 'Navigator of professions' will become available in all regions to assist applicants in choosing their future profession. The creation of employment and career centres in all public colleges will assist in building an individual professional development path for graduates.

While career guidance is recognised as important by government agencies, the evidence shows that it is not seen as a top priority. Although there are strong attempts at coordinating career-guidance efforts, the activities are still marked by decentralisation. Coordination efforts are described in more detail further in this report. Most case studies selected for the report were recently implemented. The report also includes information on innovative practices that are still at the inception phase. For the purposes of this report, interviews were organised with all the main actors in the career-guidance system, and EU grants directed at the development of career centres in higher education were reviewed.

A snapshot of the system

In Kazakhstan, the governance of the career-guidance system is implemented at the national level by the Ministry of Labour and Social Protection (MLSP) and the Ministry of Education and Science (MoES). At the regional and local levels, career guidance is implemented by local government, PES (employment centres) and secondary schools. TVET organisations and universities represent the supply side of education providers. Employers and labour-market actors are represented by the National Chamber of Entrepreneurs 'Atameken' (NCE) and its Regional Chambers of Entrepreneurs (RCE). The NCE and RCEs provide information and access to local businesses, entrepreneurs and their workforce demands. For the purposes of this report we spoke to representatives from each of these stakeholders.

ETF
Working together
Learning for life

European Training Foundation

Below is a description of the main participants of the career-guidance system.

- **The Ministry of Labour and Social Protection (MLSP)** is the main holder of labour-market information (LMI) and the agency responsible for employment. It is also tasked with the development and implementation of social vocational guidance. The ministry's efforts are directed at aggregating labour-market demand and communicating it to the education suppliers and the public via Public Employment Centres (EC) and the Electronic Labour Exchange (enbek.kz) information resource (more details in the innovative examples).
- **The Ministry of Education and Science (MoES)** is responsible for development and implementation of government policy in education and science (more details in the innovative examples) and coordinating career-guidance efforts in educational organisations.
- **Public Employment Centres (ECs):** the PES system was established in 2011. Overall, there are around 203 ECs in Kazakhstan (as of 2019). ECs deliver a wide range of services and functions including employment services to citizens and employers, implementing measures to promote employment and measures aimed at protection against unemployment (such as short-term training, government subsidies for youth internships, social jobs), delivering social welfare payments and registering unemployed citizens. ECs aspire to an individualised approach to each client by developing individual employment plans and using modern tools such as the 'E-Exchange' information system (see innovative examples). ECs are also tasked with implementing vocational guidance for secondary schools and the adult population.
- **The National Chamber of Entrepreneurs 'Atameken' (NCE)** was established in 2013 as a non-profit organisation that represents the interests of businesses. Legislation provides that all businesses (SME and large enterprises) in Kazakhstan become members of 'Atameken'. The NCE is tasked with protecting the interests of businesses and enhancing their negotiating power vis-à-vis the government and public authorities. NCE activities cover all business-related areas including the development of human capital. In relation to human capital, the NCE is primarily tasked with developing TVET and facilitating workforce flow to fit the demand of local businesses. It enhances partnerships between employers/the labour market and education providers. The specialised Human Capital Development and Employment Departments at NCE act as systems integrators by consolidating business and government stakeholders and coordinating efforts at developing vocational education and productive employment. This is done by improving relevant legislation, monitoring business workforce requirements, developing social partnerships, supporting government programmes and implementing activities aimed at increasing the attractiveness of vocational occupations to supply local business workforce demand.
- **Regional Chamber of Entrepreneurs 'Atameken' (RCE):** the functions of NCE are implemented locally by regional chambers. There are 17 RCEs and they work directly with businesses and education providers locally.
- **Local executive bodies for education** are part of a single system of executive government bodies ('akimats', i.e. mayorates). This system implements government policy at the regional and local level ('oblasts'/regions, cities, districts, villages, rural areas, etc.).
- **Education organisations** (secondary schools, TVET organisations, universities): more details below.
- **Private providers of career-guidance services**.

Legislative framework

There are two main legislative documents that guide vocational and career guidance. These are supplemented by a variety of internal guidance and regulation documents adopted by schools and other local-level stakeholders.

1. In 2016 the MLSP established the 'Rules for conduct of social vocational guidance'. This document makes provisions for cooperation between different stakeholders responsible for career guidance. It guides vocational guidance as implemented by ECs and establishes coordination mechanisms with educational organisations, local executive bodies for education, RCEs and private providers. This document provides guidelines for the implementation of career guidance both in the secondary-school system and for adults who address ECs for services.

2. Another legislative document that guides career guidance for the educational sector is the MoES order #150, 'On approval of methodological recommendations on diagnostics and career guidance in secondary education organisations' dated 19 December 2018 and updated in April 2019. The document guides career diagnostics, information and career-guidance processes for secondary education organisations. It provides guidelines for the process and role distribution within the secondary-school system starting from Grade 5, and involves providing information on vocations and occupations, diagnostic tests to assess skills and inclinations, and career counselling and guidance. The document doesn't establish mechanisms for cooperation with stakeholders outside the secondary-school system.

Secondary-school vocational guidance implementation

Provision of vocational guidance in secondary schools involves the following steps (as per the 'Rules for conduct of social vocational guidance'):

1. The local executive body for education develops career guidance schedule, compiles lists of schools and students and submits those lists to the ECs.

2. ECs, when needed, subcontract private providers to implement career guidance services (for example, they often outsource assessment of testing services).

3. RCEs help to involve local enterprises to inform students about employment opportunities;

4. The ECs and its subcontractors conduct assessment tests for students.

5. ECs visit schools, where they meet with students and parents to provide information on the labour market situation, employment prospects, wages, education and training opportunities. RCEs assist in bringing local businesses to make presentations and organising visits to enterprises.

6. TVET and higher-education organisations visit schools to present choices for educational and vocational training opportunities.

7. After the test results are ready, a list of students who have ambiguous results and have not decided on their vocation is compiled and the students are directed to short-term training courses for employment.

Additionally, local executive bodies for education, ECs, TVET and RCEs regularly organise job fairs, open-door days, and presentations on selected occupations and employment prospects for secondary-school students and their parents. The fairs are used as platforms to deliver information on local employment and vocational training opportunities.

Career guidance for adults

ECs are also tasked with vocational guidance for adults, specifically for unemployed people, 'oralmans' (ethnic Kazakhs repatriated from abroad) and others who approach the centres for help. After the ECs conduct diagnostic testing, they offer occupational options or employment measures that fit the qualifications of the client. This includes vocational training, job placements or other employment measures. TVET organisations and RCEs are involved in helping with the professional adaptation of the client.

Challenges

According to government statistics, the active labour force in Kazakhstan comprises 8.7 million people, of whom 81% have a higher-education or TVET diploma[3]. However, according to the survey conducted jointly by the NCE and the MoES in 2018, 35.5% of graduates do not work in jobs equivalent to their diploma qualification and 40% of graduates cannot find employment within the first year after graduation. Employers report low satisfaction levels with the workforce supplied by the education providers[4]. The official rhetoric (for example, by President Tokayev during his address to the people of Kazakhstan in September, 2019), as well as statements made by representatives of organisations involved in the career-guidance system during the data collection for this report, underscore low efficiency of the career-guidance system in Kazakhstan. This is further supported by the reported inadequate supply of labour force to the labour market. Although career-guidance services are highly regulated on paper, there is weak evidence that it helps stakeholders coordinate their efforts efficiently.

The career-guidance system confronts various challenges.

■ No single responsible agency for career guidance. Best international practice demonstrates cases where career guidance is implemented successfully, even though the function is shared between various agencies. However, during the study most respondents (including those from the ministries of Education and Labour) underlined that the main challenge is the absence of a single agency responsible for career guidance.

■ The career-guidance coordination mechanism as practiced now requires improvement and streamlining. The functions are decentralised and fragmented between different government agencies and there is little-to-no coordination activity between the MLSP and MoES.

■ Supplying career-guidance professionals. There is a need for a systematic preparation of career-guidance specialists to meet the challenges of the world of work.

■ Career and vocational guidance as provided by the educational sector is also highly decentralised for secondary, TVET and higher-education systems. The attention and effort given to career guidance in the public education system is formalised and decoupled from the needs of the labour market. It is mostly supply-driven from the tertiary education providers who compete for students, rather than demand-driven by the labour market. Private schools and universities, including those who have special status, for example Nazarbayev Intellectual Schools and Nazarbayev University, have enough autonomy and resources to develop well-functioning career guidance systems.

■ There is little adequate evidence or other monitoring data on whether vocational guidance is efficient. There is no continuity of career guidance between secondary education, TVET, higher education and the job market. The main indicator for high schools, TVET and higher-education

---

[3] Stat.gov.kz and www.enbek.kz/docs/ru/content/демография-и-рынок-труда-iv2019
[4] https://informburo.kz/novosti/issledovanie-u-bolshinstva-studentov-net-vozmozhnosti-vybrat-discipliny-i-pedagogov.html

ETF Working together Learning for life
European Training Foundation

organisations is student enrolment after graduation in TVET and higher-education institutions. Outcomes and impacts of the career-guidance system are not reflected in indicators.

■ Career guidance as practiced by the education sector lacks a critical component – work with parents. Parents are the main decision-makers when it comes to young people's training and education choices. Although parents are invited to career-guidance sessions, there is not enough targeted work with parents to provide information about the employment outcomes of their decisions on education and training.

■ Insufficient financing for the career-guidance system. Occasionally, MoES and MLSP secure budget for skills testing of secondary-school students. However, there is no universal coverage by the tests, and the funds are not allocated in schools to implement career guidance systematically.

Future developments

The government has acknowledged the importance of career guidance and two initiatives are planned for implementation by the responsible ministries (MoES, MLSP).

■ 'Centres for career/vocational guidance and careers': the MoES has announced plans to establish designated centres that would ensure systematic and systemic career guidance in educational organisations in 2020 or 2021; however, these plans are yet to be backed by programme documents and financing.

■ 'Find Yourself' is a project to be jointly implemented by the MLSP and MoES (the scope of participation is still not clear, possibly other ministries will also participate). The details of the project are still unclear, available information shows that the information service will contain a description of occupations and skills levels required for these occupations.

The role of EU funds in the development of career guidance and career centres

There are a number of EU-supported activities within the Bologna Process framework. For example, the Tempus Uniwork programme 'Strengthening career centres in Central Asia higher-education institutions to empower graduates in obtaining and creating quality employment'[5], which was implemented in 2013–16. The aim of the programme was to 'boost university-industry links that foster sustainable socioeconomic development in Central Asia, through enhancing the capacities of HEI in effectively promoting employability of graduates and entrepreneurship culture amongst students'. This was done through equipping employment and career centres, organising networking activities with employers, guest lectures and master classes on topics such as CV-writing, negotiations, job interviews.

The programme targeted career centres in 12 Central Asian HEIs and aimed to strengthen university-enterprise relationships. In Kazakhstan, two universities participated in this programme: Narxoz University (previous name Turar Ryskulov Kazakh Economic University) and Kokshetau State University (KokSU), with Narxoz University showing sustainable results at the end of the programme.

4.1.2 Innovative examples of ICT use in career-guidance systems in Kazakhstan

The following three innovative examples show evidence of the mega-trend 'ICT use in career-guidance systems' in Kazakhstan. The examples summarised in Table 4.1 are expanded on in Volume II.

---

[5] 544126-TEMPUS-1-2013-1-ES-TEMPUS-JPHES

ETF
Working together
Learning for life
European Training Foundation

INTERNATIONAL TRENDS AND
INNOVATION IN CAREER GUIDANCE | 43

TABLE 4.1 INNOVATIVE EXAMPLES OF ICT USE IN CAREER-GUIDANCE SYSTEMS IN KAZAKHSTAN

Type of initiative	Name	Key features	Page in Vol. II	Web link
LMI resource**	Atlas of New Professions	Sector-based approach to anticipating future skills needs	51	https://rb.gy/p5kuna
Digital CIS	Electronic Labour Exchange (E-Exchange)	Harnesses ICT and big data to provide self-service, centralised information for job-seekers, employers and PES.	51	https://rb.gy/00psup
Digital CIS	Information resource Bagdar.kz	A one-stop-shop offering careers and LMI information, tests, educational resources, etc.	53	https://rb.gy/4llu0l

**Pilot project

4.1.3   Innovative examples of developing career-management skills in Kazakhstan

The following two innovative examples show evidence of the mega-trend 'developing career-management skills' in Kazakhstan. The examples summarised in Table 4.2 are expanded on in Volume II.

TABLE 4.2 INNOVATIVE EXAMPLES OF DEVELOPING CAREER-MANAGEMENT SKILLS IN KAZAKHSTAN

Type of initiative	Name	Key features	Page in Vol. II	Web link
University career advisory service	Career and Advising Centre at Nazarbayev University	Professional Development Programme and Student Employability Concept – innovative, comprehensive programmes that focus on revealing and developing broad skills combinations.	55	https://rb.gy/kt9nzk
Regional training initiative	'Zangar' project in Atyrau region	STEM training and life skills training using the Passport to Success® (PTS) curriculum from youth aged 10–22.	58	https://rb.gy/vwlbif https://rb.gy/9hcvwn

4.1.4 Innovative examples of cooperation and coordination in career guidance in Kazakhstan

The following innovative example shows evidence of the mega-trend 'cooperation and coordination in career guidance' in Kazakhstan. The example summarised in Table 4.3 is expanded on in Volume II.

