

WARWICK INSTITUTE *for*  
EMPLOYMENT RESEARCH



**How learning helps people in their career: skills  
development and the role of Continuing Vocational  
Education and Training in individual career development**

**Alan Brown and Jenny Bimrose**

**Career Development Workshop given at RMIT University,  
Melbourne, Australia**

**Wednesday 14<sup>th</sup> July 2010**

Contact details:

[alan.brown@warwick.ac.uk](mailto:alan.brown@warwick.ac.uk)  
[jenny.bimrose@warwick.ac.uk](mailto:jenny.bimrose@warwick.ac.uk)

**Professor Alan Brown and Professor Jenny Bimrose  
Institute for Employment Research, University of Warwick,  
Coventry, CV4 7AL, UK**

# **How learning helps people in their career: skills development and the role of Continuing Vocational Education and Training in individual career development**

## **Abstract**

This paper reports findings from a major comparative study of changing patterns of work-related learning and career development in Europe. The study comprised a survey and literature review. The survey involved over a thousand respondents drawn from 10 countries – they were mainly in full-time permanent employment in their mid-career (aged 30 to 55), having achieved skilled worker or graduate qualifications in engineering, ICT or health, working primarily in health, ICT, education or manufacturing. The ten countries surveyed were France; Germany; Italy; Netherlands; Norway; Poland; Portugal; Romania; Turkey and the United Kingdom. The overall sample also included a small sub-set of people with few qualifications and/or who worked in jobs requiring few qualifications. The research examined continuing vocational training (CVT) from the perspective of how individual careers are developing across Europe. Much work in this area has focused upon the take-up of formal CVT provision or individual learning and development in the last month or year. What was missing, however, was some sense of how individuals are putting learning and development to use in their evolving careers over a much longer time period. This study therefore sought to develop an understanding of the different ways individuals careers are unfolding over time and the implications for this for European policies on CVT which are due for review in 2010. This paper outlines the key findings and issues arising from the research, including how different types of learning interact across the life-course and how they may facilitate mobility in the labour market.

**Keywords:** career, learning at work, Europe, continuing vocational training

# How learning helps people in their career: skills development and the role of Continuing Vocational Education and Training in individual career development

## 1. Introduction

Since 2000 the European Union has sought to become the most competitive and dynamic knowledge-based economy in the world. In line with this goal, member states committed themselves to increasing European cooperation in initial vocational education and training (VET) through the Copenhagen process, and until recently relatively little attention has been given to continuing vocational training (CVT). The research reported here was intended to examine CVT from the perspective of how individual careers are developing across Europe. Much work in this area has focused upon the take-up of formal CVT provision or individual learning and development in the last month or year. What was missing, however, was some sense of how individuals are putting learning and development to use in their evolving careers over a much longer time period. This study therefore sought to develop an understanding of the different ways individuals careers are unfolding over time and the implications for this for European policies on CVT which are due for review in 2010. This approach seeks to shed light on one of the challenges identified in the 'Key competences for a changing world': 'implementing lifelong learning through formal, non-formal and informal learning and increasing mobility remains a challenge (CEC 2009), by drawing attention how these different types of learning interact across the life-course and how they may facilitate mobility in the labour market. This paper outlines the key findings and issues arising from the research.

The nature of career development has changed and continues to change. Osipow and Fitzgerald (1996) distinguish between career choice as a point-in-time 'event' and a developmental 'process' over a longer period of time (p. 54), while others emphasise career as 'the evolving sequence of a person's work experiences over time' (Arthur *et al.*, 1989, p. 8). Young and Collin (2000) argue that 'overall, career can be seen as an overarching construct that gives meaning to the individual's life' (Young & Collin, 2000, p. 5). Differences in the interpretation of concepts and terminology in this area extend to cultural, linguistic and methodological differences (Van Esbroeck and Athanasou, 2008). Ball (1996) recognises that individuals are able to take responsibility for their own career choices and decisions and in order for this to be effectively achieved, individuals' ability to review and reflect upon their career transitions needs to be developed. Through a process of self-reflection and evaluation, individuals become: more comfortable and confident in their decisions (Gati & Saka, 2001); aware of their particular skills (Boyatzis, Goleman & Rhee; 2000; Gati & Saka, 2001); and are able to identify preferred outcomes and goals (Boyatzis *et al.*, 2000). The process of self-reflective evaluation (sometimes prolonged) that is characteristic of this career decision-making style is closely linked to the development of greater levels of self-awareness and self-knowledge, with individuals using this as the basis for future action and decisions.

On the other hand, individuals who take opportunities that have presented themselves, however unexpected, and tried (often successfully) to turn them to their advantage are

described as engaged in a process of opportunistic career decision making. These individuals exploit available opportunities rather than make active choices about work (see for example Banks et al., 1992). Clients' career plans could seem vague, undecided and uncertain. This resonates with the concept of 'planned happenstance' that encourages us to be receptive to randomly occurring opportunities that could be critical in shaping our careers (Mitchell, Levin & Krumboltz, 1999) and the need for practitioners to place greater importance on context (Bright, Pryor, Wilkenfeld & Bell, 2005). Other approaches to career development emphasise the importance of personal agency and the integrative process model explains mechanisms through which intrinsic motivation can influence career self-management and subsequent objective career success is proposed by Quigley & Tymon (2006). One other relevant concept is career-related continuous learning (CRCL). A key assumption here is that individual and organisational learning are intertwined. Individuals learn as employees or members of organisations, pursue their own interests and expect a personal benefit from engaging in learning activities. The concept of CRCL relates to a process of individual, self-initiated, discretionary, planned and proactive pattern of activities that are sustained over time for the purpose of career development (London and Smither, 1999; Rowold & Schilling, 2006).

