



# Improving individual choice in career direction and learning

**The potential of new technology within a world-class careers system**

**Consultation paper**

November 2010



**Analysis > Understanding > Insight > Expert advice**

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## Section 1: Introduction – starting points

### Introduction

The crucial importance of enabling individuals to make informed choices about their career direction, learning and work options, is well understood and the benefits are increasingly well-evidenced.

The rapid development of the internet offers a tremendous opportunity to build on existing good practice and so support a world-class careers system in the UK. Considering how best to maximise the potential of such technologies in this context, whilst addressing issues including the digital divide, requires careful consideration.

The purpose of this paper is: to highlight what is already known in this area, what the Commission has found out through our work to date, to set out some key development issues, and to provide an opportunity for stakeholders to share experience and insights in response to the consultation questions. The questions are included at the end of each section and at Appendix 4. **If you wish to respond, please follow this link**

<http://www.surveymonkey.com/s/ciagtechconsultation>

**If you wish to respond without using the online survey please send this to Marcus Rowntree at [marcus.rowntree@ukces.org.uk](mailto:marcus.rowntree@ukces.org.uk). The deadline for responses is 17 January 2011.**

We have also set up an online forum which is available here <http://www.ciagtechconsultation.co.uk/>. Please email Marcus Rowntree for the password for the site.

### What is the aim of the UK Commission's 'Individual career choice in career direction and learning project'?

The overall aim of the project is to provide advice about how to improve the quality of - and access to careers guidance (which includes information, advice and guidance relating to careers) through the use of new technologies. Its key purpose is to explore how new technologies (including web 2.0 and web 3.0) can most usefully support the delivery of careers guidance and what may be needed for this to become a reality.

## How is it the project being carried out?

The project commenced in July 2010 and will conclude in March 2011. It is being conducted in three main phases, as follows:



| Commissioned Research   | Consultation  | Reporting  |
|---|---|--|
| <p>Five expert papers have been commissioned.</p> <p>Details of the papers are set out at Appendix 3</p> <p>Additional research and development work is being undertaken by the UK Commission Project team, supported by a Visiting Research Fellow</p> | <p>The project is being informed through extensive consultation. Work includes:</p> <ul style="list-style-type: none"><li>• Ongoing input into the work from expert stakeholders including the Careers Sector Strategic Forum</li><li>• Ongoing liaison with government and devolved administrations</li><li>• A national consultation workshop (November 2010)</li><li>• A workshop for developers (December 2010).</li><li>• Consultation with practitioners (November 2010 and January 2011)</li></ul> | <p>This consultation paper provides the opportunity for an interim review. The final report will be completed following further research and development work by end March 2011.</p> <p>The outcomes of the project will be widely disseminated, with the aim of informing both policy and practice.</p> |

The five expert papers funded by the UK Commission form a key part of the evidence base for this project and this consultation paper has drawn heavily on their findings. The expert papers explore a range of issues in relation to using new technologies to enhance careers guidance. The first two were published in June and are available on the Commission's website. Expert papers 3 and 4 are due to be available in early December. Expert paper 5 is due to be published in March 2011. Further details about the expert papers, including links to the first two papers, are available at Appendix 3.

## Policy context

The UK Commission made a number of recommendations in '*Towards Ambition 2020: skills, jobs, growth*' (October 2009) about how information, advice and guidance should be improved. These included the need to:

- Create a leading edge 21st century universal Information, Advice and Guidance (IAG) system for young people and adults, incorporating options for web, telephone or face-to-face support. Such a system should utilise high quality, up-to-date and forward looking labour market intelligence, set out clearly the labour market and skills requirements of sectors and occupations, providing both information and inspiration on job opportunities and career progression and incorporate opportunities for social networking and mentoring, and link directly to job and learning opportunities;
- Create better links between external career support and careers teachers in schools, and require schools to ensure that every young person in primary and secondary schools has full access to the on-line service, and every young person in secondary education has genuine opportunities to receive impartial and comprehensive careers advice as required;
- Continue to support and encourage the expansion of unionlearn and other trade union learning-related activities, in order to increase adult confidence and participation in learning, especially in relatively low skilled sectors.

The Commission is far from being the only organisation interested in improving this area. In the past year in particular, the need to substantially enhance careers guidance has been increasingly stressed with ministers, providers, key stakeholders and the research community highlighting its importance and potential benefits. Some notable developments include: John Hayes, Minister of State for Further Education, Skills and Lifelong Learning announcing the establishment of an all-age careers service in England; Lord Browne recommending in the report of the Independent Review of HE Funding and Student Finance that schools should be required to make individualised careers advice available to pupils; and Dame Ruth Silver emphasising the importance of excellent careers guidance to personal and economic well-being in the report of the Careers Profession Taskforce.

## Section 2: Developing career-related labour market information (LMI) and career support provision

### What do we know about career-related LMI?

- The importance of enabling individuals to have access to accurate information - both in respect to current opportunities, and future labour market trends - has long been recognised.
- Labour market information is multi-faceted; it concerns both demand and supply-side data and the wider operation of the labour market (See Appendix 1 for a fuller description of LMI).
- Without accurate information (and intelligence) about the operation of labour and learning market, individuals cannot make fully-informed career, learning and work choices.