TABLE 4.3 INNOVATIVE EXAMPLES OF COOPERATION AND COORDINATION IN CAREER GUIDANCE IN KAZAKHSTAN

Type of initiative	Name	Key features	Page in Vol. II	Web link
Public-private and national-regional-local collaboration	Mobile Employment Centres and cooperation mechanism between government and public organisations	Successful example of coordination from the national to the local level. MECs implanted in public places offer career guidance and online testing.	59	https://rb.gy/a19lmc

4.1.5 Innovative examples of the role of parents in young people's career choices in Kazakhstan

The following innovative example shows evidence of the mega-trend 'the role of parents in young people's career choices' in Kazakhstan. The example summarised in Table 4.4 is expanded on in Volume II.

TABLE 4.4 INNOVATIVE EXAMPLES OF THE ROLE OF PARENTS IN YOUNG PEOPLE'S CAREER CHOICES IN KAZAKHSTAN

Type of initiative	Name	Key features	Page in Vol. II	Web link
Formal and informal career guidance	Nazarbayev Intellectual Schools	'Summer Social Practices' include work-shadowing and workplace visits arranged with parents.	61	https://rb.gy/w1tiho

4.1.6 Evidence of international trends and areas for improvement in Kazakhstan

In the context of the skills mismatch, delays in finding employment in the year following graduation and employer dissatisfaction with the workforce supplied by education providers, the application of international trends and best practices is pivotal for building an efficient career-guidance system in Kazakhstan. Below is a brief assessment on the evidence of international trends and how they could be further developed in Kazakhstan.

ICT use in career-guidance systems
Kazakhstan actively incorporates ICT, web-based interactive systems, and uses big data in public service, education, employment and career-guidance processes. According to the ICT Development Index 2017, published by the UN agency International Telecommunication Union (ITU), out of 176 nations Kazakhstan ranks 43rd in access to ICT, 58th in ICT use and 55th in ICT-related skills.

There is still a lot of work to be done to enhance the digital ecosystem and teach digital skills, especially in remote and rural areas of the country, and the government actively tackles these issues. In 2018, the government of Kazakhstan adopted the 'Digital Kazakhstan' programme, which is being implemented from 2018 to 2022. The programme is aimed at developing digital technologies to

improve the quality of life of citizens of Kazakhstan. The programme targets the following sectors: digitalisation of industries, the public sector, infrastructure, the innovation ecosystem and development of human capital. The programme also aims to propel Kazakhstan to rank 30 or above in the ICT Development Index by 2022.

Government agencies, including the MoES and the MLSP, promote digital solutions to improve employment and education services. Government public services are increasingly provided via web-based interactive systems and digital platforms. For example, the Electronic Labour Exchange (E-Exchange/Enbek.kz) information resource (vacancy database and employment platform). Education providers and private providers also embrace digital solutions, such as Bagdar.kz career-guidance information resource, presented in the report. Nazarbayev University and Nazarbayev Intellectual Schools are at the forefront of using digital technologies in instruction and career guidance.

Developing career-management skills

Career-management skills are increasingly recognised by employers, educational organisations and employment services as vital to sustainable employment and employability. As the 'Zangar project' case study illustrated, one of the main complaints of employers in the Atyrau region is the lack of life-skills among recent graduates. Career-management skills include not only technical skills like CV-writing, interview skills and job searching skills, but also a wide range of life skills – planning, negotiations, conflict resolution, decision making, etc. This is illustrated by the growing attention paid to teaching career-management skills in schools, career centres at educational organisations, Employment Centres and digital resources.

Cooperation and coordination in career guidance

In Kazakhstan, the governance of the career-guidance system is shared between the MLSP and the MoES at the national level. At the regional and local levels, career guidance is implemented by local government, public employment services (Employment Centres) and secondary schools. TVET organisations and universities primarily represent the supply side of education providers. Employers and labour-market actors are represented by the National Chamber of Entrepreneurs 'Atameken' (and its Regional Chambers of Entrepreneurs. These entities provide information and access to local businesses, enterprises and their workforce demands. Thus, the functions are decentralised and fragmented between different government agencies and there is little coordination between the MLSP and the MoES.

During the study, most interviewees from the government and education providers underscored the lack of a single responsible agency as one of the main weaknesses of career-guidance system. The career-guidance coordination mechanism, as practised now, requires improvement and streamlining, and there is an understanding of such need among the practitioners and policymakers.

The role of parents in young people's career choices

Formal career guidance is stipulated in a number of written guidelines and policies. However, there is also a wide practice of informal career guidance. Career-guidance practitioners and policymakers acknowledge the importance of parents, families and peers in making career choices, but there is no systemic informal career-guidance practice. Some schools involve parents, but usually on an ad hoc or urgent basis, when career-guidance test results require special attention or when parents themselves are actively involved in the process.

The case study of Nazarbayev Intellectual Schools revealed interesting cases of informal career guidance that involved parents and also made use of the summer holiday gap to help students develop extracurricular skills.

Overall, there is an acknowledgment of the importance of informal career guidance, but few practical applications in implementation.

4.2   Turkey

4.2.1   Overview of career guidance in Turkey

In Turkey, career guidance services are carried out in various contexts by the Ministry of National Education (MoNE) and the Turkish Employment Agency (İŞKUR), which is affiliated to the Ministry of Labour, Social Security and Family (MLSSF), as well as by universities, the private sector, trade unions and employer associations. MoNE and İŞKUR provide most of the current services.

MoNE is responsible for guidance services for the education system, from basic to higher education. The goal of the services is to support the students for better self-awareness, opportunity awareness, making realistic choices and self-actualisation[6]. These services include:

■   educational guidance,
■   career guidance,
■   personal and social guidance.

İŞKUR supports individuals (youth and adults) in finding jobs that suit their competences and supports employers in finding employees who have suitable qualities for the job[7].

■   İŞKUR performs career-orientation services, provides job and employment counselling services, implements education programmes aimed at developing job-search skills, and provides psychological counselling services via career-counselling centres.
■   In cooperation with schools, İŞKUR provides detailed explanations to students about the importance of choosing a career, its relationship to educational choices, and the sources from which career information can be gleaned.

A Memorandum of Understanding has been signed by all the related stakeholders as a basis for the National Career Guidance Forum. The MoU was signed by MoNE, MLSS (İSŞKUR), State Planning Organisation, Small and Medium Industry Development Organisation, National Productivity Centre, Vocational Qualification Authority (VQA), Confederation of Turkish Tradesmen and Craftsmen, Higher Education Council, Turkish Confederation of Employer Associations, Union of Chambers and Commodity Exchanges of Turkey and the Confederation of Turkish Trade Unions. However, there is no existing national forum, and the MoU was supposed to be the basis for that.

On a more local level, there are provincial employment and vocational training councils, which support the development of employment and vocational education/training policies, the planning and implementation of employment activities, and active employment programmes to attain and develop employment and to prevent unemployment. The provincial councils measure local labour-market demand, and support the educational and employment sector at the local level to develop and tailor

---

[6] Milli Eğitim Bakanlığı, Rehberlik Hizmetleri Yönetmeliği, MoNE regulation on Guidance services
[7] 4837 sayılı İş Kanunu, Law No 4837 on Labour

their work according to local demand, as well as to set action plans to develop employability and VET programmes at the local level. The provincial employment and vocational training councils consist of: the governor, head of the municipality, provincial MoNE director, provincial İSKUR director, one representative from the labour and employment organisations, one representative from the confederation of individuals with disabilities, and academics from the fields of economics or VET.

Career guidance in the education sector

The National Education Summits, which submit recommendations for the development of the Turkish national education system, first addressed the topic of guidance in 1961; access to guidance has been a topic of interest at all subsequent summits.

Turkey's National Development Plans also have articles and items on lifelong guidance for all age levels. The guidance and psychological counselling services in MoNE integrate educational, career and personal/social guidance services. Career-guidance services at schools are thus mainly provided by the school's guidance and psychological counselling service. Furthermore, in Turkey's 'Skills Vision 2020' road map, information guidance, counselling and work-based learning are emphasised for their role in creating a socially cohesive, knowledge-based economy with reduced regional inequalities and a proactive, entrepreneurial workforce in which young people and women can participate fully.

Schools at different levels provide individual and group activities to support personal and career development. Class teachers also provide information about the world of work. Career education is included as part of class guidance programmes in all types of school, integrated with personal and social education. Teacher handbooks were introduced to guide teachers through in-class activities; support is also offered by the schools' guidance practitioners. Guidance and Research Centres in cities undertake coordination responsibilities for guidance services, to support access to guidance for children with special needs and their parents, together with specialist diagnostic services, to deliver individual and group guidance services in schools that do not have a guidance practitioner, and to offer a more general support resource to guidance services within schools.

To prepare and empower the youth for the changing demands of the labour market and the world of work of 2023, MoNE released its '2023 Education Vision' paper in November 2018 (Ministry of National Education Turkey, 2018), proposing major revisions in the curricula (see innovative examples) and in the guidance and counselling system. The '2023 Education Vision' proposes that a new career-guidance system will be established and students will have opportunities for self- and opportunity awareness to get to know themselves and the world of work/labour market better. An efficient and valid guidance and counselling system from early childhood to the end of secondary education is in the process of development. It aims to empower guidance practitioners in schools, give them well-defined roles in the system and equip them well for multicultural counselling in line with migration and related social changes. Classroom teachers will be trained and certified in guidance activities to support the guidance practitioners in schools.

Under the '2023 Education Vision', career-guidance interventions will have a specific emphasis on: supporting students to develop competences for understanding themselves and the influences on them; exploring ways of investigating opportunities in learning and work; competences that enable young people to make and adjust their plan, manage change and transition, and take appropriate action. Integrating the career-development files with the student e-portfolios (see innovative examples) is foreseen.

In addition, Guidance and Research Centres will be reorganised to respond to the needs of students and families. New assessment tools will be developed and adapted. All the assessment tools currently used in Turkey have been reviewed and those that can be used in the career-guidance processes have been listed[7].

For higher education, action plans on developing the career services, as well as psychological counselling and guidance services, are rooted in the strategic plans of universities. Several universities have items in their strategic plans to promote work on career-guidance services and psychological counselling and guidance services.

Career guidance in the employment sector

İŞKUR provides job and employment counselling in accordance with a decree including provision 'to perform career-orientation services, to provide job and employment counselling services, to implement education programmes aiming at developing job-search skills, to provide psychological counselling services via career counselling centres…'. Article 10 of the same law includes provision '… to expand and enlarge career-orientation systems gradually, to provide and improve guidance services, to offer employment and counselling services, to implement educational programmes towards developing job-search skills'. İŞKUR provides services to jobseekers, employers and students, and envisages improving the quality and effectiveness of the services by implementing targeted intervention (see innovative examples).

'2023 Education Vision' includes analysis of the provincial labour force and its ability to meet labour-market demand in terms of required skills, number of workers and sectors. This is of direct and immediate relevance to education, training and LLL in the sense that it addresses the human resource development (HRD) system and its capabilities. Relevant actions include improving the effectiveness of the labour force, reducing the informal economy, developing the statistical information infrastructure, developing basic and occupational skills, attracting qualified human resources from abroad, and developing institutional capacity at a local level. Moreover, the National Employment Strategy (2014–30) puts great emphasis on resolving structural problems in the labour market, bringing strong solutions to unemployment through increasing the impact of growth on employment in the medium and long term.

İŞKUR's work in schools is complemented by videotapes and films, and a 'library/resource centre' where students can consult career files, which include definitions of careers and their tasks, qualifications, work environments and working conditions, vocational training, fields of work, employment opportunities, income, and promotion opportunities during and after training; there are also printed documents (books, articles, pamphlets) which give detailed information about opportunities for vocational training and about the labour market. İŞKUR also organises class discussions and group discussions within both general and technical/vocational secondary education schools.

İSKUR also provides vocational training to unemployed people to develop their skills for employability[8]. The training is designed based on demand from employers, and the participants are informed about how to develop their opportunity awareness and are provided with job and employment counselling.

---

[8] https://esube.iskur.gov.tr/kurs/kursOnAir.aspx?ProgrammeTur-1

Challenges and the way forward

There is still a significant need for more structured communication, coordination and collaboration among all the stakeholders in Turkey, and the target groups could be better informed about the services/interventions that could contribute to their career development. Ways to move forward could include:

■ the empowerment of professionals in career guidance to help them to respond to changing needs/demands;

■ schools, universities and İŞKUR to continue to develop their collaboration with employers in order to facilitate transitions and the exploration of the world of work by students and other target groups;

■ more targeted interventions for the large number of migrants in Turkey to facilitate their labour-market integration and social cohesion in a holistic way.

4.2.2 Innovative examples of ICT use in career-guidance systems in Turkey

The following four innovative examples show evidence of the mega-trend 'ICT use in career-guidance systems' in Turkey. The examples summarised in Table 4.5 are expanded on in Volume II.