The research findings draw upon evidence from the survey and literature review and are exemplified with some 'case histories' of individuals as appropriate. A brief summary of the survey is as follows: there were 1148 respondents drawn from 10 countries – they were mainly in full-time permanent employment in their mid-career (aged 30 to 55), having achieved skilled worker or graduate qualifications in engineering, ICT or health, working primarily in health, ICT, education or manufacturing. The ten countries surveyed were France; Germany; Italy; Netherlands; Norway; Poland; Portugal; Romania; Turkey and the United Kingdom. The overall sample, as intended, overwhelmingly comprises people qualified for, and in most cases working in, skilled, associate professional or professional occupations, with a small sub-set of people with few qualifications and/or who worked in jobs requiring few qualifications.

## **2. Research findings**

### **2.1. Career development, Continuing Vocational Training (CVT) and learning while working**

For skilled workers in their mid-career it is an interesting question as to where they acquired their knowledge, skills and understanding to perform in their most recent job (see table Q5 below). That 71% of respondents pointed to the importance of their initial education or training highlighted how this continued to provide an underpinning to their continuing work, although as over 28% did not highlight this shows that some people develop their careers well beyond their initial training while others reorient their career in ways that distance them from their original education and training.

Q5: How did you acquire your knowledge and skills to perform your current or last job? Please tick all that apply. (in percentages)

<b>your studies or initial training</b>	<b>71.5</b>
<b>additional training in your current work</b>	<b>51.6</b>
<b>self-directed / self-initiated learning, inside or outside workplace</b>	<b>55.7</b>
<b>learning through work by carrying out challenging tasks</b>	<b>60.9</b>
learning through life experience	47.6
<b>learning from others at work</b>	<b>52.5</b>
learning from networks, working with clients	32.1
other	5.1
N	1148

The most striking results, however, show the breadth and depth of other forms of learning and development relevant to work. Learning through work by carrying out challenging tasks was seen as an important form of acquiring the knowledge and skills necessary to perform your current job by over sixty per cent of respondents. This is significant in three respects. First, initial education and training is rarely sufficient in order to reach an ‘experienced worker’ standard – this is likely to require individuals to continue to develop their skills through engaging in challenging work activities which extend their skills in a number of respects. There are different performance and task expectations for an experienced worker, at whatever level in an organisation, than for a person who has just joined the organisation immediately after completion of initial education or training (or early career learning). Similarly, an individual’s work may undergo significant change when taking on a new challenging role (involving upskilling or reskilling). Second, individuals may take on more demanding tasks as a result of promotion or other forms of career progression. Third, learning through more challenging tasks following a job change is the most popular way for low skilled workers to upgrade their skills.

Learning through self-directed or self-initiated learning, inside or outside the workplace, was highlighted by 55% of respondents. This acknowledges the role of personal agency in responding to learning opportunities at work and/or in individuals seeking to supplement their learning at work in order to pursue personal learning goals. An example of self-directed learning is where an employee upon promotion asked to visit the head-quarters of the engineering company in another country for two weeks in order to put what they were expected to do in their new role in a wider context of the company as a whole. Another example was where someone working in a care home sought to learn more about cultural diversity on their own in order to deal more effectively with a range of patients, rather than getting their existing experience accredited in order to get an approved national vocational qualification – a process which would not lead to any additional learning and development.

That over fifty per cent of respondents acknowledged that additional training at work was important for the acquisition of skills and knowledge relevant to effective performance of their current job showed that formal continuing vocational training could play an important role in continuing professional development and many people undertook a mix of formal and more informal methods of skill development. Additional training was often associated with new ways of working, undertaking a new role or the introduction of new equipment.

Interestingly, in some hospital contexts one person undertook most of the formal training associated with working with new equipment – they then cascaded the new way of working to all the other members of the department. These other members were learning from other colleagues rather than through formal additional training, even though the end result was the same. This may have been one of the reasons why learning from others at work was also popular: 52% of the sample had acquired valuable work-related knowledge and skills in this way. Work-related learning and development also occurred through use of networks, engagement with clients etc. for over 30% of respondents. Overall then, acquisition of valued work-related skilled and knowledge often came through interactions at work. Broader still, for almost 50% of the sample learning through life experience also helped them acquire some skills and knowledge necessary to perform their current (or last) job. The only two significant gender differences relate to women making greater use of additional training in their current job and being more prepared to learn from others at work (see table Q5 by gender below).

Q5: How did you acquire your knowledge and skills to perform your current or last job? Please tick all that apply. By gender. (In percentages). Note: the table is statistically significant at the 0.05 level.

	Female	Male	Total
Studies or initial training	77.3	71.7	74.1
<b>Additional training in the current job*</b>	<b>59.9</b>	<b>50.6</b>	<b>54.6</b>
Self-directed or self-initiated learning, inside or outside the workplace	56.3	57.8	57.1
Learning through work by carrying out challenging tasks	62.8	58.1	60.1
Learning through life experience	49.7	46.3	47.8
<b>Learning from others at work*</b>	<b>59.1</b>	<b>49.2</b>	<b>53.4</b>
Learning from networks, working with clients	34.6	30.0	32.0
Other	4.7	6.6	5.8
N	384	516	900

For skilled workers in their mid-career it is an interesting question as to where they acquired their knowledge, skills and understanding to perform in their most recent job (see table Q5 below). That 71% of respondents pointed to the importance of their initial education or training highlighted how this continued to provide an underpinning to their continuing work, although as over 28% did not highlight this shows that some people develop their careers well beyond their initial training while others reorient their career in ways that distance them from their original education and training. Overall the relationship between career development, CVT and learning while working highlights how:

- learning while working is an established form of learning at work in all contexts (but especially for the highly skilled)
- The lack of engagement with substantive learning and development increases likelihood of downward career drift.
- Employees working in learning-rich work environments are more likely to have a positive disposition towards learning and a proactive approach to career development.