### What do we know about career support?

- Many individuals struggle with the idea of 'career' – with this term too often only being associated with 'professions' rather than 'jobs and work'. (See Appendix One for a fuller description of career).
- The process of career choice is complex and highly individualised. It is too often characterised as simply a 'matching process' - placing 'square pegs in square holes'.
- Current thinking about career choices stresses the need for individuals to have sufficient skills and understanding to 'weigh-up' options and opportunities on an ongoing basis - including those that they come upon 'by chance'.
- Individuals frequently seek information and advice about learning and work from a variety of formal and informal sources (including family, friends/colleagues, employers, learning providers).
- Choices made can be subject to a range of influences and environmental factors – both positive and negative.
- A range of research/evaluation studies have considered the nature of effective career support and its characteristics are increasingly well-recognised.
- The key benefits of effective career support include not just individuals making better informed choices, but also increasing their confidence, willingness and ability to act.

### Key Message

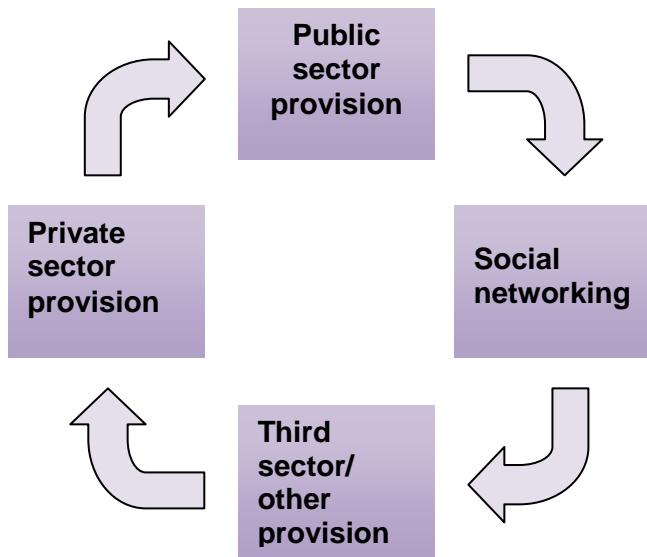
The career support market in the UK is complex and includes services such as:



## What do we know about the career support market?

- There is a wide range of different sorts of provision. This can be described as a 'career support market', in so far as individuals can choose which web, and/or, other services they want to access.
- Public-sector provision plays a significant role in this market. From April 2012, it is planned that all countries in the UK will have all-age careers services, which will have an integrated service offer, including face-to-face and online services.
- A framework to conceptualise the career support market and the role of new technologies within it, developed by iCeGS for the project, is set out at Appendix Two.
- Web 2.0 and 3.0 technologies offer new ways for individuals to communicate and learn. This includes communication on a one- to-one basis, one person providing support that can be accessed by many people and groups of people communicating.
- Many 'online markets' (e.g. financial services, travel) have sites where individuals access detailed data to enable them to find out about, and compare, available services. Some of these are based mainly on user-content (such as TripAdvisor.com), others (such as the Consumer Association 'Which' site), base recommendations on expert reviews and consumer feedback.
- It has been noted that a comparable facility does not currently exist in the career support market.

## How do these best fit together?



'Most young people today, and an increasing proportion of adults – take technology – such as e-bay, Amazon, Facebook, MySpace, Twitter, TripAdvisor, Horsesmouth and other social networks and portals - for granted in shaping their views and decisions on a wide variety of issues. Yet there is an astonishing dearth of high-quality and reliable on-line support for career and learning choice in the UK...'

UKCES *Towards Ambition 2020: skills, jobs and growth*, October 2009

## What are the main issues?

### Career-related LMI

- The world of work is changing rapidly. New technologies, and related developments, have led to the creation of new jobs and industries and have transformed the way that most established roles are performed.
- Many job roles do not match the stereotypical views that many people have of them. This raises questions as to: a) what 'constructs' individuals use to think about work, and b) how best to ensure that individuals are kept up-to-date with the key tasks being undertaken within job roles and functions, the challenges in them, and the sectors in which they are now found.
- LMI is collected by a wide range of public and private sector bodies. In regard to the public sector, substantive data are collected through a range of surveys, and other research, regarding the current operation of, and future trends in, the labour market. However, these have frequently been collected for economic/workforce development purposes and the use of these data by individuals has not been a prime focus in the past. Furthermore, data collected has limitations, including the extent to which it can reliably provide information at a local enough level to meet individual requirements.
- Facts do not always 'speak for themselves'. If LMI is to be helpful to individuals in informing choice it has to be:
  - *Accurate*: Based on robust evidence.
  - *Accessible*: Available in appropriate formats and be understandable (including necessary levels of interpretation).
  - *Relevant*: Able to answer questions individuals have.
  - *Transparent*: Clear about sources used.
- To ensure consistency in respect to career-related LMI, some countries - for example, the United States<sup>1</sup> – have established a data portal, so that an agreed level of career-related data is available across the full range of occupations.
- As part of its wider agenda, the Coalition Government is committed to increasing individual, and interested parties' access, to a full range of government data. In a number of fields (e.g. health and education), entrepreneurs and developers are already using - and adding value to - public data and creating new information/advice services. Such an approach can expand whatever is the agreed 'core' public offer (See Section Five).