TABLE 4.5 INNOVATIVE EXAMPLES OF ICT USE IN CAREER-GUIDANCE SYSTEMS IN TURKEY

Type of initiative	Name	Key features	Page in Vol. II	Web link
Electronic tools for monitoring and organising guidance in schools	E-portfolio and e-guidance systems	Academic, personal and extra-curricular modules, co-ownership of the e-portfolio by the pupil; systematic organisation of career-guidance in schools.	63	https://rb.gy/gaycv8
E-learning for guidance practitioners	Online training programme on lifelong guidance	Takes account of international developments, LMI systems, evaluation and serving people with disabilities.	64	https://rb.gy/gaycv8
Reorganisation of roles and methodology in the PES	Profiling-based counselling system and division of roles and responsibilities for counsellors	Assignment of 5 defined roles for counsellors with retraining, and use of ICT for profiling clients, led to a more personalised service.	64	
CIS for VET students	VET portal 'My Career and My Life'	Provides a platform between VET students, teachers, employers and jobseekers.	65	https://rb.gy/mbtidd

4.2.3 Innovative examples of developing career-management skills in Turkey

The following two innovative examples show evidence of the mega-trend 'developing career-management skills' in Turkey. The examples summarised in Table 4.6 are expanded on in Volume II.

TABLE 4.6 INNOVATIVE EXAMPLES OF DEVELOPING CAREER-MANAGEMENT SKILLS IN TURKEY

Type of initiative	Name	Key features	Page in Vol. II	Web link
Educational curriculum revision	Curriculum approach to career awareness and competence	Strengthening students' self-awareness for better and more realistic career plans.	66	https://rb.gy/mbtidd
Private university initiative to link students with potential employers	Interview adventure with talent hunters	Collaboration with prominent employers and use of the student database as a career portal.	67	https://rb.gy/z7v2dc

4.2.4 Innovative examples of cooperation and coordination in career guidance in Turkey

The following three innovative examples show evidence of the mega-trend 'cooperation and coordination in career guidance' in Turkey. The examples summarised in Table 4.7 are expanded on in Volume II.

TABLE 4.7 INNOVATIVE EXAMPLES OF COOPERATION AND COORDINATION IN CAREER GUIDANCE IN TURKEY

Type of initiative	Name	Key features	Page in Vol. II	Web link
Quadripartite agreement to integrate refugees into the labour force	Integrated provision of career and employment services for migrants and the host community	Pre-employment support programme and on-the-job training; responds to local labour-market needs.	68	https://rb.gy/ld9zn4
PES-HE joint venture	İŞKUR Career Campus	Campus contact points for career development, job search and placement.	70	
Integrated public service provision for refugees and migrants	Migrant Services Centres	Partnership between IOM and municipal partners to provide counselling, referral and employment services that help integrate migrants.	70	https://rb.gy/u6kj8q

4.2.5 Innovative examples of the role of parents in young people's career choices in Turkey

The following innovative example shows evidence of the mega-trend 'the role of parents in young people's career choices' in Turkey. The example summarised in Table 4.8 is expanded on in Volume II.

ETF Working together Learning for life
European Training Foundation

TABLE 4.8 INNOVATIVE EXAMPLES OF THE ROLE OF PARENTS IN YOUNG PEOPLE'S CAREER CHOICES IN TURKEY

Type of initiative	Name	Key features	Page in Vol. II	Web link
Pilot programme to inform, engage and involve parents.	Parental involvement programme in elementary schools	Three-level programme from the early 2000s that influenced current and future initiatives.	71	

4.2.6   Evidence of international trends and areas for improvement in Turkey

Turkey is a country of 82 million people, of whom 15.8% are in the age group 15–24. Of this group, 51% are male and 48.8% female. Keeping this demographic in mind, the assessment is based on socioeconomic and cultural infrastructure and the fabric of the country.

ICT use in career-guidance systems

Turkey has a good grasp of the importance of ICT tools in providing individuals with access to educational/training, labour-market and career information. The websites of Turkish PES (İŞKUR), the Ministry of National Education (MoNE) and the Vocational Qualifications Authority (VQA) could be cited as examples. Information on sector-specific realities, available vacancies and employer perspectives is also being made available to a wider spectrum of jobseekers, policymakers, employers and school administrators' (Cedefop, 2016). However, there is a need to develop a better awareness of the role of a comprehensive labour-market information (LMI) system and how it could contribute to the employment and career development of individuals. A policy initiative for a comprehensive LMI system would be beneficial. Moreover, strategies at the policy level should be envisaged for 'skills-forecasting exercises to foresee future demand for skills, identifying obstacles and changing requirements of occupations and the reshaping of qualifications.

Teachers, guidance practitioners, job and employment counsellors have a significant role to play in the implementation of career-information systems. They need to make a better use of the available ICT/digital service provision to raise the levels of readiness of their clients on how to develop their career orientation. Furthermore, these professionals are in a critical position to support students/individuals in improving their digital competences to make better use of the available ICT/digital service provision. At the implementation and policy level, there is room for development of a better understanding of why career-information systems are important for the holistic development of the individual and specifically career development and orientation, to further contribute to the employability of individuals.

Systems of digital service provision in the country need to become more interactive and this could increase the accessibility and dissemination of the services to larger segments of the population. It is important to have a good and feasible mix of traditional and modern provision services in place. In other words, finding the optimal career guidance balance is critical considering the infrastructure and fabric of the country.

Better strategies and policy initiatives need to be envisaged for continuous input and update of the career-information systems, and this is pivotal for the efficiency of the ICT tools.

Big data and a better understanding of how it could be used for the development of LMI systems and evidence-based policy-making are areas of development in Turkey.

Developing career-management skills

To prepare and empower youth for the changing demands of the labour market and the world of work of 2023 and onwards, major revisions have been conducted in the guidance and counselling system. The '2023 Education Vision' envisages that a new career-guidance system will be established and students will have opportunities for self- and opportunity awareness to get to know themselves and the world of work/labour market better. Furthermore, with this Vision in mind, a new system and major changes in the high-school curricula have been embedded to strengthen students' self-awareness for better and more realistic career plans. The system will be effective in 2020. The new model is geared around career education and guidance within the educational system. The main philosophy of the model is to support individuals to develop holistically with a better understanding of their potential and interests, and to decide and act accordingly. Career offices are being established in schools. Starting from the 9th grade, these offices will support the students for better self-understanding, self-exploration and awareness to develop a career profile based on values, competences and interests. The students will be assisted for better opportunity awareness and career exploration. These policy developments/innovative practices could set the stage for empowering the students in career-management skills in the near future. However, this requires both an empowerment of the human capacity and the development of the institutional capacity in relation to education/training and career guidance.

For adults, in the context of İŞKUR, there is room for development in designing and implementing career-management skills for jobseekers. In Turkey, there is a high level of unemployability and the individuals have to be empowered in CMS to develop their employability skills/lifelong learning/international learning/career mobility. Moreover, with around two million Syrians of working age in Turkey, the development of CMS has a critical role to play for the labour market and social integration of this specific target group.

Cooperation and coordination in career guidance

In Turkey, there is a background and history of cooperation and coordination in career guidance. A Memorandum of Understanding was signed by all the related stakeholders in 2010. From that time on, there have been protocols, and joint efforts of different parties to cooperate and coordinate career guidance and related activities. One example is İŞKUR's 'career campus' (see innovative examples). However, most of these efforts have not been successfully finalised, including the work on the development of a national body to support coordination in career guidance. There is a need for policy initiative to support further mechanisms in this respect, and this could promote the national strategy in the area of career guidance.

One challenge is the high level of turnover in the bureaucracy. The infrastructure and a background of cooperation and coordination is present in the country, but a 'new mentality' or impetus could promote further developments.

The business community has played an active part in developing VET and the Vocational Qualification Authority (VQA), and it could be encouraged to cooperate more actively with educational institutions and İŞKUR.

As a conclusion, although there is considerable institutional and human capacity for better applying the new trends, a greater understanding and awareness of the role of career guidance in tackling contemporary global challenges is pivotal.

The role of parents in young people's career choices

In Turkey, nuclear and extended families are central and highly significant in the socialisation process and in children's development. They can provide role models and can be very influential on young people's decisions. Parental involvement in the education system has a history going back to the late 1990s (see innovative examples). A comprehensive programme was introduced, but could not be further implemented and became part of collaborative intervention between schools, communities and families. Today, within the educational system there is a good understanding of the important role of parents in their children's development. Based on this, parent training programmes are being developed by MoNE and the Directorate General of Lifelong Learning. Further cooperation between parents, teachers and other school staff, psychological-pedagogical centres, other schools, organisations and institutions working for the family, children and youth, and efforts to engage parents in their children's learning and participation in daily school life, could be promising developments in the near future. However, this needs to be prioritised at the policy level. NGOs also have a role to play in empowering parents for a better understanding of their children's development and providing information about the education system, occupations and the labour market.

Actively communicating with parents and providing them with the relevant information, as well as offering career guidance for parents and children, need to be new avenues of parent empowerment in the country. These trends could be promoted at the policy and implementation level.

4.3   Ukraine

4.3.1   Overview of career guidance in Ukraine

In Ukraine, career-guidance services are provided by the Ministry of Social Policy (formerly the Ministry of Labour and Social Policy), the State Employment Service Centres, the Ministry of Youth and Sports (MYS), the Ministry of Education and Science (MES), NGOs, employer associations and private services.

Today the State Employment Service (SES) is the most effective provider of career guidance for the public in Ukraine. For decades it was an affiliated institution of the Ministry of Social Policy, but since December 2019 it has become part of the Ministry of Economic Development and Trade.

SES is a structure that brings together 25 regional employment centres, 95 basic providers and 429 branches of regional employment centres across Ukraine. All SES offices operate under a single service-delivery scheme: clients can contact any employment centre and receive all employment-related social services. SES provides career guidance through career information, career counselling and job-search assistance. It is the active intermediary in the labour market between employers and jobseekers that provides free job-search and recruitment services, state social insurance in the case of unemployment and financial assistance to people who have been made redundant. The main tasks of the SES at the present time are:

■   development of active employment-promotion programmes;
■   increasing the competitiveness of the unemployed in the labour market;
■   targeted assistance for employment of socially disadvantaged people;
■   introduction of new partnerships with employers, stimulating them to create new jobs.

The MYS is an active player in supporting youth career guidance and employment. Under this ministry's initiative, the All-Ukrainian Youth Centre (YC) was established in April 2019 with affiliates across the country. The mission of the YCs is to provide youth with self-determination and social

adaptation, support youth employment and volunteering, increase youth mobility and introduce innovative practices for young people. Every year, MYS introduces a wide range of activities connected to youth career guidance: the nationwide 'Young Employee' training scheme, the local 'Young Employee' training schemes, the nationwide 'Youth Passport' round table, and nationwide seminar training for the development of young leaders' career competencies, etc.

The 'Young Employee' training scheme was launched by the MYS in partnership with the State Institute of Family and Youth Policy. It included three main training modules:

1. Youth Policy (Reforms in Youth Policy in Ukraine; European Approach to Youth Policy; Work for Youth);
2. Communities and Youth Involvement (Communities and their Activities; Youth Participation in Community Activities);
3. Skill Sets for Young Employees (Competences of Young Employees; Job Portfolio).

These training sessions were held both nationally and locally. The key topics could vary and were updated monthly. A number of other activities were offered for participants such as career-focused workshops, round tables ('Youth Passport'), etc.

In July 2019, the MES introduced 'The Strategy of the Development of School Education Assessment in Ukraine till 2030', developed by the Ukrainian Centre for Education Quality Assessment and the International Renaissance Foundation ('Vidrodzennya'). This document describes in detail the implementation of a new education policy for creating a holistic system of quality assessment at key stages of school education. Among other key points the Strategy reviews the career-guidance system in Ukraine and focuses on career tests for high-school students. It highlights the imperative for developing career-management skills at school age and gives recommendations for how European trends can be used as a model to improve lifelong learning and counselling in Ukraine.

This approach can help address the challenge of career-guidance provision in Ukrainian schools and has resulted in the plan from the MES to introduce career guidance in a systemic manner from the 6th to 10th grades. School career counsellors will be responsible for providing career guidance through close collaboration with local employers and higher-education institutions. Currently, employers who are willing to take an active part in career guidance for schools are registered in a special database and invited to take part in cooperative activities. Each higher-education institution will be obliged to set up a career centre responsible for students' career learning and counselling, and the open-access system for monitoring graduates' employment will be launched in few years' time.

The other challenge for the MES is to revive the prestige of vocational education. This aim also calls for highly qualified career guidance at the high-school level. Appropriate information about the world of work and work-based learning at local enterprises will give young people a better understanding of the modern labour market, both locally and internationally. The ambitious goals of modernising two to three vocational educational institutions in every region of Ukraine should not only attract a greater number of students to vocational schools but also start the process of providing adults with training and retraining opportunities at local vocational and technical colleges.

Today, career-guidance projects for different age groups are also being introduced by NGOs, employer associations and private providers. They are promoted through social networks, and are popular among students and adults. Some NGOs like Career Hub are introducing their activities across the country and fruitfully cooperating with state organisations, employment centres and

ETF Working together Learning for life

European Training Foundation

educational institutions. In partnership with the educational sector, they provide cooperation programmes and career mentoring for young people. Employer associations support career initiatives and take part in career fairs, career days and career talks. More and more national and international companies are focusing on employing students and people with special needs while providing career learning and counselling.

A number of social projects involving employment assistance and psychological support for socially disadvantaged groups are being organised by national and local charitable foundations in cooperation with state and local authorities. There is a special focus on former military officers, participants in the Anti-Terrorist Operation (ATO) in the conflict zone of eastern Ukraine and internally displaced people. Joint projects on raising awareness among these social groups about procedures for safe employment and starting their own businesses are implemented across the country. As part of such joint activities, educational training and workshops are conducted in basic employment centres in the cities that have received the largest number of displaced people. The main topics of training schemes are 'Secure employment', 'How to start your own business' and 'How to use social and administrative services'.