- How continuing vocational learning is coupled with career progression is important for the extent to which individuals engage in continuing learning.
- Learning to learn and link continuing learning strategically to career development affects individuals' attitudes to CVL.

## 2.2. Importance of personal agency:

The sample was in the main well-qualified and had opportunities for learning and development associated with their jobs, but even so the extent of their positive actions and attitudes towards learning was striking: see table Q11 below.

Q11: Learning or training activities participated in the last 5 years, several answers possible (in percentages)

off-the job training	38.0
<b>on-the-job training</b>	<b>53.5</b>
<b>self-directed learning inside or outside the workplace</b>	<b>55.3</b>
<b>learning from networks, working with clients</b>	<b>50.2</b>
<b>learning through life experience</b>	<b>59.6</b>
<b>learning through work by carrying out challenging tasks</b>	<b>65.0</b>
<b>learning from others at work</b>	<b>58.2</b>
group training in your workplace provided by your employer	33.4
individual training at your workplace provided by mentor/tutor/colleague	30.6
course provided by a training centre/organisation/institution at your workplace	42.9
course provided by training centre/organisation/institution outside your workplace	42.5
additional training in your current work	35.9
<b>seminars, conferences</b>	<b>59.6</b>
correspondence course	7.4
training that leads to further qualifications	25.5
Other	2.3
N	895

The rich range of learning activities participated in the last 5 years clearly complement more formal training activities, with learning through challenging work, networks, from others, experience and self-directed learning all figuring prominently (over 50%). Interestingly, the reasons they took part in training and learning activities were primarily related to skill development and personal development (see table Q12 below).

Q12: Reasons for taking part in training/learning activities, several answers possible (in percentages)

<b>I wanted to develop a broader range of skills and/or knowledge.</b>	<b>77.9</b>
<b>I wanted to develop more specialist skills and/or knowledge.</b>	<b>67.6</b>
I wanted to change my career options.	29.2
I thought it would improve my job prospects (i.e. find new job, advance my career, get a promotion, earn better money).	43.1
The successful completion of training activities is required for my occupation.	36.2
My employer requested/required me to do so.	26.7
I wanted to perform new tasks or more demanding tasks in my current job.	45.0
I wanted to prepare myself for a new job or new career.	26.8
I wanted to obtain unemployment benefits that depend on training attendance.	0.4
<b>I took part for my own personal development.</b>	<b>60.6</b>
Because of threat of restructuring / redundancies in my area of work.	4.4
Because of rights to training granted by my employer or legislation.	13.6
Other	1.5
N	895

The respondents largely remained committed to learning, training and development for the future too (see tables Q 13 and 14 below).

Q13: Participation in training/learning in the next 5 years (in percentages)

Yes	79.7
No	6.2
I don't know	14.0
N	1041



Q14: Thinking about the next 5 years, why do you think you will undertake more training or learning activities (several answers possible, respondents who plan further training) (in percentages)

<b>I want to develop a broader range of skills and/or knowledge.</b>	<b>79.8</b>
<b>I want to develop more specialist skills and/or knowledge.</b>	<b>65.1</b>
I want to change my career options.	26.6
I will have more opportunities to change my career in the future.	34.5
I want to improve my job prospects (i.e. find new job, advance my career, get a promotion, earn better money).	45.9
The successful completion of training activities is required for my occupation.	30.5
My employer requires me to do so.	10.2
I need to perform new tasks or more demanding tasks in my current job.	36.9
I need to prepare myself for a new job or new career.	20.8
I want to obtain unemployment benefits that depend on training attendance.	0.6
<b>Training will be part of my own personal development.</b>	<b>55.5</b>
Because my employer offers training.	11.7
Because of threat of restructuring / redundancies in my area of work.	5.4
Because of rights to training granted by my employer or legislation.	11.1
Other	2.7
N	830

They were also clearly attitudinally positive towards learning, appreciating the challenge of learning for work (see table Q15 below). Although their jobs required them to continue learning new things and employers were generally supportive, most respondents clearly liked learning and were prepared to be proactive in terms of their own learning and development.

Q 15: Experiences of training or learning activities (means, 1=strongly disagree... 4= strongly agree)

<b>My job requires that I keep learning new things.</b>	<b>3.6</b>
<b>I like learning new things for my job.</b>	<b>3.7</b>
I don't like learning new things.	1.3
I learn new things for my job as it is a requirement.	2.9
My opportunities for advancement are good.	2.6
<b>I take the initiative in finding new things to learn.</b>	<b>3.3</b>
<b>I am serious about career development.</b>	<b>3.2</b>
<b>I think my career is important.</b>	<b>3.2</b>
I am too old to learn.	1.3
There are few opportunities for me to learn.	1.7
My employer does not support/offer any training.	1.9
My employer supports my career development/learning activities.	2.8
<b>I enjoy new challenges as they offer opportunities for learning.</b>	<b>3.5</b>
N	971

The career decision-making styles of respondents were mixed (see table Q16 below), but again an emphasis upon learning and development is strongly apparent, with learning from previous experience and needing to reflect, plan and analyse when thinking about career development all emphasised. The willingness to take opportunities as they arise also reflects the pro-activity of our respondents.