### Career support market

- The expert papers highlight that public-sector careers services (and the online services they provide) typically: provide authoritative and impartial resources; link to other relevant sites/services (including a face-to-face offer, where appropriate); provide a rich source of occupational information designed to support career exploration. There are some moves to develop more dynamic and multi-media content which is a feature of the most innovative forms of provision.
- There is evidence that many individuals (both young people and adults) find the services that they obtain from publicly-funded sites to be valuable. These include

<sup>1</sup> See O\*Net Online: <http://online.onetcenter.org/>

'third parties', such as parents/carers and advisers without specialist training in careers guidance, who are making enquiries on behalf of individuals they are supporting.

- 'Informal' sources of information and advice can be very helpful to individuals making choices - and are often very influential. However, they may not always be reliable, impartial or accurate. In this sense, the 'unique selling point' of professional careers guidance services (be they public or privately-funded) is that they offer these key characteristics, which can be assured through quality assurance 'kitemarks'.

### What key questions does this raise?

1. What types of career-related LMI do different groups of individuals (for example, young people, graduates, people who are long term unemployed, older people) find most useful and at what level (national, regional, sectoral etc,?)
2. To what extent is useful career-related LMI currently available in different parts of the UK?
3. How can career-related LMI best be developed in the future?
4. Is it possible, and/or desirable, to seek to quality-assure commercially produced career-related LMI?
5. How can the career support market best be expanded and developed?
6. What distinctive- or indeed unique - role can publicly funded all-age career services play in the development of future provision?

## Section 3 - Supporting individuals

### What do we know about how individuals use the internet?

Individuals use the internet to access information and increasingly to communicate with friends and contacts and to widen their social and professional circles. They also use the internet to access information on which to base decisions including to consider the views of other users. According to figures from 2009 from the Office for National Statistics (ONS), 70 per cent of households had internet access and 76 per cent of adults had accessed the internet in the previous three months.

### What are the main issues?

#### Accessing and using data

- Some commentators have argued that individuals are frequently not trusted by central planners (and other 'paternalists') to make sensible choices about learning and work. They argue that the more publicly funded learning provision becomes like a real market, the more 'real choices' which individuals take responsibility for will be made. They argue too that individuals have a far better grasp of what the market 'values' than governments and their agencies. At its extreme these commentators might argue that any (albeit well-intentioned) intervention by the state is innately unhelpful and unproductive and that individuals will (and most do) 'work it out for themselves'.
- An essential element of trusting individuals more must be to ask them what services they want and need. Some recent work argues that 'co-production' needs to be taken into the mainstream, with public services demonstrating key characteristics such as: recognising people as assets; building on people's existing capabilities; promoting mutuality and reciprocity; developing peer support networks; breaking down barriers between professionals and recipients; facilitating rather than delivering.
- As the expert papers have highlighted, web 2.0 and 3.0 technologies, create a paradigm shift in respect to the way that individuals' needs can be met in the context of career support. This includes the fact that, given adequate skills, they can: be increasingly self-supporting; support others; generate 'real time' feedback (and collective wisdom) on the way the labour market is operating.
- However, there is a real danger that already disadvantaged individuals, with a particular need for localised and personalised career support services, will be excluded especially if service delivery becomes dependant on access to ICT.
- Digital exclusion is not simply about lack of access – including having the necessary digital infrastructure. Critically too, it is about individuals having necessary digital literacy and wider career learning skills with recent research for the Higher Education Funding Council (HEFCE)<sup>2</sup> highlighting, for example, that whilst prospective students may be able to retrieve information on HE, they may crucially not be able to evaluate, or appreciate, what is important for them to know.

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<sup>2</sup> Oakleigh Consulting (August 2010) *Understanding the information needs of users of public information about higher education* Manchester: Oakleigh Consulting Ltd

- Furthermore, research undertaken for the project with customers found that (in common with much other research in this area) that:
  - Individuals do not always search for information in a sophisticated way;
  - Many searches do not provide the answer to the question posed;
  - Many searches do not always help individuals find the most useful websites and/or may not generate information that is 'fit for purpose'.

### **Paying for services**

- Although there is an increasing trend for individuals to buy goods (and to a lesser extent services) via the internet, there seems to be continuing resistance to paying for information/advice accessed from sites. The reasons for this need further exploration with different customer groups.
- The expert papers have highlighted that there is limited evidence of individuals paying for career-related information/advice and payment for careers guidance services is mainly in niche markets (e.g. executive coaching and outplacement). If such a market is to grow it is likely to require stimulus and development.