Challenges and future developments

Systemic changes in the labour market and employment require the introduction of a unified state policy for public career guidance, especially for young people. The balance in the labour market cannot be restored without a fundamental change in the state policy for human capital management in Ukraine – in particular, the transformation of the career-guidance system.

Since most ministries in Ukraine are currently being restructured, there is no clear understanding of how the public career-guidance system will evolve. It should be emphasised that Ukrainian policymakers today have no common vision for the development of a career-guidance system, which makes it impossible to measure the effectiveness of such services and their benefits, either for individuals or society. It should also be taken into account that the market for private career-guidance providers is unregulated, and therefore should be regularly monitored and assessed.

4.3.2   Innovative examples of ICT use in career guidance in Ukraine

The following three innovative examples show evidence of the mega-trend 'ICT use in career-guidance systems' in Ukraine. The examples summarised in Table 4.9 are expanded on in Volume II.

TABLE 4.9 INNOVATIVE EXAMPLES OF ICT USE IN CAREER-GUIDANCE SYSTEMS IN UKRAINE

Type of initiative	Name	Key features	Page in Vol. II	Web link
Online CIS	Career Hub Ukraine	As well as providing a vast body of information the platform organises events, meetings, competitions, etc. to stimulate career-management skills	73	https://rb.gy/dmd3lj
Online CIS	SmartJob – the PES integrated resource tool	Extensive use of video technology for counselling and training; special features for ATO veterans.	75	https://rb.gy/nrzw6l https://rb.gy/m29jxm https://rb.gy/brakix
Use of social media	Videos for career guidance (from the State Employment Service)	Humour, animation and social media is used to disseminate career advice.	76	https://rb.gy/5vtiq7 https://rb.gy/rpah1s

ETF
Working together
Learning for life
European Training Foundation

INTERNATIONAL TRENDS AND
INNOVATION IN CAREER GUIDANCE | 56

4.3.3 Innovative examples of developing career-management skills in Ukraine

The following three innovative examples show evidence of the mega-trend 'developing career-management skills' in Ukraine. The examples summarised in Table 4.10 are expanded on in Volume II.

TABLE 4.10 INNOVATIVE EXAMPLES OF DEVELOPING CAREER-MANAGEMENT SKILLS IN UKRAINE

Type of initiative	Name	Key features	Page in Vol. II	Web link
Training for career development	Education and Research Institute of Continuous Education	Furthering the agenda of lifelong learning by training not only teachers but professionals from other walks of life.	77	https://rb.gy/ketjia
Support community for gifted young people	Junior Academy of Sciences of Ukraine	Competitions, labs and projects are scientifically and vocationally focused, allowing talented youngsters to fly and develop their future careers.	78	https://rb.gy/mmgdp2
Project-based CGS	Kyiv Youth Centre	Holistic career-development service based on a year-long programme of workshops, talks, career days and more.	80	https://rb.gy/gadzhr8.3

4.3.4 Innovative examples of cooperation and coordination in career guidance in Ukraine

The following two innovative examples show evidence of the mega-trend 'cooperation and coordination in career guidance' in Ukraine. The examples summarised in Table 4.11 are expanded on in Volume II.

TABLE 4.11 INNOVATIVE EXAMPLES OF COOPERATION AND COORDINATION IN CAREER GUIDANCE IN UKRAINE

Type of initiative	Name	Key features	Page in Vol. II	Web link
PES	Career guidance at the Zhytomyr Regional Employment Service	An example of a regional PES that scores highly on all four mega-trends, particularly collaboration with the education system.	82	
Governance and reforms	Ukrainian Association for Career Guidance and Educational Advising	NGO promotes international cooperation and militates for key competences and qualifications frameworks.	84	

4.3.5 Innovative examples of the role of parents in young people's career choices in Ukraine

The following innovative example shows evidence of the mega-trend 'the role of parents in young people's career choices' in Ukraine. The example summarised in Table 4.12 is expanded on in Volume II.

TABLE 4.12 INNOVATIVE EXAMPLES OF THE ROLE OF PARENTS IN YOUNG PEOPLE'S CAREER CHOICES IN UKRAINE

Type of initiative	Name	Key features	Page in Vol. II	Web link
Career guidance for young children	The City of Professions	Mobile event that introduces children and their parents to the world of careers through role-play and participation by members of the local working community.	85	

4.3.6 Evidence of international trends and areas for improvement in Ukraine

Today, only 36% of Ukrainian graduates start a career for which they were trained in their diploma qualification, while 29% work in fields related to their speciality and 44% are employed in spheres completely different to those of their diplomas. The other great problem is that according to the statistics only 10% of Ukrainians enjoy their jobs[9]. Poor understanding of the latest trends in the labour market, competitiveness and real demand for certain careers at the local and international level, and a lack of proper career-guidance provision in schools are making it hard for young people to make a responsible career choice. Implementation of successful local and international innovative career-guidance practices in four key areas will allow the country to focus on youth and adult employment problems and work out the solutions nationwide.

ICT use in career-guidance systems

Today, the digital informational environment provides a vast choice of career options for Ukrainian jobseekers. Personal and professional development for all age groups are widely represented both by the public and private sectors. The leaders in the holistic provision of free career information online are the State Employment Service[10], Kyiv Youth Centre[11] and non-governmental organisation Career Hub[12].

The State Employment Service (SES) has created a unified online base of jobs, jobseekers and job training opportunities across the country. This allows it to expand the area of job search for clients not only within the district or region, but also across the country. A special career-guidance E-platform was launched a few years ago for free distance individual self-assessment of transversal skills, career learning and development[13]. The SES website gives information about the opportunities for people who lost their work in the occupied territories and have had to start their career from the beginning.

---

[9] https://pon.org.ua/novyny/7194-profesyna-oryentacya

[10] www.dcz.gov.ua/

[11] https://kyc.org.ua/

[12] http://careerhub.in.ua/

[13] http://profi.dcz.gov.ua/

Kyiv Youth Centre website informs the public about the importance and benefits of responsible career choice through career guidance; it motivates people to use the methodology of complex career guidance, meaning a systematic approach to career guidance and counselling rather than the episodic and partial provision currently available in most places; it enables young people to make an informed career choice based on state-of-art information; it removes the consequences of a stereotypical view of a particular job; it creates a platform for the self-determination and self-development of young people through the study of their talents and interests.

Career Hub Ukraine is an innovative e-platform for career planning and employment that provides career information, educational projects and activities, career programmes and competitions, useful career articles, career advice and vacancies for young people.

The private sector has also widely introduced general career information online, but most individual fee-paying career counselling is provided face-to-face, with varying degrees of effectiveness.

Developing career-management skills

Young Ukrainians spend most of their time learning school subjects and doing homework. Unfortunately, the majority of this knowledge seems to be useless in a fast-changing world and in the age of digital technologies. School and university learning content and facilities are far removed from the modern needs of students and require urgent transformation.

For the next few years, the MES is planning to renovate school curricula according to the New Ukrainian School Strategy. The learning process is practice-oriented and closely linked to real-life challenges through practical application. The education policymakers and policy-providers are fully aware that it is essential to create appropriate conditions for developing schoolchildren's career-management and life skills. Since first steps in career planning at school age are vitally important, the MES plans to introduce career counsellors for youngsters. Fortunately, NGOs have developed a wide range of effective toolkits that have great potential for career counselling in schools at a minimum investment. They could be adopted by the MES and introduced into the school curricula to bring quick results. If the MES implements the successful strategies of NGOs and Employment Centres, this initiative could be achieved in the near future.

Compulsory career centres for all Ukrainian higher-educational institutions are another potential solution for students' career-management skills development. The State Employment Services pay great attention to the transversal skills development of Employment Centre clients. The Centre experts give regular training and workshops to unemployed people for the development of employability skills based on the principles of lifelong learning.

The Ukrainian Association for Career Guidance and Educational Advising (UACGEA) is developing relevant visions, strategies, models and approaches that can be realistically adapted in Ukraine in the near future. In this context, it proposes to apply updated pan-European models of key competences, including career management skills[14]. UACGEA experts propose a Career Management Skills Framework containing 10 career management competences divided into three groups. Each complete competence consists of a specific set of skills. In the process of acquiring these skills young people are preparing for professional self-determination.

---

[14] www.potok.org.ua/pdmq

Cooperation and coordination in career guidance

In Ukraine the cooperation and coordination of all stakeholders related to career guidance is a question of great concern due to the absence of a unified system of career guidance based on the concept of lifelong learning, and a shortage of effective tools for implementing this system. Nevertheless, some attempts to coordinate career-guidance activities at the policymaking level are worth highlighting.

Since 2009, the Council for Public Career Guidance has been an advisory body under the Cabinet of Ministers in Ukraine[15]. The Council was created to implement 'The Concept of Career Guidance State System' approved by the Cabinet of Ministers Decree No 842 of 17 September 2008. It planned to meet at least twice a year, though this intention has not been fulfilled for several years. Therefore, in the absence of a systematic approach and a unified policy, career-guidance programmes and activities in central executive authorities were implemented without proper reflection and evaluation of their effectiveness.

In July 2019, after a long break, and resulting from the joint action of several NGOs, the Council for Public Career Guidance resumed its activity. A Memorandum for Collaboration between the concerned ministries (the Ministry of Economy, the Ministry of Education and Science, the Ministry of Social Policy, the Ministry of Youth and Sports) was signed[16]. The main task of this agreement is to consolidate the efforts of all state bodies and departments, employers' associations, educational establishments and NGOs for creating an effective system of public career guidance in Ukraine. But the crucially important questions still require answers: What is career guidance? How will its outcomes be measured? Who is responsible for the career guidance of different age groups?

The benchmark examples of successful cooperation and coordination can be demonstrated by the State Employment Service (SES) both at national and local levels[17]. The SES Career Guidance Programme 2017–20 has been elaborated and a number of Memorandums of Understanding and Cooperation with the Ministry of Social Policy, the Ministry of Justice, the State Migration Service, Stabilisation Support Services and NGOs have been signed since 2017. The SES has been implementing and piloting projects, for instance in support for reforms ('Support for reforms in the Social Sector') and inclusive employment ('Inclusive labour market for employment in Ukraine'). Moreover, the regional and basic Employment Centres, which are extremely modern and client-oriented, interact efficiently with related stakeholders (employers, local authorities, educational institutions, non-governmental and international organisations), introducing innovative career-guidance practices for different social groups.

NGOs also fruitfully cooperate with the State Employment Service, business sector and educational institutions, providing career guidance services through educational and mentoring programmes, personal and professional training, workshops and courses, international programmes and educational grants. A great example of cooperation between the business, state and educational sectors is the Ukrainian Pact for Youth 2020 that introduces an initiative for solving the problem of youth unemployment[18].

---

[15] https://zakon.rada.gov.ua/laws/show/28-2009-%D0%BF
[16] http://employers.org.ua/news/id2046
[17] www.dcz.gov.ua/
[18] http://careerhub.in.ua/

The role of parents in young people's career choices

Today parents take an active part in their children's process of choosing a career and exert a significant influence on their decision-making. Parents who feel they have not been very successful in their own career want their children to have better opportunities for personal and professional development. The recent trend for Ukrainian parents is to give their children financial support for studying abroad. More and more school-leavers apply to foreign colleges and universities, attracted by their practice-oriented and career-focused learning processes.

Permanent transformations in the world of work and constant changes in the labour market cause Ukrainian young people to feel uncertain in their career choices. At the same time, a lack of career guidance at schools and universities causes adolescents to address their parents for assistance in choosing the right career.

Fortunately, the best innovative practices in career guidance are becoming more and more popular among Ukrainian parents and their children. One of the brightest examples to encourage the first steps in career choices is a national project called 'The City of Professions'[19]. It is a large, mobile career-oriented event that annually invites children and their parents to discover more about the world of work through work simulation activities in real-life conditions, and has gathered huge momentum since its initiation in 2014.

---

[19] https://mistoprofesiy.com.ua/

5. CONCLUSIONS AND RECOMMENDATIONS

The report explored the importance of career-guidance policies and practices in the light of global challenges and the responses offered by education and training systems, employment and social policies. It examined the current mega-trends in career guidance, focusing on the use of information and communication technologies (ICT), career-management skills, cooperation and coordination mechanisms in career guidance and the role of parents and carers in young people's career choices. Other emerging trends in the international career-guidance debate were briefly presented: social justice as an issue in career guidance, bringing career guidance closer to communities, providing evidence and accountability of career-guidance practices, co-constructing the careers of career counsellors and the co-careering approach.

The report further presented a selection of inspiring examples from around the world of how career guidance is changing in a fast-evolving world and labour market to support individuals to become real lifelong learners, to acquire new skills to cope with change and to further develop their existing skills. A general conclusion from those examples is that career guidance is a key response to contemporary global challenges, but it needs to evolve to remain relevant and functional. The specific key lessons learned, and recommendations derived, from the examples covered in this report aim at increasing awareness about opportunities, stimulating reflection and providing inspiration to support the evolution of policies and practices in career guidance.