Q 16: Career decisions (means, 1=strongly disagree... 4= strongly agree)

<b>I think about the decisions I have to make and those I have made in the past and learn from them.</b>	<b>3.5</b>
I have a clear plan for my career and I know what I have to do to achieve it.	2.8
I have a career-related ambition, but it is long term.	2.8
Chance has played a large role in how my career has developed.	2.6
<b>I think about what I need, what fits with my abilities and values.</b>	<b>3.3</b>
<b>I make decisions by weighing up the pros and cons.</b>	<b>3.4</b>
I'll do any job to pay my bills to keep my long term ambition alive.	2.1
I can deal easily with uncertainty or unpredictability.	2.6
I have got better at making decisions as I get more experience.	3.5
I like to analyse and/or research a situation before making a decision.	3.4
I follow my heart when making decisions.	2.5
<b>I take advantage of opportunities as they arise.</b>	<b>3.1</b>
N	958

The respondents had had varying degrees of success in the labour market and their learning and work trajectories resonated with structural conditions with which they were faced. However, their trajectories were not fully conditioned by such constraints: for example, in Romania and Poland workers over the age of 45 had had to negotiate major shifts in societal and organisational structures.

Personal agency is an important driver of individual work and learning trajectories, and from our survey it is clear that, across the different sectoral groups:

- There is an increased role for reflection and reflexivity as individuals shape their work trajectories (choices and possibilities have expanded and structural, organisational and technological change have added complexity to work trajectories)
- Experience developed through engagement with challenging work is the main vehicle for professional growth, but this needs to be supplemented in a variety of ways and individuals have choices in the combination of learning activities (formal, non-formal and informal) with which they engage
- Individuals seek a degree of personal autonomy in how their careers develop (and the meaning attached to career) but, in parallel, they also seek opportunities to exchange experiences with peers, colleagues and experts.

The survey findings offer reinforcement for the idea that individuals are responsible actors in creating their own career pathways through learning and development linked to opportunities in education, training, employment and other contexts. However, at the same time, there is

an urgent need to support individuals in navigating their way through increasingly complex work and life contexts and, in particular:

- helping individuals become more reflective at the individual level through provision of career guidance and counselling as a key component of a lifelong learning strategy
- introducing reflective strategies in organisations (in support of both individual empowerment and organisational development).
- Even within generally successful careers anxieties were expressed about the risks connected to overall dynamics and change associated with career development and with organisational changes and structural constraints – people recognised that navigating a career path could be fraught with difficulties.
- Personal agency (pro-activity and responding to opportunities) is important but there is also value in helping individuals develop a coherent career narrative: where they have been; are; and where they are going). Many individuals are actively shaping their personal work biographies (but they also value help to do this).
- Individual traits (proactive personality and self-management behaviour) and experiences of learning influence engagement and persistence with CVT. Those with a proactive approach to career development are more likely to engage in CVT and lifelong learning.
- People can reinforce their satisfaction (and in some cases even overcome dissatisfaction) with work by engaging in CVET (which people often believe has value in itself – even when not strictly necessary for current or likely future job performance).
- Much continuous vocational learning is influenced by motivational factors (such as willingness to make the most of learning affordances and opportunities at work).
- By engaging with CVET, many individuals have learnt how to actively manage their careers and progress their future plans (this could be either through self-directed learning or where formal CVT opens up other potential career pathways).
- One key factor in continued career success for older workers in a changed context is a positive disposition towards learning.
- Developing a proactive approach to career development is associated with employees being given encouragement, time and space to engage in self-directed learning and critical reflection; learning from others and through networks; organisations that emphasise breadth of competence development; timely and appropriate feedback and support for development of employees' learner identities.

### **2.3. Structural constraints on personal agency:**

In transition economies such as Poland and Romania the shift towards personal responsibility for career development was a major turning point for older workers brought up under centrally planned economies. In Romania one legacy of the earlier system was in some areas there was a feeling that school-based training resulting in formal certification was the most 'powerful' form of training. On the other hand, the emergent economy was making use of

different types of jobs, skills, companies, forms of work organisation and career patterns. In such circumstances older low skilled workers could be part of a 'fatalistic' culture in which they viewed themselves as out of step with the way the economy was evolving, with immobility being linked to demography and getting employment depending on luck and contacts rather than individual merit. Two workers in their forties exemplified how if they were in employment they were determined to hang on to their current jobs but saw no prospects of doing anything else. The first person had worked in a large factory for fifteen years but when that was restructured he was made redundant and then, after a spell unemployed, retrained to be a tram driver ten years ago: 'I am satisfied with my job because it is well paid and I can support my family, although it is difficult and stressful. I don't have the formal qualifications to think of a better position in the company. I am fed up with training and courses.' The second person was working as a chef: 'I have no formal qualification. I learned cooking from my mother and I also learned a lot from my colleagues. I think it is a good job in that I can support my children growing up without any other support. The new colleagues that come have certificates but they still ask for my help. For the future, I am waiting for my pension time only.' Similarly, seeking to make a labour market transition at a time of high unemployment could be constraining:

#### **Case exemplar: interplay of structure and agency**

A Library and Information Services Manager in Health Care recalled how initially 'my career was blighted by the recession of the early 1980s. I could not find work after university for four months, and I found the experience of unemployment (and unsuccessful job interviews) very traumatic. Once I had found work (in the book trade) I stayed in that sector for too long, fearful of unemployment again, although I was not happy; it was eleven years before I found my present career as a librarian, in which I am much happier.'