### **What key questions does this raise?**

7. What skills do individuals need to decide how accurate, useful and/or objective is career-related information or advice which is delivered online?
8. How can individuals best be supported to develop the necessary skills to make sound judgements about career-related information or advice they access online?
9. Should greater efforts be made to increase and develop the 'individual pays' element of the career support market (See Appendix 2)? If so, how would you suggest this happens?
10. How can services be developed that meet the needs of those who have low levels of digital literacy as well as those who are comfortable with web-enabled environments?

## Section 4: Enabling Practitioners

### Introduction

The increasing use of technology by the key user groups of careers services in the UK is placing new demands on careers practitioners and the organisations they work for. There is a wide range of people providing services that could be described as 'careers guidance' in publicly-funded, commercial and third-sector organisations. For some, this is the main focus of their role and these people are usually described as 'careers practitioners'. For others, it is just one part of the job that they do and many, in both industry and education, have a role in providing career-related support to individuals as employees and/or learners.

This project looks broadly at what can be put in place to enable those practitioners- irrespective of sector - for whom careers guidance is the main purpose of their job to be more effective in delivering web-enabled support.

The expert papers have identified that there are three main purposes for the use of information and communication technologies (ICT) in careers guidance. These are: as a resource; for communication; and for material development. Whilst using ICT as a resource is highly developed in careers guidance, the other two purposes are under-developed and this, it has been suggested, has profound implications for service delivery.

A key challenge for the immediate future is to ensure that the careers guidance sector is sufficiently equipped to respond to these demands in the context of a wider professionalisation of the workforce.

### What do we know in regard to practitioners?

Careers practitioners require a wide range of skills to deliver career support services effectively. The skills and competencies needed for internet-based careers guidance can be regarded as two separate, but inter-related domains. One relates to ICT user skills and competencies and the other to more generic careers guidance skills and competencies.

'Half of Career Guidance organisations suffer from skills gaps (defined as skills which are lacking amongst existing staff); a quarter (25%) of organisations confirmed that this was having a negative impact....

The key gaps identified by this research are essentially based upon the disparities between the skills in the Career Guidance workforce and the provision of education and training available to it. For example, research indicates that many Career Guidance practitioners lack ICT skills and that many would welcome more widespread provision'

*'Skills Needs and Training Supply for Career Guidance – a Gap Analysis'* (2009)  
Report prepared for LLUK & UKCES by TBR



## What are the main issues?

- There is a need to professionalise practice in the provision of career support. The Careers Profession Task Force<sup>3</sup> was given a remit to recommend improvements to the recruitment, retention and development of careers professionals. It recently recommended that initial training and Continuing Professional Development (CPD) should include a focus on labour market information (LMI), ICT, and science, technology, engineering and mathematics (STEM), all of which it argued are crucial to all members of the careers profession in delivering high-quality careers guidance; and that, through CPD, there should be opportunities for further development of 'specialisms', leading towards the concept of an Advanced Careers Practitioner. This need has also been recognised in the wider 'welfare to work' workforce, many of whom undertake IAG activities.<sup>4</sup>
- Many practitioners are enthusiastic about the potential for using technology to deliver careers guidance but do not have the skills or confidence to be able to do this effectively. Supporting people to develop these skills and increase their confidence will be essential going forward.
- Some practitioners, whilst understanding that technology can play a valuable role in making information available, are unsure about what technology can contribute to the delivery of careers guidance. The ways in which technology can be used to facilitate communication need to be further developed to enhance the offer and enhance rather than undermine the key role of the careers professional.
- In addition to the right skills, practitioners also need access to the right ICT infrastructure. This is partly an issue about having appropriate software and hardware, but also about the restrictions some organisations place on the web-sites that their staff can access.
- Use of the internet also raises questions about safeguarding, particularly in relation to young people. New technologies can be used to enhance the careers guidance offer without putting vulnerable people at risk, but this needs to be done carefully.

## What key questions does this raise?

11. How well do you feel ICT-based technologies are currently used in the delivery of IAG/careers guidance?
12. What do you feel would be the benefits of increasing the use of ICT-based technologies (including web 2.0 and 3.0) in the delivery of IAG/careers guidance?
13. What do you feel are the key barriers to maximising the use of such technologies in the delivery of IAG/careers guidance services?
14. What are the implications of harnessing technology for both the role of careers guidance practitioners and the skills and competencies they need?

<sup>3</sup> Department for Education (2010) *Towards a Strong Career Profession: Independent Report for the Department of Education* London: DfE

<sup>4</sup> Crawford C, Parry F (October 2010) *Professionalising the welfare to work industry* London: Centre for Economic and Social Inclusion

## Section 5 - Incentivising developers

### What do we know about developers?

The role of developers will be important going forward to make sure that career-related LMI is provided in an accessible format as part of a wider career support offer.

The needs of service developers are not always taken account in developing public policy, but it is essential that we understand more about the motivations and barriers for developers in using LMI to develop applications, and other tools, for individuals and practitioners to use.