Since career-guidance services reflect the context in which they operate, career-guidance systems need to be context-specific and cannot just follow an international blueprint. The many good practice cases presented in this report are therefore to be seen as inspiration for a context-sensitive development of a career-guidance system. In that regard, all other recommendations mentioned below are to be adapted to the various country contexts, and relevant stakeholders need to be aware of the existing capacity of the career-guidance system in their country in order to continuously develop it. For this reason, a good monitoring system needs to be in place. Decision-makers should reflect on the role that research could play to deliver evidence-based information about impact, but also service effectiveness.

Key features of an adequate understanding of career guidance for supporting individuals in the context of the 21st century labour market and society overall include:

■ cooperation and collaboration at policy and practice level (e.g. by a resourced national body) to overcome fragmentation when reaching out to diverse population groups, to enhance policy and service effectiveness, to ensure efficient use of resources, to integrate career guidance into wider policy objectives, such as economic, employment, social, youth, education and training (e.g. lifelong learning) policy goals (e.g. through the provision of integrated services);

■ a shift from support for making career and/or education choices at transition points towards enabling individuals to manage their own education and careers, with a focus on: increasing lifelong career adaptability and employability through career-management skills development via integration in education curricula (schools and adult education); lifelong information and advice provision; and lifelong guidance[20] from early school years onwards throughout life;

---

[20] See definition in Barnes et al. (2020b), p. 4

ETF Working together Learning for life
European Training Foundation

- a multi-channel approach to the delivery of career-guidance services, also leveraging the opportunities offered by ICT, to meet the needs of diverse clients, increase access to and quality of guidance services (from personalised, group and online provision to self-directed service offers, e.g. to explore future skills needs, and involvement of parents and/or the wider community);
- availability of quality labour-market information (LMI) for the use of individuals in their career development and by professionals in guidance provision;
- professionalism and quality assurance of career-service provision, including education and training for practitioners (e.g. to ensure readiness for online provision) and practitioner occupational standards, but also provision standards and procedures (e.g. on the common use of LMI and ICT) as well as quality standards for service providers, and monitoring indicators.

This will support the delivery of coordinated, flexible and personalised career-guidance provision. In relation to the key features listed above, the main lessons to be drawn from the examples in this report are that decision-makers:

- should see cooperation and coordination in career guidance, involving public but also private, voluntary and community actors, as key to policy effectiveness and efficiency. A fruitful start can be simply to establish regular meetings and exchange (with the overall long-term objective of increasing cooperation and collaboration) as a basis for further establishing in concertation with all stakeholders how cooperation and collaboration, and finally the integration of services, should develop;
- should acknowledge the advantages of integrating the development of career-management skills into educational curricula (schools and adult education), given the need for sustainable employability and lifelong career adaptability, because: (a) this provides a better chance of reaching those who are not active, not self-driven, not supported, e.g. by parents, not motivated or not aware of the need to get informed; (b) it empowers individuals to take their career and education into their own hands through developing decision-making, proactive and resiliency skills; (c) it follows a holistic approach (personal, social, educational and career development); (d) it increases individuals' understanding of skills needs due to real-life exposure;
- should strive to benefit from ICT as a support for traditional services in career guidance (e.g. harnessing the potential for connecting stakeholders: individuals-employers, schools-employers, practitioners-individuals, etc.; facilitating self/career/opportunity exploration and acquiring skills for deciding and acting; increasing accessibility: offering one-stop-shop information points, providing LMI, etc.); at the same time, the potential of ICT to bring together the different elements of the career-guidance system as an integrative factor needs to be better understood in country contexts, and better used in the sense of strategic systematisation of the use of ICT aimed at remodelling the career-guidance system and services and improving effectiveness and efficiency;
- should leverage the role of parents/carers in the career decision-making of young people, taking account of the fact that parents/carers may have great influence but little guidance know-how;
- should ensure practitioners have adequate professional competences: to design and implement Career Management Skills (CMS) programmes and curricula for schoolchildren and adults, and/or to use CMS frameworks; to engage parents together with their children, or in programmes specifically for parents; to cooperate and collaborate with different stakeholders such as employers and schools; to increase the personalisation of information and flexibility of delivery methods; to integrate virtual solutions such as the use of career information systems (CIS), labour-market information (LMI) systems, web-based interactive systems, big data, social media, apps, chatbots, etc., thereby always being well-informed and reflecting on the benefits and limitations of each system/means of using ICT; to reconstruct their own mindset and introduce

ETF
Working together
Learning for life

European Training Foundation

changes in the organisational culture in order to support client reflexivity (e.g. the 'co-constructing the careers of career counsellors' approach supports professionals in the process of the development and revision of their professional identities); to gain access to professional training and methodological support (e.g. methodological guides, open educational resources, evidence-based research examples, etc.);

■ should understand that the use of ICT, CMS development, cooperation and coordination and the involvement of parents are valuable policy/service options if a career-guidance system is to be further developed, in that they address such challenges as effectiveness, efficiency, outreach and adaptation of career guidance to 21st century needs if they are adapted to the respective country context.

A further lesson from the report is that career guidance needs to be seen in the context of wider economic, employment, social, youth, education and training-policy objectives. A strategic reflection on the question of 'What can career guidance help address?' needs to take place in order to integrate career guidance into wider reforms in education, the labour market, social and youth policy, etc. In order to answer this and other key questions and to ensure a common understanding of career guidance and common approaches, countries need to hold regular meetings and exchange to increase cooperation and collaboration between stakeholders. The examples of integrating career education and the development of CMS into school curricula, or developing CMS competence frameworks, go some way to answering this core question and are a strategic choice for a country.

However, for innovation and effective governance in career-guidance services to occur requires not only policy coherence and efficient partnerships between all the stakeholders, but also adequate allocation of resources. Decision-makers should be aware of the importance of modern infrastructure for the development and implementation of career-guidance services, e.g. CIS, LMI systems, web-based interactive systems, or integrating social media, apps and chatbots into career-guidance provision. Resources should be allocated for public access to career-guidance services, especially for disadvantaged groups. Examples in this report have shown that the use of ICT and cooperation and collaboration in career-guidance systems are effective ways to be resource-efficient.

Decision-makers should also consider the wider role of research in promoting innovation in career guidance and should ensure its relevance and effectiveness: research topics should be encouraged in relation to the current mega-trends in career guidance, investigating, amongst other themes: impact of career guidance; the consequences of the digitalisation and automation of work and how recent career-guidance systems are addressing these issues; effective approaches to developing and assessing career-management skills (CMS) and social-emotional skills; how technology-enhanced learning (TEL) approaches could facilitate professional-identity transformation for career-guidance practitioners; the impact of using big data, apps, social media, chatbots, etc. in career guidance; evaluation of the use of career-guidance websites, CIS, LMI, etc. on individuals' career-related knowledge and skills; and the role of parents and caretakers in young people's career decision making.

ACRONYMS AND ABBREVIATIONS

AI	Artificial intelligence
CASEL	Collaborative for Academic, Social and Emotional Learning
Cedefop	European Centre for the Development of Vocational Training
CEG	Careers Education and Guidance
CMS	Career-management skills
DigComp	A digital competence framework
EC	European Commission
EEEP	European Education Expert Panel
ELGPN	European Lifelong Guidance Policy Network
ES	Expert system
ETF	European Training Foundation
ETUCE	European Trade Union Committee for Education
EU	European Union
ICT	Information and communication technology
ILO	International Labour Organisation
MOOC	Massive open online course
NEET	(Young people) not in education, employment, or training
OECD	Organisation for Economic Cooperation and Development
OSHA	Occupational Safety and Health Administration
SEL	Social and Emotional Learning
UNESCO	United Nations Educational, Scientific and Cultural Organisation
USA	United States of America
VET	Vocational education and training
WHO	World Health Organisation

REFERENCES

Aagaard, K. (n.d.). 'How informal and non-formal learning is recognised in Europe. Denmark – country report', Bertelsmann Stiftung. Last accessed 30 October 2019 at: www.bertelsmann-stiftung.de/fileadmin/files/BSt/Publikationen/GrauePublikationen/LL_Denmark_FINAL_32Seiter.pdf

Abbas, R. (2020). Presentation 'Bridging the dialogue between parents and children for career counselling and guidance', Pakistan at the Asian-Pacific Career Guidance Conference. Last accessed October 2020 at: https://asiapacificcda.org/event-3803422

ACVT (Advisory Committee on Vocational Training) (2018). 'Opinion on the future of Vocational Education and Training Post-2020', 3 December 2018.

Andrei, A. & Solberg, V.S. (2020). 'Personalised career and academic planning: a promising policy and practice', *Proceedings of the Conference of the International Association for Educational and Vocational Guidance* (IAEVG), Bratislava, Slovakia, 2019.

Andrei, A., Botnariuc, P., Călineci, M., Făniță, A., Geană, I., Goia, D., Iacob, M., Țibu, S.L. (2017). *Consiliere și dezvoltare personală-clasa a V-a. Ghid pentru profesori*, Bucuresti: Editura Universitara.

Arnkil, R., Spangar, T. and Vuorinen, R. (2017). 'Practitioner's toolkit for PES building career guidance and lifelong learning', Luxembourg: Publications Office of the European Union.

Attwell, G. and Hughes, D. (2019). 'Learning about Careers: Open data and Labour Market Intelligence', *Revista Iberoamericana de Educación a Distancia* (RIED), 21(2), pp. 81–106. doi:http://dx.doi.org/10.5944/ried.22.1.22289

Babarović, T. et al. (2020). 'Career Choice: The new online career guidance system in Croatia', *Conference Proceedings from the 2019 Conference of the International Association for Educational and Vocational Guidance* (IAEVG), 11–13 September 2019, Bratislava, Slovakia.

Bagga, E., Bhargava, P. and Chadha, N.K. (2020). Presentation 'International Certified Career Coach (ICCC) – Initiatives and challenges'. Last accessed October 2020 at: https://asiapacificcda.org/event-3803423

Bakshi, A.J. and Goss, S. (2019). 'Trends related to ethics, technology, counselling and careers', *British Journal of Guidance & Counselling*, 47:3, pp. 265–273, DOI:10.1080/03069885.2019.1630603

Bårdsdatter Bakke, I., Haug, E.H. and 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*, Issue 41, October 2018.

Barnes, A., La Gro, N. ane Watts, A.G. (2010). 'Developing e-guidance competencies: The outcomes of a two-year European project to transform the professional development of career guidance practitioners'. *Career Research and Development: The NICEC Journal*, 25, 26–32.

Barnes, S.-A., Bimrose, J., Brown, A., Gough, J. and Wright, S. (2020a). 'The role of parents and carers in providing careers guidance and how they can be better supported', International evidence report, University of Warwick.

Barnes, S.-A., Bimrose, J., Brown, A., Kettunen, J. and Vuorinen, R. (2020b). 'Lifelong guidance policy and practice in the EU: Trends, challenges and opportunities', final report, European Commission, Directorate-General for Employment, Social Affairs and Inclusions, Directorate E. Luxembourg: Publications Office of the European Union. DOI:10.2767/91185

Bimrose, J., Brown, A., Holocher-Ertl, T., Kieslinger, B., Kunzmann, C., Prilla, M., … Wolf, C. (2014). 'The role of facilitation in technology-enhanced learning for public employment services', *International Journal of Advanced Corporate Learning*, 7, pp. 56–63.

Bimrose, J., Kettunen, J. and Goddard, T. (2015). 'ICT – the new frontier? Pushing the boundaries of careers practice', *British Journal of Guidance & Counselling*, 43:1, pp. 8–23. DOI:10.1080/03069885.2014.975677

Bimrose, J., Brown. A., Mulvey, R., Kieslinger, B. and Dewanti, R.T. (2019). 'Transforming identities and co-constructing careers of career counsellors', *Journal of Vocational Behavior*, Vol. 111, April 2019, pp. 7–23.

Bimrose, J. and Brown, A. (2019). 'Professional identity transformation: Supporting career and employment practitioners at a distance', *British Journal of Guidance & Counselling*, 47:6, pp. 757–769. DOI:10.1080/03069885.2019.1698008

Blustein, D.L., Connors-Kelgren, A., Olle, C. and Diamonti, A. (2017). 'Promising career and workforce development programs and services in supporting the needs of unemployed population', in Solberg, V.S. and Ali, R.S. (eds), *The handbook of career and workforce* development. Research, practice and policy, Routledge Taylor and Francis Group, New York.

Borbély-Pecze, T. (2019). 'Prevention for active people: career guidance', discussion paper, PES Annual Mutual Learning Conference 'How to prevent unemployment in a changing world of work?'. Last accessed October 2020 at: https://ec.europa.eu/social/BlobServlet?docId=20600&langId=en

Botnariuc, P. and Fat, S. (2011). 'Developing the ICT skills of guidance and counselling practitioners in Romania. Analysis of the national context', paper delivered at the 7th International Scientific Conference E-learning and software for education, Bucharest, 28–29 April 2011.

Bright, J.E.H. (2015). 'If you go down to the woods today you are in for a big surprise: Seeing the wood for the trees in online delivery of career guidance', *British Journal of Guidance & Counselling*, 2015 Vol. 43, No 1, pp. 24–35. http://dx.doi.org/10.1080/03069885.2014.979760

Cedefop (2019). Cedefop analytical framework for upskilling pathways for adults. Last accessed October 2020 at: www.cedefop.europa.eu/files/cedefop_af_upskilling_pathways_20-21.05.2019.pdf

Cedefop (2020). Note on lifelong guidance and the Covid-19 pandemic: Responses from Cedefop's CareersNet. Last accessed October 2020 at: www.cedefop.europa.eu/files/2020_05_27_llg_and_pandemic_cnet_b.pdf

Cedefop (2011a). *Lifelong guidance across Europe: Reviewing policy progress and future prospects*, Luxembourg: Publications Office of the European Union.