Some qualified workers had made successful transitions or exhibited greater resilience in overcoming periods of unemployment, but the extent of over-qualification compared to the jobs available meant that expressed interest in learning could be driven by personal development rather than as being a tool for career progression. It may be that messages promoting learning through strongly emphasising employability are less effective than those which emphasise personal development, establishing social networks, meeting a wider range of people together with increasing the likelihood of getting employment. That is, messages should emphasise the immediate benefits from being a learner rather than seeing learning primarily being judged by where it leads.

#### **2.4. Intensive periods of (substantive) learning across the life-course**

Occasionally an individual might engage with formal education and training for most of their working life, but it is much more common for workers to have bouts of intensive periods of (substantive) learning across the life-course. These intensive periods of substantive learning, following initial VET or HE studies, are typically concerned with either upskilling within recognised career pathways or reskilling associated with a significant career change. The upskilling or reskilling could comprise a formal educational programme, CVT, learning while working or a mixture of two or more of these components.

**Case exemplar: an intensive period of part-time formal learning (educational upskilling) followed by a later period of formal training coupled with more challenging work leading to further development, upskilling and reskilling**

In 1989 Michelle started doing routine administrative work on benefits claims straight from leaving school at 18. In the period 1996 – 2000 she completed a skilled worker qualification and then a degree which led to career development: first, in becoming a trainer, then an operations manager before becoming a regional trainer. She then completed a range of specialist advanced level vocational qualifications in 2005 – 2009 which equipped her to take a job in a new sector (health) as a manager with responsibilities for business change based upon IT systemic change and for measuring the benefits of such deployments.

**Case exemplar: initial vocational training and development coupled with completion of two intensive mid-career degree programmes as well as learning while working and through career change: upskilling and reskilling**

Mary now works as a Change Manager in Health Care, in charge of Change Management IT projects since 2006, but she started her career by working as a pharmacy assistant for five years after completing initial vocational training in 1973. Subsequently, ‘I had at least 10 career changes, including working as a Pharmaceutical Sales Rep from 1985 – 1990. I have had numerous changes in my working career, for a variety of reasons, but mostly because I wanted to learn more/improve skills/learn something new or work somewhere new.’ She completed a first degree in Psychology in 1995 and a Master’s degree in Industrial Psychology in 2000.

How learning at work is coupled with career progression influences how individuals engage in continuing learning (for example, in some contexts after initial recruitment promotion is almost wholly dependent upon performance at work, which is itself linked to learning through challenging work, interactions and networks at work; whereas in other cases some form of formal continuing professional development would be expected, such as taking *Meister* qualifications in Germany, as a prelude to promotion.

**Case exemplar: initial hospital-based (sub-degree HE equivalent) vocational training coupled with completion of two intensive mid-career post-graduate diploma programmes as well as learning while working and through career progression: upskilling**

Karen qualified as a radiographer in 1984; in 1991 she completed a Diploma in Management Studies and in 2004 a Postgraduate Diploma in Advanced Practice (Imaging) as she progressed through linked progression pathways as an advanced practitioner, clinical tutor and then a Research Radiographer recruiting patients to clinical trials, promoting & active involvement in radiotherapy research from 2004.

From a policy perspective, it is important that the message about lifelong learning (LLL) does not convey that ‘we all need to be engaged in substantive learning all the time’. This message could easily be seen as unachievable – it is out of alignment with how people actually learn across the life-course. Rather than engaging in continuous learning at an even pace year after year, people are likely to have periods of more and less intensive learning. The key here is to make a distinction between learning which fits into an individual’s current set of values, attitudes, competences, networks, behaviour and identities and learning which leads to significant personal development or transformation. Respondents to the survey had little difficulty in identifying the role of learning and development in making significant work-

related transitions. So LLL rhetoric about ‘learning all the time’ may not always be helpful in practice, as periods of intensive learning are decisive for individuals’ career direction (that is, most people with successful careers display episodic learning: periods of intensive learning interspersed with ‘quieter’ times (which nevertheless can involve learning through challenging work etc.)).

### **2.5. An effective form of employee development for workers in low skilled work is to change jobs and value of guidance in supporting this process**

Brynin and Longhi (2007) in their summary of findings from a major European project (on ‘Work organisation and restructuring in the knowledge society - WORKS project’) reported on individual-level change using panel data and found that both ‘dissatisfaction with work and skill mismatches are widespread, and while tending to be overcome through career switches, thereby contribute to the overall prevalence of work flexibility’ (p. 7). So job mobility can be viewed as positive for individuals where it leads to progression, greater satisfaction and personal development or negative if it is considered forced, unrewarding and involves a ‘sense of loss’ rather than development. Interestingly, in nearly all European countries the most common way for people in low skilled employment to update their skills was by changing their jobs. This finding is important in two respects. First, it means that public policy should encourage people to find more challenging work if they are in undemanding work – guidance and counselling could play a key role in this respect. Second, it chimes with a number of ‘case histories’ of people in our research study whereby their personal development took off as they passed through ‘low skilled employment’ with the switch to other forms of work opening up opportunities for learning and development whether these were related to training and/or more challenging work.