### What are the main issues?

- The expert papers have highlighted a range of innovative developments in respect to developing the career support market. Some of these are at a relatively early stage, but point the way as to how the market could develop.
- Publicly funded LMI needs to be in an appropriate format for developers to use. There are also issues around data protection and 'cleaning' the data before it is released into the public domain. Data.gov.uk is taking some of these issues forward.
- Developers/entrepreneurs need to develop business models that enable products to be not only launched, but (where appropriate) sustained and updated, quality-assured (by themselves and/or others), and developed to meet fast-changing needs and requirements.
- A key issue in developing this approach is to identify how developers and entrepreneurs can be motivated to create and distribute high quality IAG/careers guidance offers, including tools based on robust career-related LMI, tailored to be user-friendly and relevant at local level.

### What key questions does this raise?

15. What are the limitations for developers in using public information to develop products, applications and tools that can be used to provide career-related IAG/ careers guidance offers?
16. What are the incentives for developers to use public information to develop career-related IAG products, applications and tools?
17. What can be done to facilitate greater innovation?
18. To what extent is profitability an issue in respect to developing commercially-viable products and services? Are there areas of service delivery that are unlikely to be viable commercially and how could this be addressed?

## Section 6 - The role of policy makers

### What does government currently do?

The way that publicly-funded careers guidance is delivered varies across the UK with the situation being more complex in England where separate services have been funded for young people and for adults. Increasing the use of technology within careers guidance will change the career support market and the implications for what this means in respect to developing policy needs to be explored.

### What are the main development issues?

- The expert papers have highlighted that the internet is a difficult field in which to develop viable public policies and so policy-makers need to proceed with caution and to have realistic expectations as to what can be achieved.
- It is possible to draw on previous work relating to the development of a 'market in careers guidance' to suggest that three key roles for government could be:
  - *Stimulating* the market, in order to build its capacity.
  - *Regulating* the market, and assuring the quality of services, both to protect the public interest and to build customer confidence.
  - *Compensating* for market failure.
- A possible fourth role has also been proposed, which is supporting the growth of the educated consumer. In order to achieve this, and to maximise the value that individuals can draw, it has been suggested that it would be helpful for policy to:
  - Support the growth of digital literacy and associated career-learning skills.
  - Develop mechanisms for quality-assuring and recommending career-related online resources.
  - Support the up-skilling of careers professionals.
- OECD (2004) identified that careers guidance could support three major public policy goals:
  - *Learning goals*: Improving the efficient workings of the education and training system managing its interface with the labour market.
  - *Labour market goals*: Improving the match between supply and demand and managing adjustment to change; and
  - *Social equity goals*: Supporting equal opportunities and promoting social inclusion throughout communities and society as a whole.
- In regard to these, an area of 'market failure' that might need to be addressed is in respect to addressing policy goals (such as social mobility), where 'libertarian paternalist' approaches (such as 'nudge' and 'choice architecture' – See Appendix One), amongst others, may need to be employed.
- It is likely that any recommendations to government that have cost implications will need to be thought through in relation to the potential savings that more effective career-related IAG/careers guidance can bring.

## What key questions does this raise?

19. In what ways, if any, should government, be:
  - a) Stimulating the career support market, in order to build its capacity.
  - b) Regulating the career support market, including assuring the quality of services, both to protect the public interest and to build customer confidence.
  - c) Compensating for failure in the career support market, to enable required services to be developed.
20. Where the government does have a role in stimulating the market, regulating the market and/or compensating for market failure, what should this role be?
21. In formulating its advice in this area, are there any other key points that the Commission should consider which aren't highlighted in this brief paper, or in the wider expert papers commissioned and published to date?

## Appendix 1: Glossary of terms

### Career

A working definition of career is: 'the evolving sequence of a person's work experiences over time' (Arthur et al, 1989).

Expanded concepts of career emphasise: their lifelong nature; their interface with other life experiences ('work life balance'); and their links to lifelong learning and skills development (including through high performance HRD practices).

### Career/s guidance

In describing career guidance, OECD (OECD, 2004<sup>5</sup>) concluded that:

'Career guidance refers to services and activities intended to assist individuals of any age and at any point throughout their lives, to make educational, training and occupational choices and to manage their careers. Such services may be found in schools, universities and colleges, in training institutions, in public employment services, in the workplace, in the voluntary or community sector and in the private sector.'

The activities may take place on an individual or group basis and may be face-face or at a distance (including help-lines and web-based services). They include career information provision (in print, ICT-based and other forms), assessment and self-assessment tools, counselling interviews, career education programmes (to help individuals develop their self-awareness, opportunity-awareness, and career management skills), taster programmes (to sample options before choosing them), work search programmes, and transition services.'

OECD's definition highlights that career guidance is not a 'one-off', but rather a linked series of activities that – at their best – are designed around the evolving needs and requirements of individuals.