Cedefop (2011b). *Working and ageing: Guidance and counselling for mature learners*, Luxembourg: Publications Office of the European Union.

Cedefop (2012). *Working and ageing: The benefits of investing in an ageing workforce*, Luxembourg: Publications Office of the European Union.

Cedefop (2014). *Valuing diversity: Guidance for labour market integration of migrants*, Luxembourg: Publications Office of the European Union.

Cedefop (2016). *Labour market information and guidance*, Cedefop research paper No 55, Luxembourg: Publications Office of the European Union. http://dx.doi.org/10.2801/72440

Cedefop (2018a). *Handbook of ICT practices for guidance and career development*, Luxembourg: Publications Office. http://data.europa.eu/doi/10.2801/368695

Cedefop (2018b). 'Reaching out to "invisible" young people and adults', briefing note, March 2018.

Cedefop (2019a). 'Artificial or human intelligence. Digitalisation and the future of jobs and skills: Opportunities and risks', briefing note, June 2019.

Cedefop (2019b). 'Coordinating guidance and validation', Cedefop research paper No 75, Luxembourg: Publications Office of the European Union. http://data.europa.eu/doi/10.2801/801290

Cedefop (2019c). 'Not just new jobs: Digital innovation supports careers', briefing note, October 2019.

Cedefop (2019d). *Online job vacancies and skills analysis: A Cedefop pan-European approach*, Luxembourg: Publications Office. http://data.europa.eu/doi/10.2801/097022

Chambers, N. et al. (2018). 'Drawing the future: Exploring the career aspirations of primary school children from around the world', Education and Employers, January 2018.

Chiru, M., Jigau, M., Olaru, C. (2005). 'Use of ICT in counselling. Practitioners' competences and training' (Folosirea tehnologiilor informatice si comunicarii in consiliere. Competentele si formarea practicienilor), ICT skills for guidance counsellors, project, Bucharest: Afir.

Cogoi, C. (Ed.) (2005). Using ICT in guidance: Practitioner competences and training. Report of an EC Leonardo project on ICT skills for guidance counselors. Bologna: Outline Edizione.

Council of the European Union (2004). 'Resolution of the Council on strengthening policies, systems and practices in the field of guidance throughout life in Europe', 18 May 2004. Last accessed October 2020 at: http://ec.europa.eu/education/policies/2010/doc/resolution2004_en.pdf

Council of the European Union (2008). 'Resolution of the Council and of the Representatives of the Governments of the Member States, meeting within the Council of 21 November 2008 on better integrating lifelong guidance into lifelong learning strategies', Official Journal of the European Union, C 319, 13 December 2008, pp. 4–7. Last accessed October 2020 at: http://eurlex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:C:2008:319:0004:0007:EN:PDF

Council conclusions of 12 May 2009 on a strategic framework for European cooperation in education and training ('ET 2020'), OJEC 2009/C 119/02. of the European Union. Last accessed October 2020 at: https://eur-lex.europa.eu/legalcontent/EN/TXT/PDF/?uri=CELEX:52009XG0528(01)&from=EN

Council of the European Union (2011). 'Council resolution on a renewed European agenda for adult learning,' Official Journal of the European Union, C 372, 20.12.2011, pp. 1–6. Last accessed October 2020 at: http://eur-lex.europa.eu/LexUriServ/ LexUriServ.do?uri=OJ:C:2011:372:0001:0006:en:PDF

Council of the European Union (2018). 'Council recommendation on key competences for lifelong learning', Council of the European Union, 2018/C 189/01-13, Brussels, 22 May 2018. Last accessed October 2020 at: https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32018H0604(01)&from=EN

Data Flair Team (2019). 'Exigency of big data in education sector with case studies', 16 December 2019.

Department for Education (2018). 'Labour market information (LMI) for all: Stakeholder engagement and usage, data and technical developments', research report, London: Department for Education.

EEEP (European Education and Training Expert Panel) (2019a). Issue paper on 'Demographic challenge'.

EEEP (European Education and Training Expert Panel) (2019b). Issue paper on 'Digitalisation of society'.

EEEP (European Education and Training Expert Panel) (2019c). Issue paper on 'Environmental challenges'.

EEEP (European Education and Training Expert Panel) (2019d). Issue paper on 'Inclusion and citizenship'.

EEEP (European Education and Training Expert Panel) (2019e). Issue paper on 'Investment, reforms and governance'.

EEEP (European Education and Training Expert Panel) (2019f). Issue paper on 'Technological change and the future of work'.

ELGPN (European Lifelong Guidance Policy Network) (2012). 'Lifelong guidance policy development: A European resource kit', Saarijärven Offset Oy Saarijärvi, Finland.

ELGPN (European Lifelong Guidance Policy Network) (2014). 'Lifelong guidance policy development: glossary', Jyvaskyla, Kirjapaino Kari, Finland.

ELGPN (European Lifelong Guidance Policy Network) (2015a). 'Designing and implementing policies related to career management skills (CMS)', Kariteam Jyväskylä, Finland.

ELGPN (European Lifelong Guidance Policy Network) (2015b). 'Guidelines for policies and systems development for lifelong guidance: A reference framework for the EU and for the Commission', Kariteam Jyväskylä, Finland.

ETF (European Training Foundation) (2011). 'Career guidance in ETF partner countries: A missing link in the transition from education to the labour market', *INFORM*, Issue 06, October 2011.

ETF (European Training Foundation) (2016a). 'Labour market and training observatories: Providing information and data on labour market trends,' skills anticipation background note, August 2016. Last accessed October 2020 at: www.etf.europa.eu/sites/default/files/m/F8E652156F4C0E9FC12580E60049A5CE_Observatories.pdf

ETF (European Training Foundation) (2016b). 'Sector-based skills anticipation: Making sense of emerging labour market trends', skills anticipation background note, August 2016. Last accessed October 2020 at:
www.etf.europa.eu/sites/default/files/m/309859F8DE3CCD8FC12580E600497EEF_Sector%20based%20skills%20anticipation.pdf

ETF (European Training Foundation) (2017a). 'Employment service providers: Developing better labour markets that work', skills anticipation background note, February 2017. Last accessed October 2020 at:
www.etf.europa.eu/sites/default/files/m/17C2F3D788165CE0C12580E6004A348F_Employment%20service%20providers.pdf

ETF (European Training Foundation) (2017b). 'Labour market information systems: Collecting information and data on labour market trends', skills anticipation background note, February 2017. Last accessed October 2020 at:
www.etf.europa.eu/sites/default/files/m/466C7A2340B3DAE0C12580E60049FC1D_LMIS.pdf

ETF (European Training Foundation) (2017c). 'Skills forecasts: Matching the right workers and skills with the right jobs', skills anticipation background note, February 2017. Last accessed October 2020 at:
www.etf.europa.eu/sites/default/files/m/B7B61B2538FFF764C12580E600495140_Skills%20forecasts.pdf

ETF (European Training Foundation) (2018b). 'The Future of work and skills in ETF partner countries', preliminary survey results. Last accessed October 2020 at:
www.skills4future.eu/assets/resources/Future-of-work-and-skills-survey-2018.pdf

ETF (European Training Foundation) (2019a). 'Big data for labour market intelligence: An introductory guide'. Last accessed October 2020 at: www.etf.europa.eu/sites/default/files/2019-06/Big%20data%20for%20LMI.pdf

ETF (European Training Foundation) (2019b). ETF Conference 'Skills & Qualifications: Benefits for People: How learning and guidance professionals make it happen'. Last accessed October 2020 at:
www.etf.europa.eu/en/news-and-events/events/2019-etf-conference-skills-and-qualifications-benefits-people

ETF (European Training Foundation) (2019c). 'Skills for the future: Managing transitions. Conference conclusions'. Last accessed October 2020 at: www.etf.europa.eu/sites/default/files/2019-04/skills%20for%20the%20future%20conclusions_0.pdf

ETF (European Training Foundation) (2019d). 'Skills mismatch measurement in ETF partner countries'. Last accessed October 2020 at: www.etf.europa.eu/sites/default/files/2019-05/Skills%20mismatch%20measurement_ETF%20partner%20countries.pdf

ETF (European Training Foundation) (2019e). 'The future of work and skills in ETF partner countries', ETF issues paper. Last accessed October 2020 at: www.etf.europa.eu/sites/default/files/2019-07/Future%20of%20work%20and%20skills_Issues%20paper.pdf

EU-OSHA, Cedefop, Eurofound and EIGE (2017). 'Towards age-friendly work in Europe: A life-course perspective on work and ageing', joint report from EU agencies, Luxembourg: Publications Office of the European Union.

Eurofound (2019). 'Platform work: Maximising the potential while safeguarding standards?', policy brief, Luxembourg: Publications Office of the European Union. Last accessed October 2020 at: www.eurofound.europa.eu/sites/default/files/ef_publication/field_ef_document/ef19045en.pdf

Euroguidance Newsletter (April 2010). Last accessed October 2020 at: http://cimo.multiedition.fi/eNewsletter4/euroguidance_eng/2010/april/front.php

Euroguidance (2019). 'Lifelong Guidance in Estonia 2019', Archimedes Foundation.

European Commission (2014). 'European reference competence profile for PES and EURES counsellors', Brussels.

European Commission (2017a). 'Proposal for a structured cooperation between public employment services (PES) and the education sector for better school-to-work transitions,' position paper, European Network of Public Employment Services, Luxembourg: Publications Office of the European Union.

European Commission (2017b). 'Practitioner's toolkit for PES building career guidance and lifelong learning', Luxembourg: Publications Office of the European Union.

European Commission (2017c). 'Attitudes towards the impact of digitisation and automation on daily life,' Special Eurobarometer 460, March 2017.

European Commission (2018a). 'One-stop-shop guidance centres for young people (Ohjaamo) Finland', April 2018.

European Commission (2018b), 'Opinion on the future of vocational education and training post-2020,' Advisory Committee on Vocational Training, Brussels, 3 December 2018.

European Commission (2019). 'The European Green Deal', Communication from the Commission to the European Parliament, the European Council, the Council, the European Economic and Social Committee and the Committee of the Regions, Brussels, 11.12.2019 COM(2019) 640 final. Last accessed October 2020 at: https://ec.europa.eu/info/sites/info/files/european-green-deal-communication_en.pdf

European Commission (2020). 'The just transition mechanism: Making sure no one is left behind', European Union, January 2020.

European Commission (n.d.). 'Mobile Mentor Application ("Mentor App")'.

European Commission Joint Research Centre (2019). 'The changing nature of work and skills in the digital age', Luxembourg: Publications Office of the European Union. Last accessed October 2020 at: https://ec.europa.eu/jrc/en/publication/eur-scientific-and-technical-research-reports/changing-nature-work-and-skills-digital-age

European Guidance Week (2017). EU Presidency Conference on 'Lifelong guidance policy and practice', background paper, 27–28 September 2017.

European Parliament (2017). 'Skills development and employment: The role of career management skills', policy briefing. Last accessed 27 December 2019 at:
www.europarl.europa.eu/RegData/etudes/BRIE/2017/607359/IPOL_BRI(2017)607359_EN.pdf

EY, 'Megatrends: Making sense of a world in motion', 2015. Last accessed October 2020 at:
www.ey.com/Publication/vwLUAssets/ey-megatrends-report-2015/$FILE/ey-megatrends-report-2015.pdf

Fondation Robert Schuman (2020). 'Data: the fuel of the third industrial revolution', policy paper, *European Issues*, No 548, 25 February 2020.

Gardiner, D. and Goedhuys, M. (2020). 'Youth aspirations and the future of work: A review of the literature and evidence', ILO Working Paper 8, Geneva: ILO.

Gouëdard, P., Pont, B. and Viennet, R. (2020). 'Education responses to Covid-19: Implementing a way forward', OECD Education Working Papers, No 224, OECD Publishing, Paris.

Guadagno, L. (2020). 'Migrants and the Covid-19 pandemic: An initial analysis', IOM UN Migration.

Gonzalez Vazquez, I. et al. (2019). 'The changing nature of work and skills in the digital age', Luxembourg: Publications Office of the European Union.

Haagh, L. and Rohregger, B. (2019). 'Universal basic income policies and their potential for addressing health inequities: Transformative approaches to a healthy, prosperous life for all', World Health Organisation.

Hanover Research (2018). 'Longitudinal ACP Survey Analysis: 2015–2016 to 2017–2018', April 2018.

Hansen, E. (2006). *Career guidance: A resource handbook for low- and middle-income countries*, Geneva: International Labour Office.

Harasty, C. and Ostermeier, M. (2020). 'Population ageing: Alternative measures of dependency and implications for the future of work', ILO Working paper 5, June 2020, Geneva, ILO.

Hendahewa, C. et al. (2006). 'Artificial intelligence approach to effective career guidance', Sri Lanka Association for Artificial Intelligence (SLAAI), Proceedings of the third Annual Sessions, 15 September 2006, Colombo.

Herr, E.L. (1997). 'Perspectives on career guidance and counselling in the 21st century', *Educational and Vocational Guidance Bulletin*, No 60/1997.

Hirschi, A. (2018). 'The Fourth Industrial Revolution: Issues and implications for career research and practice', *The Career Development Quarterly*, Vol. 66, September 2018.