For example, in Portugal and Poland a number of people worked in assistant or junior positions before finding more challenging work in the same sector or in a different field altogether (after transferring from work in for example hotel and catering). In some cases a shift between different forms of low skilled work could allow for greater development within work: for example, as when one respondent switched from being a waiter with no prospects of further advancement to working in an exhaust and tyre fitting centre, where after getting on the job training, learning while working and securing a qualification it was possible to move on to carrying out more demanding forms of work. Another respondent started out over forty years ago without any formal qualifications as an apprentice painter and decorator and then moved through a number of low level jobs in construction and retail and progressed to managing a mobile shop, then a small travel agency, before becoming self-employed as a grocery shop owner. Apart from some training and minor qualifications related to work in a travel agency the driver for development was always self-directed learning, inside or outside the workplace. Being able to apply your skills, knowledge and understanding in a number of contexts can itself act as a considerable spur to development.

### **2.6. Older workers’ careers: dynamic or stable**

Many of our older respondents were engaged in active career development in their 40s and 50s. However, a few had decided that they were not going to engage any further in substantive learning and development above what was required to work effectively in their current job: one respondent represented this as ‘coasting’ (doing the minimum possible)

while waiting for (preferably early) retirement. The respondent did recognise that there dangers associated with ‘coasting’ in that employability becomes dependent almost solely upon current job. This attitude was sometimes also linked with a lack of reflexivity of individuals to think about their own skills, a reluctance to think in terms of skill sets - rather there was a tendency to rely upon an attachment to an occupational / organisational identity that may be vulnerable to change. In this context, coupled with the demographic shift towards an ageing workforce, it was clear that there could be real cost-benefit advantages in offering mid-career workers guidance which could extend the length of their careers. One benefit could come from an increased willingness to continue working after a career shift for some, while others could also value the guidance process for affirming them in their current path. One problem in some organisations is that career development and learning are often not actively supported by employers for those over the age of 45?!

## 2.7 Competence development:

Upskilling and reskilling are valuable processes but need to be linked to contextualised examples of competence and performance in order for an individual to have a demonstrable mix of skills, knowledge, understanding and experience which employers find so valuable. The above analysis in this section has shown that many of the processes of learning while working are linked to the development of workplace competences. It is clear that respondents are much more likely to feel over-qualified rather than under-qualified to carry out their current (or most recent) duties (see table Q6 below).

Q6: Matching of skills and duties in current or last job (in percentages)

I need further training to cope well with my duties.	17.0
My duties correspond well with my present skills.	40.9
I have the skills to cope with more demanding duties.	37.0
I am new to the job so I need some further training to learn new aspects of my duties.	5.1
Total	100.0
N	1115

Most respondents drew upon their past work experience in performing their current work (see table Q7 below).

Q7: Use of past work experience in current or last job (in percentages)

Almost none	6.9
A little	15.3
A lot	39.7
Almost all	30.7
This is my first job	7.5
Total	100.0
N	1119

Past work experience is seen as very important and used in their current job by about 70% of respondents, compared to 56% who see their formal qualifications as of use in their current or last job (see table Q8 below). Qualifications can also be important in getting an individual a particular job, even if they are not actually directly used in the job (the most striking example being the graduate engineer employed in finance).

Q8: Use of formal qualifications in current or last job (in percentages)

Almost none	11.1
A little	30.4
A lot	34.2
Almost all	22.1
I have no formal qualifications	2.2
Total	100.0
N	1119

Formal qualifications are more likely to be seen as useful in their current jobs by women (see table Q8 by gender below).

Q8: Use of formal qualifications in current or last job by gender (in percentages)

	Female	Male	Total
Almost none	8.3	12.1	10.5
A little	27.1	32.1	30.0
A lot	37.2	31.7	34.1
Almost all	26.0	20.8	23.1
I have no formal qualifications	1.3	3.3	2.4
Total	100.0	100.0	100.0
N	384	514	898

## 2.8. Career change

Over two thirds of respondents had had at least one career change since starting work (see table Q17 below), with 70% of those who had not changed saying the primary reason was because they were satisfied with their job (see table Q18 below):

Q17: Career change since starting work (in percentages)

Yes	68.5
No	31.5
Total	100.0
N	1003



Q18: Reasons for staying in your current career, several answers possible  
(in percentages)

I am satisfied with my job.	70.3
My job fits my life circumstances.	56.0
My employer is at a good/convenient location.	45.6
I have good opportunities with my employer (such as training, development, advancement etc.).	35.1
There are no or limited other employment opportunities in my area.	10.1
I am satisfied with the pay and working conditions.	33.5
I feel that my skills, expertise and/or knowledge are a good match to my job/position.	49.7
I have looked for employment elsewhere, but have not been successful.	5.7
I have not thought about changing career.	29.1
I have not been forced/compelled to change my career.	27.8
I like my colleagues and the working environment.	43.0
I just like where I am and what I do.	44.9
I am too old to change my job/employer.	7.0
I am committed to my current employer (or current job).	17.1
I am kind of stuck or locked into my current position.	9.2
Other	3.8
N	316

Two thirds of the career changers had had 1 – 3 career changes, with a quarter having 4 – 6. Career changers were particularly likely to be in ICT and / or from the UK (see table Q19):

Q19: Number of career changes experienced

	N	Percent
0	6	0.9
1	167	25.3
2	141	21.4
3	144	21.8
4	91	13.8
5	52	7.9
6	19	2.9
7 or more	41	6.2
Total	660	100.0

Q21: Consideration of career change over the next five years (in percentages)

Yes	30.6
No	38.3
Do not know	31.1
Total	100.0
N	908

Consideration of career change over the next five years was fairly evenly balanced between the three categories, with the major drivers being progression, seeking another challenge or time for a change. The value of challenge in work comes up again and again in this survey.