### Career learning skills

Career learning skills are those which equip an individual to pursuing a career in a flexible and dynamic job market. They are frequently thought of as covering:

- *Self-Awareness and Development* - identifying, assessing and developing the skills and qualities necessary to choose and implement an appropriate career plan.
- *Career Exploration* - acquiring and evaluating information, and reviewing experiences to identify and investigate appropriate career pathways and learning opportunities in education, training and employment, locally, nationally and internationally.
- *Career Management* - developing skills in career planning, and employing effective career decision-making strategies to manage transition and make suitable career development choices, with the appropriate support, advice and guidance.

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<sup>5</sup> Organisation for Economic Co-operation and Development (2004) *Career Guidance and Public Policy: Bridging the Gap*. Paris: OECD.

## Career support

Career support is concerned with how individuals relate to learning and work across their life course. It describes a range of services and relationships that people draw upon in order to help them to make decisions, navigate changes, deal with adversity and maximise their personal and economic potential. Career support exists in both professional and non-professional forms. Users may seek career support from career professionals and/or from a range of other sources, including career informants (i.e. people with personal experience in the career paths that users are interested in entering).

## Digital divide

This: 'refers to the gap between individuals, households, businesses and geographic areas at different socio-economic levels with regard to both their opportunities to access information and communication technologies (ICTs) and to their use of the Internet for a wide variety of activities' (OECD, 2001).<sup>6</sup>

The digital divide includes the imbalance both in physical access to [technology](#) and the resources and skills needed to effectively participate as a '[digital citizen](#)'. The [knowledge divide](#) reflects the access of various social groupings to information and knowledge, typically by [gender](#), [income](#), [race](#) and location.

## Digital literacy

'The awareness, attitude and ability of individuals to appropriately use digital tools and facilities to identify, access, manage, integrate, evaluate, analyse and synthesise digital resources, construct new knowledge, create media expressions, and communicate with others in the context of specific life situations, in order to enable constructive social action; and to reflect upon this process' (Martin, 2006<sup>7</sup>).

The independent review of ICT User Skills<sup>8</sup>, undertaken by Baroness Estelle Morris (June 2009) on behalf of the last Government adopted the term 'Digital Life Skills' to: 'identify a set of basic ICT skills an individual requires to use a computer to safely enter, access and communicate information online'.

## Information literacy

Information literacy is: 'knowing when and why you need information, where to find it, and how to evaluate, use and communicate it in an ethical manner. This definition implies several skills. We believe that the skills (or competencies) that are required to be information literate require an understanding of:

- A need for information
- The resources available
- How to find information

<sup>6</sup> Organisation for Economic Co-operation and Development (2001) *Understanding the Digital Divide*. Paris: OECD.

<sup>7</sup> Martin, A. (2006). Digital literacy needed in an "e-permeated" world – progress report of DigEuLit project. ([http://www.elearningeuropea.info/directory/index.php?page=doc&doc\\_id=6973&docLang=6](http://www.elearningeuropea.info/directory/index.php?page=doc&doc_id=6973&docLang=6))

<sup>8</sup> Department for Business Innovation and Skills (2009) *Independent Review of ICT User Skills* London; BIS (<http://www.dius.gov.uk/~media/3F79A51589404CFDB62F3DA0DEBA69A1.ashx>) (Accessed 27 October 2010)

- The need to evaluate results
- How to work with or exploit results
- Ethics and responsibility of use
- How to communicate or share your findings
- How to manage your findings'

(CILIP, 2004)<sup>9</sup>

## Information, advice and guidance (IAG)

Warwick Institute of Employment Research (IER) indicate in their research for the Commission that over the past decade or so in England, the term 'Information, advice and guidance' (IAG) has become an umbrella term for a range of activities previously encapsulated in the term 'careers guidance'.

The origin of this term can be traced back to a policy framework that was published in England in 2003 that related to service delivery to adults. This document separated out three key activities of IAG, which were to be differentially funded, with information the cheapest component of the service and guidance the most costly. The distinct activities were:

- **Information** relates to the process of informing clients about issues relevant to their development. Such information usually needs some interpretation (i.e. information needs to be converted into intelligence).
- Advice is about helping clients to undertake that interpretation of information and select the most appropriate option.
- **Guidance** is helping clients to: understand their own needs relating to learning and work; set and review goals/objectives for learning and work; understand their barriers to learning and work; overcome barriers/obstacles to learning and work; and to produce learning and career action plans. (DES, 2003)

## Career-related labour market information

The understanding of LMI used for this project is the list proposed in the report '*Labour Market Information (LMI), Information Communications and Technologies (ICT) and Information, Advice and Guidance (IAG)*' (Warwick Institute for Employment Research) which states that LMI for IAG includes:

- Information on general employment trends (e.g. historical trends, future demand);
- Data on the structure of the labour market (i.e. what jobs exist, how many, which sectors, which occupations);
- Information about the way the labour market functions (i.e. how people get into jobs and move between employers, etc.);
- The interaction between labour demand and supply (i.e. mismatches – as reflected in unemployment rates, skills gaps, skills shortages, etc.);

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<sup>9</sup> Chartered Institute of Library and Information Professionals (2004). Information literacy: definition. (<http://www.cilip.org.uk/get-involved/advocacy/learning/information-literacy/pages/definition.aspx>)

- Data on national, regional and local labour markets variations (i.e. size of workforce, prominent sectors etc.);
- Data focusing on equality and diversity (i.e. which individuals are employed in different sectors and at what levels); and
- Information on progression routes (i.e. career structure, earnings, transferability of skills).