Hooley, T. (2014). 'The evidence base on lifelong guidance: A guide to key findings for effective policy and practice', ELGPN Tools No 3, Saarijärvi, Finland: The European Lifelong Guidance Policy Network.

Hooley, T. and Dodd, V. (2015). The economic benefits of career guidance. Careers England.

Hooley, T. and Sultana, R. (2016). 'Career guidance for social justice', editorial in *Journal of the National Institute for Career Education and Counselling*, Issue 36, April 2016.

Hooley, T., Sultana, R. and Thomsen, R. (2018). *Career guidance for social justice: Contesting neoliberalism*, London: Routledge.

Hooley, T. et al. (2020). 'Why a social justice informed approach to career guidance matters in the time of Coronavirus'. Last accessed October 2020 at: https://careerguidancesocialjustice.wordpress.com/2020/03/23/why-a-social-justice-informed-approach-to-career-guidance-matters-in-the-time-of-coronavirus/

Howieson, C. and Semple, S. (2013). 'The impact of career websites: wWhat's the evidence?', *British Journal of Guidance & Counselling*, 41:3, pp. 287–301. DOI:10.1080/03069885.2013.773960

Hughes, D., Mann, A., Barnes, S.A., Baldauf, B. and McKeown, R. (2016). 'Careers education: International literature review', Institute for Employment Research/Education and Employers Research.

Hughes, D., Akkök, F., Arulmani, G., Zelloth, H. (2019). 'Migration: Theory, research and practice in guidance and counselling', *British Journal of Guidance & Counselling*, DOI:10.1080/03069885.2018.1564898

IAEVG (2018). 'IAEVG Communiqué on precarious employment', International IAEVG Conference 'A need for change: Guidance for building the future', Sweden, 2018.

IAG (2020b). Report on survey 'Covid-19 pandemic and career guidance systems and policy development'.

ICCDPP (International Centre for Career Development and Public Policy) (2017). 'Career development at the crossroads. Communiqué 2017', 8th International Symposium on Career Development and Public Policies, 18–21 June 2017, Seoul, Korea. http://iccdpp2017.org/download/Communique_2017_ICCDPP.pdf

ICCDPP (International Centre for Career Development and Public Policy) (2019a). 'Communiqué 2019. Leading career development services into an uncertain future: Ensuring access, integration and innovation', ICCDPP International Symposium Norway 2019.

ICCDPP (International Centre for Career Development and Public Policy) (2019b). 'Leading career development services into an uncertain future: Ensuring access, integration and innovation. Country paper: Croatia', ICCDPP International Symposium Norway, 2019.

ICCDPP (International Centre for Career Development and Public Policy) (2019c). 'Leading career development services into an uncertain future: Ensuring access, integration and innovation. Country paper: Singapore', ICCDPP International Symposium Norway, 2019.

ICCDPP (International Centre for Career Development and Public Policy) (2019d). 'Leading career development services into an uncertain future: Ensuring access, integration and innovation. Country paper: South Korea', ICCDPP International Symposium Norway, 2019.

ILO (International Labour Organisation) (2019a). 'Digital labour platforms and the future of work: Towards decent work in the online world'.

ILO (International Labour Organisation) (2019b). 'Skills for a greener future: A global view based on 32 country studies', Geneva: ILO. Last accessed October 2020 at: www.ilo.org/wcmsp5/groups/public/---ed_emp/documents/publication/wcms_732214.pdf

ILO (International Labour Organisation) (2020a). 'Launch of the 1st Skills Challenge Innovation Call', January 2020. Last accessed October 2020 at: www.ilo.org/skills/events/WCMS_734544/lang--en/index.htm

ILO (International Labour Organisation) (2020b). 'The ILO's policy framework to respond to the Covid-19 crisis. ILO policy brief on Covid-19', updated on 7 March 2020. Last accessed October 2020 at: www.ilo.org/global/topics/coronavirus/impacts-and-responses/WCMS_739047/lang--en/index.htm

Indecon (2019). Review of career guidance. Final Report, 2 April 2019. www.education.ie/en/Publications/Education-Reports/indecon-review-of-career-guidance.pdf

Interagency Working Group (IAG) of UNESCO, European Commission, OECD, International Labour Organisation, European Training Foundation and the European Centre for the Development of Vocational Training (Cedefop) (2019). 'Investing in career guidance', Paris, 2019. https://unesdoc.unesco.org/ark:/48223/pf0000371414

International Bank for Reconstruction and Development/World Bank (2015). 'Skills and jobs: Lessons learned and options for collaboration'.

International Organisation for Migration (2019). 'World migration report 2020', Switzerland: IOM, The UN Migration Agency. Last accessed October 2020 at: https://publications.iom.int/system/files/pdf/wmr_2020.pdf

IPCC (Intergovernmental Panel on Climate Change) (2018). 'Global Warming of 1.5°C.', edited by V. Masson-Delmotte, P. Zhai, H.O. Pörtner, D. Roberts, J. Skea, P.R. Shukla, A. Pirani et al. Geneva: IPCC.

Jarvis, P.S. and Keeley, E.S. (2003). From vocational decision making to career building: Blueprint, real games, and school counseling. Professional School Counseling, 6, 244–250.

Jessoula, M., Natili, M. and Raitano, M. (2019). 'Italy: Implementing the new minimum income scheme', ESPN Flash Report 2019/35, European Social Policy Network, Brussels: European Commission.

Kern, P., Rizoiu, M.A. and McCarthy, P. (2019). 'Robot career guidance: AI may soon be able to analyse your tweets to match you to a job', *Newsroom*, UNWS Sydney, 18 December 2019.

Kettunen, J., Vuorinen, R. and Sampson Jr, J.P. (2013). Career practitioners' conceptions of social media in career services. *British Journal of Guidance & Counselling*, 41, pp. 302–317. doi:10.1080/03069885.2013.781572

Kettunen, J., Sampson Jr, J.P. and Vuorinen, R. (2015). 'Career practitioners' conceptions of competency for social media in career services', *British Journal of Guidance & Counselling*, Vol. 43, No 1, 2015, pp. 43–56.

Kettunen, J., Vuorinen, R. and Ruusuvirta, O. (2016). 'European Lifelong Guidance Policy Network representatives' conceptions of the role of information and communication technologies related to

national guidance policies', *International Journal for Educational and Vocational Guidance*, 16, pp. 327–342. doi:10.1007/s10775-015-9313-7

Kettunen, J. (2017). 'Career practitioners' conceptions of social media and competency for social media in career services', PhD Dissertation, University of Jyväskylä, Finnish Institute for Educational Research.

Kettunen, J. and Sampson Jr, J.P., (2019). Challenges in implementing ICT in career services: Perspectives from career development experts. *International Journal for Educational and Vocational Guidance*, 19, 1–18. doi:10.1007/s10775-018-9365-6 Open access

Kettunen, J., Lindberg, M., Nygaard, E. and Kardal, J. (2020). Enhancing career practitioners understanding and use of ICT in guidance and counselling. In E. Haug, T. Hooley, J. Kettunen and R. Thomsen (Eds), *Career and career guidance in the Nordic countries*. Rotterdam. Netherland: Brill | Sense, pp. 163–175. doi:10.1163/9789004428096_011

Kose, M.A. and Ohnsorge, F. (eds) (2019). 'A decade after global recession: Lessons and challenges for emerging and developing economies', Washington DC: International Bank for Reconstruction and Development/ World Bank.

Mamede, R.P. (coord.), Pereira, M. and Simões, A. (2020). 'Growing green: Fostering a green entrepreneurial ecosystem for youth', Geneva: International Labour Organisation.

Mann, A. et al. (2020). 'Dream jobs? Teenagers' career aspirations and the future of work', OECD.

Mehraj, T. and Mehraj Baba, A. (2019). 'Scrutinising artificial intelligence-based career guidance and counselling systems: An appraisal', *International Journal of Interdisciplinary Research and Innovations*, Vol. 7, Issue 1, January–March 2019.

Messenger, J. (eds) (2019). 'Telework in the 21st century: An evolutionary perspective', The ILO Future of Work series, Geneva, ILO.

Miller, M.J. and Brown, S.D. (2005). 'Counseling for career choice: Implications for improving interventions and for working with diverse populations,' in Brown, S.D. and Lent, R.W. (eds), *Career development and counseling: Putting theory and research to work*, New York: Wiley.

Ministry of Education Romania (2017). 'Annex No 2 to the Ministerial Order No 3393/28.02.2017. Curriculum for counselling and personal development. Grades 5–8', translated into English by Euroguidance Romania. http://euroguidance.ise.ro/wp-content/uploads/2019/01/cdp_cls_5-8.pdf

Ministry of National Education Turkey (2018). 'Turkey's Education Vision 2023'. Last accessed October 2020 at: http://2023vizyonu.meb.gov.tr/doc/2023_VIZYON_ENG.pdf

MISK Global Forum (2019). 'Readiness for the future of work'. Last accessed October 2020 at: https://miskglobalforum.com/wp-content/uploads/2018/12/Readiness-for-the-Future-of-Work-2019.pdf

Mokeki, L. (2019). Presentations 'The National Career Advice Portal' and 'The Challenges of Meeting Everyone's Needs' at the ICCDPP International Symposium in Norway, June 2019. Last accessed October 2020 at: www.kompetansenorge.no/contentassets/18ec32b9efc049a2ae1c1dbcb2ae77f7/theme-2---catalyst-speech---letshego-mokeki.pdf

Mokyr, J., Vickers, C. and Ziebarth, N.L. (2015). 'The history of technological anxiety and the future of economic growth: Is this time different?', *Journal of Economic Perspectives*, 29, pp. 31–50.

Musset, P. and Mýtna Kureková, L. (2018). 'Working it out: Career guidance and employers' engagement', OECD Education Working Paper No 175.

Nair, C. (2020). 'Why resilience – not technology – is the answer to our biggest challenges', World Economic Forum (WEF), September 2020.

Neary, S. and Dodd, V. (2016). 'Understanding career management skills: Findings from the first phase of the CMS LEADER project', Derby: University of Derby. Last accessed 27 December 2019 at: https://derby.openrepository.com/bitstream/handle/10545/595866/Understanding+career+managemen t+skills+Final+Feb+20161.pdf;jsessionid=188F49E442671813C247C145B905BEDE?sequence=1

Nie, M. et al. (2018). 'Advanced forecasting of career choices for college students based on campus big data', *Frontiers of Computer Science*, Vol. 12, pp. 494–503. Last accessed October 2020 at: www.springer.com/journal/11704

OECD (2003). Career guidance: New ways forward, *Education Policy Analysis – 2003 Edition*. Last accessed October 2020 at: www.oecd.org/education/school/educationpolicyanalysis-2003edition.htm

OECD (2004). Career guidance and public policy: Bridging the gap, Paris: OECD.

OECD and European Commission (2004). Career guidance: A handbook for policymakers, Paris: OECD/European Commission.

OECD (2017). Basic income as a policy option: Can it add up? Policy brief on the future of work. Paris: OECD. Last accessed October 2020 at: www.oecd.org/social/Basic-Income-Policy-Option-2017.pdf

OECD (2018). Profiling tools for early identification of jobseekers who need extra support, Policy brief on activation policies, OECD Publishing, Paris.

OECD (2019a). Measuring distance to the SDG targets 2019: An assessment of where OECD countries stand, OECD Publishing, Paris. https://doi.org/10.1787/a8caf3fa-en

OECD (2019b). Trends shaping education 2019, Paris: OECD Publishing.

OECD (2019c). The future of work. OECD Employment Outlook 2019. Highlights.

OECD (2020a). Education at a glance: OECD indicators, Paris: OECD publishing.

OECD (2020b). Education responses to Covid-19: An implementation strategy toolkit. OECD Education policy perspectives. No 5.

OECD (2020c). Supporting people and companies to deal with the Covid-19 virus: Options for an immediate employment and social policy response. Updated: 20 March 2020.

OECD (2020d). VET in a time of crisis: Building foundations for resilient vocational education and training systems, Policy brief, Paris: OECD.

Official Journal of the European Union (2018b). Decision (EU) 2018/646 of the European Parliament and of the Council of 18 April 2018 on a common framework for the provision of better services for skills and qualifications (Europass) and repealing Decision No 2241/2004/EC, L 112/42, 2 May 2018. Last accessed 29 December 2019 at: https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32018D0646&from=en

Oomen, A. (2019). 'Involving parents in careers work in secondary education: An educational innovation'. Last accessed October 2020 at: www.researchgate.net/publication/332013812_Involving_parents_in_careers_work_in_secondary_education_an_educational_innovation

Perdrix, S., Stauffer, S., Masdonati, J., Massoudi, K. and Rossier, J. (2012). 'Effectiveness of career counseling: A one-year follow-up', *Journal of Vocational Behavior*, 80(2), pp. 565–578.

Plant P. (2014). 'Green guidance', in Arulmani, G., Bakshi, A., Leong, F. and Watts A. (eds), *Handbook of Career Development,* International and Cultural Psychology. Springer, New York, NY.