Q22: Main reason(s) why you are considering a career change, several answers possible (in percentages)

I am dissatisfied with my current job/position.	20.5
I will be made redundant/I have accepted voluntary redundancy.	3.6
I would like to retrain and work in another field.	17.6
A change in my personal circumstances (i.e. moved location, needed better salary, new caring commitments) will mean that I may have to consider a career change.	25.5
I feel that it is time for a change.	36.7
I feel that it is time for another challenge.	44.2
I would like to be self-employed.	11.9
I would like a permanent contract.	5.4
I would like to progress (i.e. gain promotion or pay rise).	47.8
The opportunities for employment in this geographical area are limited.	5.4
I will be retiring.	3.6
I feel discriminated against in my current position.	5.8
I feel that my work is not valued.	12.2
I feel that my skills are not valued.	21.2
I would like to work in another country.	12.6
I would like to work closer to my home.	6.8
The work I do may be moved to another region or country.	3.6
I would like to increase my working hours.	1.4
I would like to decrease my working hours.	6.5
Other	7.9
N	278

Q 23: Requirements for career progression (respondents who consider career change) (in percentages)

My education and training to date is sufficient	33.9
I should follow more training, but I cannot currently do this	20.8
I should follow more training and intend to do this	40.1
Do not know	5.1
Total	100.0
N	274

60% of those wishing to progress in their career thought they needed to follow more training, with two thirds of the group intending to take more training while one third were currently unable to do so. Only about a third of those thinking of a career change foresaw barriers or difficulties standing in their way, with financial barriers or limited opportunities with current employer both being identified by about one sixth of the respondents.

Q24b: Barriers or difficulties in undertaking a career change do you foresee, several answers possible (respondents who consider career change) (in percentages)

limited opportunities for progression/promotion with current employer	16.2
limited employment opportunities in this sector	10.1
financial barriers	16.5
lack of qualification, experience, training, skills	10.1
lack of transport	1.4
caring commitments	10.4
personal health issues	4.3
too old	4.7
Discrimination	3.6
cultural or linguistic barriers	2.2
geographical / national barriers	5.0
Other	2.9
N	278

Q25: Which of the following types of training would you choose during working time in order to further your career and update your skills? Several answers possible. (in percentages)

group training in your workplace provided by your employer	42.9
individual training at your workplace provided by mentor/tutor/colleague	37.7
course provided by a training centre/organisation/institution at your workplace	53.7
individual training via the internet or audio-visual material	32.2
higher education course alongside work	38.4
Do not need or wish to take part in any training during working time	6.0
Other	4.4
Total	100.0
N	900

A variety of training activities were valued as attractive during work with training courses being the most popular. In relation to training activities outside work formal group activities (seminars, conferences, courses provided by training institutions and HE) were all more popular than individual training via Internet, AV material or a correspondence course. Learning, like working, appears as a strongly social activity to these respondents.

Q26: Which of the following types of training would you choose outside working time in order to further your career and update your skills? Several answers possible. (in percentages)

seminars, conferences	53.8
training leave from work to pursue new career interest	25.6
correspondence course	11.4
course provided by training centre/organisation/institution	51.9
individual training via internet or audio-visual material	31.2
higher education course alongside work	36.3
Do not need or wish to take part in any training outside working time	10.2
Other	1.0
Total	100
N	900

### **3. Key themes arising from the research:**

#### **3.1. Complementary role played by different forms of learning in skill development at work**

The survey highlighted the variety and depth of learning opportunities in many work settings and the increasing differentiation within and between labour markets in the extent to which learning opportunities are available in work settings (with work itself has become an increasingly multi-faceted). However, formal continuing vocational education and training for many workers, particularly in the context of dynamic and/or uncertain labour markets, remains important too. Formal CVT can be used, for example, to update existing skills, develop new skills, consolidate and deepen work-related knowledge and understanding and help maintain employability over a long period. Personal professional development often makes use of complementary forms of learning and development over time, even though much skill development, especially for more highly skilled workers, takes place outside formal training contexts.

#### **3.2. The relationship between career development, CVT and learning while working**

The survey and literature review highlighted how:

- learning while working is an established form of learning at work in many contexts (but especially for the highly skilled).
- the lack of engagement with substantive learning and development increases likelihood of downward career drift.
- employees working in learning-rich work environments are more likely to have a positive disposition towards learning and a proactive approach to career development.
- continuing vocational learning is coupled with career progression and is important for the extent to which individuals engage in continuing learning.
- Learning to learn and linking continuing learning strategically to career development affects individuals' attitudes to continuing vocational learning.

#### **3.3. Enhancing skill development at work**

The survey and literature review pointed to the importance of six key factors to bear in mind when seeking to develop policy and practice to support skills development at work are: extent of opportunities for engagement with challenging work; different patterns of interactions at work; forms of knowledge used at work; whether there is a culture which facilitates supporting the learning of others at work, encourages self-directed learning at work, and aligns with evolving identities at work. One way of contextualising skill development. One way to conceptualise how best to achieve this in different settings could be to apply the following set of ten principles:

- Skills development policy should have twin foci upon enhancing individual development and organisational performance.
- Effective skills development depends on the learning and development of all those who support the learning of others in the workplace.

- Informal learning is a central component of skills development at work.
- Skills development at work involves both individual and social processes and outcomes.
- Skills development at work works best when it promotes the active engagement of the individual as a learner.
- Effective skills development at work is dependent upon the timeliness and quality of feedback and support.
- Effective skills development at work requires some aspects of learning to be systematically developed.
- Effective skills development at work recognises the importance of prior experience and learning.
- Effective skills development at work engages with expertise and valued forms of knowledge.
- Effective skills development at work should engage with individuals' broader life goals.