### Libertarian paternalism

A school of thinking has developed in the US around 'libertarian paternalism' as a union of two political notions that are commonly viewed as being at odds.

The main authors<sup>10</sup> state that, 'the libertarian aspect of our strategies lies in the straightforward insistence that, in general, people should be free to do what they like-and to opt out of undesirable arrangements if they want to do so'. The paternalistic portion of the term: 'lies in the claim that it is legitimate for choice architects to try to influence people's behaviour in order to make their lives longer, healthier, and better'.

The term 'choice architecture' is used to describe the way in which decisions are influenced by how the choices are presented. It is in arranging the choice architecture in a certain way that individuals can be 'nudged' to take a course of action without (it is argued) taking away their freedom of choice.

A simple example of a 'nudge' would be placing healthy foods in a school cafeteria at eye level, while putting less healthy junk food in harder-to-reach places. Individuals are not prevented from eating whatever they want, but the arranging of the food choices in that way has the effect of decreasing consumption of junk food and increasing consumption of healthier foods.

### Quality assurance

Quality assurance is a systematic process for checking to see whether a product or service being developed is meeting specified requirements.

### Social media

Social Media is a group of Internet-based applications that build on the ideological and technological foundations of Web 2.0, and that allow the creation and exchange of User Generated Content (Kaplan & Haenlein, 2009).<sup>11</sup>

### Web 1.0, 2.0, and 3.0

Web 1.0 is the 'retronym' used to describe the original state of the world-wide web in the 90s, which included the use of html text.

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<sup>10</sup> Thaler RH, Sunstein CR (2008) *Nudge: Improving Decisions about Health, Wealth and Happiness* New Haven and London: Yale University Press

<sup>11</sup> Kaplan AM & Haenlein M (2010) *Users of the world, unite! The challenges and opportunities of social media* Business Horizons, 53 (1), pp.59-68.

The second generation of web-based services (Web 2.0) introduced new applications including communication tools and social networking.

Web 3.0 will allow information to be searched, filtered, personalised and fed back, based on biofeedback, specific preferences and localities, with data display on an increasing range of mobile devices and netbooks.

## Appendix 2: Career support market

The International Centre for Guidance Studies (iCeGS) contends in their forthcoming expert paper for the Commission (*'Enhancing choice? The role of technology in the career support market'*), that it is helpful to think of a 'career support market', defined for the purposes of the report as the conceptual space within which individuals who desire career support transact with those who provide it.

Crucially, the paper notes that relatively few of the services within the career support market are paid for by the clients who access them; most are paid for in other ways. They argue that the way the service is funded affects how it is delivered and that exploring and understanding the tensions between the *customers* who pay for career support services and the *clients/consumers* who use them is a key issue in informing public policy in this area.

The five business models operating in the market are as follows:

- **Government Pays:** The 'government pays' model remains the mechanism through which the majority of career support services are funded. Actors in this segment of the market have largely utilised technology to increase efficiency, although there are also some examples of the development of enhanced services and new service paradigms. An issue that emerged within this section of the market was the way in which current public-sector management, target and inspection regimes tend to make innovation less likely. Policy-makers may wish to consider whether a management framework can be developed that offers more space for innovation and knowledge transfer from other elements of the market.
- **Charitable Body Pays:** Where career support is funded by the 'charitable body pays' model, the services that are offered tend to be more discrete or developmental. This funding model seems effective in identifying innovation and in developing new products and services, but to experience problems in achieving sustainability.
- **Individual Pays:** The 'individuals pay' model is the most straightforward funding model, as it is the only one in which the customer and the client are the same person. This removes the scope for conflicts of interests and reduces the ethical complexity for the practitioner. However, research with customers and stakeholders in the 'individual pays' market and with international comparators suggests that this funding model is currently confined largely to a higher skilled / higher-income market segment. Actors in the 'individual pays' market use technology to market their services and to facilitate some one-to-one delivery, but there does not seem to be a current market for less intensive (and therefore cheaper) 'individual pays' career support. Some of the stakeholders interviewed for the project had experimented with selling smartphone apps and e-books, but none had yet managed to develop a sustainable business in these areas.
- **Opportunity Provider Pays:** In contrast, the 'opportunity providers pay' (employers or learning providers) segment is a much larger and more mainstream aspect of the career support market. The recruitment industry has always overlapped with career support and new technologies have increased the extent of overlap. Many 'opportunity providers pay' sites offer substantial career and labour market information and advice that goes beyond helping people to navigate recruitment services. Much of this provision is innovative and high-quality, although these sites generally avoid intensive approaches involving professional staff.

- **Embedded Career Support:** The final model for the funding of career support is where it is offered as an embedded part of a broader experience, e.g. education or employment.