Progressive Partnership (2018). 'Report to Skills Development and Scottish Government: Parents and carers. Research findings – Final report'. Last accessed October 2020 at: https://beta.gov.scot/publications/parents-and-carers-research-final-report-january-2018/

Sala, A., Punie, Y., Garkov, V. and Cabrera Giraldez, M. (2020). LifeComp: The European framework for personal, social and learning to learn key competence. Luxembourg: Publications Office of the European Union. Last accessed October 2020 at: https://ec.europa.eu/jrc/en/publication/eur-scientific-and-technical-research-reports/lifecomp-european-framework-personal-social-and-learning-learn-key-competence

Sampson Jr., J.P. (2008). Designing and implementing career programs: A handbook for effective practice. Broken Arrow, OK: National Career Development Association.

Sampson Jr, J.P. and Makela, J.P. (2014). Ethical issues associated with information and communication technology in counseling and guidance. *International Journal for Educational and Vocational Guidance*, 1, pp. 135–148. doi:10.1007/s10775-013-9258-7

Sampson Jr, J.P., Vuorinen, R. and Kettunen, J. (2018). 'Social media and the evolving role of the counsellor: Opportunities and challenges', IAEVG Conference Keynote Presentation, 4 October 2018, Gothenburg, Sweden.

Saraswathi, S., Reddy, M.H.K., Kumar, S.U., Suraj, M. and Shafiet, S.K. (2014). 'Design of an online expert system for career guidance', *International Journal of Research in Engineering and Technology*, Vol. 3, Special Issue 7, May 2014.

Schleicher, A. (2020). 'The impact of Covid-19 on education: Insights from Education at a Glance', OECD, 2020.

Schreiber, M. and Reumiller, D. (2020). 'Vocational, college and career counselling in Switzerland: Blended information and e-counselling in a digitised world', in *Conference Proceedings from the 2019 Conference of the International Association for Educational and Vocational Guidance* (IAEVG), 11–13 September 2019, Bratislava, Slovakia.

Schwab, K. (2016). 'The fourth industrial revolution', World Economic Forum, Geneva, Switzerland.

Skills Scotland (2012). 'Career Management Skills Framework in Scotland'. Last accessed October 2020 at:
www.skillsdevelopmentscotland.co.uk/media/34749/career_management_skills_framework_scotland.pdf

Solberg, V.S. (2017). 'Career and workforce development and its role in maintaining a competitive global economy', in Solberg, V.S. and Ali, R.S. (eds), *The handbook of career and workforce development: Research, practice and policy*, Routledge Taylor and Francis Group, New York.

Solberg, V., Martin, J. and Larson, M. (2018). *Promoting quality individualized learning plans throughout the lifespan: A revised and updated ILP how to guide 2.0,* Washington, DC: Institute for Educational Leadership.

Solberg, V.S. (2019). *Making school relevant with individualized learning plan. Helping students create their own career and life goal*, Cambridge, MA: Harvard Education Press.

Stevenson, H., Hagger-Vaughan, L., Milner, A. and Winchip, E. (2017). 'Education and training policy in the European semester: Public investement, public policy, social dialogue and privatisation patterns across Europe', Brussels: European Trade Union Committee for Education.

Sultana, R.G. (2012). 'Learning career management skills in Europe: A critical review', *Journal of Education and Work*, Vol. 25, No 2, April 2012, pp. 225–248.

The Guardian (2016). 'Why Facebook and Microsoft say chatbots are the talk of the town', *The Guardian*, 18 September 2016. www.theguardian.com/technology/2016/sep/18/chatbots-talk-town-interact-humans-technology-silicon-valley

Thirunarayana, J. (2018). 'Counselling guidance using Big Data analytics', *International Journal of Scientific Research in Computer Science, Engineering and Information Technology*, Vol. 3, Issue .

Thomsen, R. (2012). *Career guidance in communities: A model for reflexive practice*, Derby: International Centre for Guidance Studies, University of Derby.

Thomsen, R., Skovhus, R. and Buhl, R. (2017). 'Collection of cases: Career guidance in communities', translation prepared by Euroguidance Denmark.

Țibu, S. and Andrei, A. (2016). 'Counselling and guidance curricula in the context of the educational reform in Romania', in *Proceedings of the Conference of the International Association for Educational and Vocational Guidance* (IAEVG) 'Promoting equity through guidance: Reflection, action, impact', Madrid, Spain.

Țibu, S. and Andrei, A. (2017). 'Romanian experience in designing counselling curriculum framework for middle schools', in *Proceedings of ICERI International Conference*, Seville, 2017.

UNESCO, European Commission, OECD, International Labour Organisation, European Training Foundation and the European Centre for the Development of Vocational Training (Cedefop) (2019). 'Investing in career guidance'. https://unesdoc.unesco.org/ark:/48223/pf0000371414

UNESCO (2020). 'Covid-19 educational disruption and response', Paris.

Voss, E., de Micheli, B., Schöneberg, K. and Rosini, S. (2017). 'Final study report. Investment in education and training. Trends and challenges, the role of EU policies and financing from the perspective of European and national social partners', Hamburg and Rome.

Vuori, J., Toppinen-Tanner, S. and Mutanen, P. (2012). 'Effects of resource building group intervention on career management and mental health in work organizations: Randomized controlled field trial', *Journal of Applied Psychology*, 97(2), pp. 273–286.

Vuorinen, R. (2017). 'Developing national career and workforce development systems and policies with structured international cooperation', in Solberg, V.S. and Ali, R.S. (eds), *The handbook of career and workforce development. Research, practice and policy*, Routledge Taylor and Francis Group, New York.

Watts, A.G. (1986). The role of the computer in careers guidance. *International Journal for the Advancement of Counselling*, 9, pp. 145–158. doi:10.1007/BF00129409

Watts, A.G. (1996). Computers in guidance. In A.G. Watts, B. Law, J. Killeen, J.M. Kidd and R. Hawthorn (Eds), *Rethinking careers education and guidance: Theory, policy and practice*. London, England: Routledge, pp. 269–283.

Watts, A.G. (2001). 'The role of information and communication technologies in an integrated career information and guidance system', Paris: OECD, November 2001.

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, pp. 139–155. doi:10.1023/A:1020669832743

Watts, A.G. and Sultana, R.G. (2004). 'Career guidance policies in 37 countries: Contrasts and common themes', *International Journal for Educational and Vocational Guidance*, 4, pp. 105–122.

Watts, A.G. (2010). Policy issues relating to the use of ICT in lifelong guidance. *Journal of the National Institute for Career Education and Counselling*, 25, pp. 33–39.

Whiston, S.C. (2001). 'Selecting career outcome assessments: An organizational scheme', *Journal of Career Assessment*, Vol. 9, No 3, Summer 2001, pp. 215–228.

Whiston, S.C. and Buck, I.M. (2008). 'Evaluation of career guidance programs', in Athanasou, J.A. and Van Esbroeck, R. (eds) (2008), *International Handbook of Career Guidance*, Springer Science+Bussiness Media.

Whiston, S.C. and Blustein, D.L. (2013). 'The impact of career interventions: Preparing our citizens for the 21st century jobs', research report, National Career Development Association (www.ncda.org) and the Society for Vocational Psychology.

Whiston, S.C., Rossier, J. and Hernandez Baron, P.M. (2017). 'Evidence-based practice in career and workforce development interventions', in Solberg, V.S. and Ali, R.S. (eds), *The handbook of career and workforce development: Research, practice and policy*, Routledge Taylor and Francis Group, New York.

Wisconsin Department of Public Instruction (2016). 'ACP in Wisconsin. implementing academic and career planning'. Last accessed October 2020 at:
https://dpi.wi.gov/sites/default/files/imce/acp/DPI%20Guide%202016%20FINAL%20web.pdf

Wisconsin Evaluation Collaborative (2019). 'Academic and career planning 2018–19. Evaluation Report. Executive Summary'. Last accessed October 2020 at:
https://dpi.wi.gov/sites/default/files/imce/acp/pdf/2019_10_11_ACP_Exec_Sum_1819_Final_Stand_Alone.pdf

World Bank (2015). 'Skills and jobs. Lessons learned and options for collaboration', Washington: International Bank for Reconstruction and Development/World Bank.

World Bank (2019). 'The changing nature of work', *World Development Report*, Washington: International Bank for Reconstruction and Development/World Bank.

World Bank (2020). 'The Covid-19 pandemic: Shocks to education and policy responses', policy note, World Bank, May 2020.

World Economic Forum (2016). 'New vision for education: Fostering social and emotional learning through technology'.

World Economic Forum (2020a). 'Accelerating digital inclusion in the new normal. Playbook', WEF in collaboration with Boston Consulting Group, July 2020.

World Economic Forum (2020b). 'Diversity, Equity and Inclusion 4.0. A toolkit for leaders to accelerate social progress in the future of work', WEF, June 2020.

World Economic Forum (2020c). 'Jobs of tomorrow. Mapping opportunity in the new economy', WEF, January 2020.

World Economic Forum (2020d). 'Schools of the future. Defining new models of education for the fourth industrial revolution', WEF, January 2020.

Yoon, H.J., Hutchison, B., Maze, M., Pritchard, C. and Reiss, A. (Eds) (2018). *International practices of career services, credentials, and training*, Broken Arrow, OK: National Career Development Association.

Zelloth, H. (2009). 'In demand: Career guidance in EU neighbouring countries', Luxembourg: Office for Official Publications of the European Communities.

Zelloth, H. (2014a). 'Technical and vocational education and training (TVET) and career guidance: The interface', in Arulmani, G., Bakshi, A.J., Leong, F.T.L. and Watts, A.G. (eds) (2014), *Handbook of career development*, International Perspectives, Springer Science+Business Media, LLC.

Zelloth, H. (2014b). 'Career guidance and VET. An ETF position paper', Turin: European Training Foundation (ETF).

Zelloth, H. (2014c). Career guidance for vocational education and training (VET). October 2014.

Links

CareerMe app, Queensland, Australia: www.busyatwork.com.au/apprenticeships-traineeships/gateway-services/careerme/

CASEL (Collaborative for Academic, Social and Emotional Learning): https://casel.org/what-is-sel/

Cedefop CareersNet Meeting: www.cedefop.europa.eu/files/third_careersnet_future_of_guidance_2020_cedefop.pdf

Cedefop. Resources for guidance. Developing Information Technologies and Labour Market Information in Lifelong Guidance: www.cedefop.europa.eu/el/toolkits/resources-guidance/training-modules/objectives-target-groups

Cedefop Skills Panorama: www.cedefop.europa.eu/en/events-and-projects/projects/eu-skills-panorama

Digital Competence Framework: https://ec.europa.eu/jrc/en/digcomp/digital-competence-framework

Education Guide Denmark: www.ug.dk/evejledning

Education and employers, the UK: www.educationandemployers.org/about-the-charity/

Education and Research Institute for Continuous Education, Ukraine: https://ino.npu.edu.ua/

Euroguidance: www.euroguidance.eu/about-us

Euroguidance Austria: www.euroguidance.eu/guidance-system-in-austria

Euroguidance Denmark: www.euroguidance.eu/guidance-system-in-denmark

Euroguidance, the UK: www.euroguidance.eu/guidance-system-in-the-united-kingdom

Inspiring the future: www.inspiringthefuture.org/

International Organisation for Migration (IOM): www.iom.int/countries/kyrgyzstan

Junior Academy of Sciences, Ukraine: http://man.gov.ua

Mindler, India: www.mindler.com/iccc

My Career Future, Singapore: www.mycareersfuture.sg

My competence folder, Denmark: www.minkompetencemappe.dk

My future, Australia: https://myfuture.edu.au/

My Skills Future, Singapore: www.myskillsfuture.sg/content/portal/en/index.html

My world of work, the UK: www.myworldofwork.co.uk/parents

National Career Advice Portal, South Africa: http://ncap.careerhelp.org.za

ETF Working together Learning for life
European Training Foundation

One-Stop Guidance Centres, Finland: helping young people get into work and education: https://europa.eu/investeu/projects/guidance-services-young-people-all-under-one-roof_en

O'net online, the U.S.: www.onetonline.org

Presentation of Wolfgang Bliem, Austria at Cedefop CareersNet Meeting: www.cedefop.europa.eu/files/third_careersnet_austria_bliem.pdf

Presentation of Thea Van den Boom, the Netherlands at Cedefop CareersNet Meeting: www.cedefop.europa.eu/files/third_careersnet_the_netherlands_van_den_boom.pdf

Presentation Outreach, Guidance and Skills Identification of Hester Smulders, Centre of expertise in VET, the Netherlands at Cedefop: www.cedefop.europa.eu/files/hester_smulders_session_a_outreach_guidance_and_skills_assessment.pdf

Presentation of Raimo Vuorinen, Finland at Cedefop CareersNet Meeting: www.cedefop.europa.eu/files/third_careersnet_finland_vuorinen.pdf

SELFIE – Supporting schools for learning in the diigital age: https://ec.europa.eu/education/schools-go-digital

Skills development, Scotland: www.skillsdevelopmentscotland.co.uk/what-we-do/scotlands-careers-services/our-careers-service-in-schools/

Skills in online job vacancies, Cedefop: www.cedefop.europa.eu/en/events-and-projects/projects/skills-online-job-vacancies

Skills OVATE: www.cedefop.europa.eu/en/data-visualisations/skills-online-vacancies

Target jobs, the UK: https://targetjobs.co.uk/news/421008-survey-reveals-parental-influence-on-students-career-choices

Tool for documentation of and dialogue about personal competences: www.realkompetence-folkeoplysning.dk

U.S. Bureau of Labour Statistics. Occupational Outlook Handbook: www.bls.gov/ooh

ETF Working together Learning for life
European Training Foundation