This approach is particularly strong in higher education where services are staffed by skilled professionals who are able to exercise a fair degree of autonomy in the development of their services. Correspondingly, many higher education careers services have been able to innovate in their use of new technologies and are beginning to mainstream some of this innovation into their practice. Alternative examples of 'embedded' career support are provided by trade unions, professional bodies and employers.

## **Appendix 3: UK Commission for Employment and Skills expert papers**

In order to provide a rich evidence base for this project the Commission has funded five expert papers. The expert papers explore a range of issues in relation to using new technologies to enhance IAG/careers guidance. The first two were published in June and are available by following the links below. Expert papers 3 and 4 are due to be available in early December from the Commission's website. Expert paper 5 is due to be published in March 2011.

### **Expert paper 1**

'Careering through the Web. The potential of Web 2.0 and 3.0 technologies for career development and career support services' (iCeGS, June 2010)

<http://www.ukces.org.uk/reports/careering-through-the-web>

### **Expert paper 2**

'Labour Market Information (LMI), Information and Communication Technologies (ICT) and Information, Advice and Guidance (IAG). The way forward?' (Warwick Institute for Employment Research, June 2010)

[http://www.ukces.org.uk/reports/labour-market-information-\(lmi\)-information-communications-and-technologies-\(ict\)-and-information,-advice-and-guidance-\(iag\)](http://www.ukces.org.uk/reports/labour-market-information-(lmi)-information-communications-and-technologies-(ict)-and-information,-advice-and-guidance-(iag))

### **Expert paper 3**

'Enhancing choice? The role of technology in the careers support market' (iCeGS) (due to be published in early December 2010)

### **Expert paper 4**

'The use of LMI in career direction and learning' (GHK) (due to be published in early December 2010)

### **Expert paper 5**

Report by the Warwick Institute for Employment Research that builds on the work already carried out, taking the development of service models further and focussing on the skills that practitioners will need to be more effective. The report is due to be published in March 2011.

## Appendix 4: Consultation questions

The questions contained in this document are listed below. You do not have to answer all the questions if you don't want to.

There are a number of ways that you can respond to this consultation:

- Respond to the online consultation here  
<http://www.surveymonkey.com/s/ciagtechconsultation> by 17 January 2011
- Prepare a response and return this to Marcus Rowntree at  
[marcus.rowntree@ukces.org.uk](mailto:marcus.rowntree@ukces.org.uk) by 17 January 2011.

We have also set up an online forum where you can discuss the questions with other people who are interested in this subject. The online forum is available here <http://www.ciagtechconsultation.co.uk/>. Please email Marcus Rowntree for the password for the site.

### Developing career-related labour market information (LMI) and career support provision

1. What types of career-related LMI do different groups of individuals (for example, young people, graduates, people who are long term unemployed, older people) find most useful and at what level (national, regional, sectoral etc,?)
2. To what extent is useful career-related LMI currently available in different parts of the UK?
3. How can career-related LMI best be developed in the future?
4. Is it possible, and/or desirable, to seek to quality-assure commercially produced career-related LMI?
5. How can the career support market best be expanded and developed?
6. What distinctive- or indeed unique - role can publicly funded all-age career services play in the development of future provision?

### Supporting individuals

7. What skills do individuals need to decide how accurate, useful and/or objective is career-related information or advice which is delivered online?
8. How can individuals best be supported to develop the necessary skills to make sound judgements about career-related information or advice they access online?
9. Should greater efforts be made to increase and develop the 'individual pays' element of the career support market (See Appendix 2)? If so, how would you suggest this happens?
10. How can services be developed that meet the needs of those who have low levels of digital literacy as well as those who are comfortable with web-enabled environments?

### Enabling practitioners

11. How well do you feel ICT-based technologies are currently used in the delivery of IAG/careers guidance?
12. What do you feel would be the benefits of increasing the use of ICT-based technologies (including web 2.0 and 3.0) in the delivery of IAG/careers guidance services?
13. What do you feel are the key barriers to maximising the use of such technologies in the delivery of IAG/careers guidance services?

14. What are the implications of harnessing technology for both the role of careers guidance practitioners and the skills and competencies they need?

### **Incentivising developers**

15. What are the limitations for developers in using public information to develop products, applications and tools that can be used to provide career-related IAG/ careers guidance offers?
16. What are the incentives for developers to use public information to develop career-related IAG, applications and tools?
17. What can be done to facilitate greater innovation?
18. To what extent is profitability an issue in respect to developing commercially-viable products and services? Are there areas of service delivery that are unlikely to be viable commercially and how could this be addressed?

### **The role of policy makers**

19. In what ways, if any, should government, be:
  - a) Stimulating the career support market, in order to build its capacity.
  - b) Regulating the career support market, including assuring the quality of services, both to protect the public interest and to build customer confidence.
  - c) Compensating for failure in the career support market, to enable required services to be developed.
20. Where the government does have a role in stimulating the market, regulating the market and/or compensating for market failure, what should this role be?
21. In formulating its advice in this area, are there any other key points that the Commission should consider which aren't highlighted in this brief paper, or in the wider expert papers commissioned and published to date?