#### **3.4. Value of a more developmental view of expertise in a knowledge-based society**

The literature review highlighted how a key focus for moving towards a more knowledge-based society should be upon supporting the use of skills in context rather than just increasing the volume of skills per se. An expansive view of the development of expertise would help address issues of transfer of skills, knowledge and experience between different settings; support individuals in developing a frame of mind whereby they continually look to improve their own performance through learning and development and support the learning and development of others; and support organisational commitments to continuing development. A more coherent and comprehensive view of the type of learning and development required to support continuing learning at work can interact with a wide range of education and training provision that varies according to subject, breadth, depth and timing.

#### **3.5. Policy challenges arising from the research**

A major policy challenge is the need for skills development policies and practices to take account of current, and possible future, patterns of individual skills development across the life-course. Our research findings would suggest the following issues need to be tackled:

- although many individuals learn in adaptive ways through challenging work, learning and development which results in substantive changes in attitudes, knowledge or behaviour is often episodic, and the rhetoric of lifelong learning should reflect these two different forms of development: adaptive learning may occur more or less continuously but individuals' transformative learning may follow an irregular rhythm and tempo across the life-course.
- those individuals who do not engage in substantive upskilling or reskilling, for say five to ten years, through either formal CVET or learning through work run the risk of being 'locked into' a particular way of working and are very vulnerable if there is a significant change in their job or their circumstances.

- the focus on formal qualifications as a proxy for learning and development does not do justice to the range, depth and variety of forms of learning while working and we should look to promote the latter and consider the most appropriate timing for validation of learning and the use of qualifications in this process.
- there is a need to provide support for people moving between sectors as well as offering development and progression within sectors.
- low skilled work is not a problem per se (and because of high replacement demand many people may ‘pass through’ such employment) - it is staying in work which lacks challenge or opportunities for development which can erode an individual’s broader employability prospects over the long term. It is important to encourage and support people in seeking more challenging work (especially as this is rated as the most effective form of skill development by the low skilled in almost every country in Europe).
- there is a need to encourage more people to consider mid-career change if we want more older people to remain engaged in the labour market (one of Europe’s key future challenges is an improved integration of older employees into the labour market).
- people need support and guidance to develop coherent career narratives of where they have been; what they are doing now and where they are going.
- a challenging working and learning environment facilitates informal learning and many workers value challenges at work and this in turn produces a positive disposition towards learning. Not all work supplies such challenges, however, and thought should be given as to ways to improve the proportion of high quality jobs.

### **3.6. Job mobility and the importance of career guidance**

Our survey, the literature review and the policy challenges outlined above all highlight the importance of job mobility for individuals in a range of contexts in order to support upskilling, reskilling, employability and integration of older workers for longer in the labour market. The literature review and the survey also highlighted how individuals often valued support in making career decisions. This support could take various forms, but from a policy perspective access to advice and guidance services for adults at times of transition appears crucial in facilitating positive outcomes both for the individual and for the smooth functioning of the labour market.

### **3.7. Richness and diversity of continuing vocational learning: recognition, validation and consolidation of learning leading to further personal development (and possible transformation)**

Our research emphasised the richness and diversity of continuing vocational learning (learning through challenging work, learning through interaction, peer learning etc.), but one challenge is to ensure there are facilitating mechanisms like recognition and validation systems that will enable such learning to be recognised for the purposes of progression in employment, training or employment. Equally, however, there needs to be access to formal continuing vocational education and training programmes (and HE) which can consolidate

such learning whereby individuals can use such programmes as a platform for further individual development (and in some cases transformation of significant aspects of their life).

### **3.8. Support for groups at risk**

Those individuals with the least initial education and training are also the least likely to receive continuing vocational training or to have opportunities to learn while working through engaging in challenging work because their work offers a more restrictive learning environment. Some workers in low skilled employment may feel less motivated to engage in substantive learning precisely because learning does not fit seamlessly alongside their work. However, it was also striking that some people in low skilled employment did have a strong commitment to learning, development and progression – this was particularly likely if they had developed a clear ‘career narrative’ of where they had been, where they were currently and where they were going. Guidance could play a key role in this process in helping people establish such narratives. As previously argued, changing employment so you had more challenging work was a powerful driver of skills development for the low skilled, because learning at work based upon engagement with work keeps motivation to learn high. Attendance on formal VET programmes was also in such cases sometimes seen as a vehicle to improve competences (including in some cases basic skills development), not least because this could involve the recovery and rebuilding of fragile learning identities.

### **3.9. Nature of lifelong learning interventions**

Lifelong learning (LLL) itself as a concept has different dimensions including skill growth, personal development and collaborative learning and LLL interventions may be targeted to achieve different ends. Much LLL policy has been concerned with skill development, especially in relation to upskilling, but some emphasis is now being given to the importance of reskilling – developing new skills and updating existing ones in order to apply them in new contexts. LLL policy could also seek to strengthen learning through networks and other collaborative forms of knowledge creation and sharing.

### **3.10. Perspectives for future research and development**

Further qualitative developments could be put in place on the basis of what has already been achieved through the survey. It could be useful to design new research activities specifically looking at issues of job mobility, learning across the life-course, how to improve career development services in work environments and in particular career counseling activities designed to support career development for people in work (which are often under-developed at present).

## **4. Recommendations for CVT policy and practice:**

### **4.1. Guidance:**

Access to advice and guidance services for adults at times of transition is useful both for individuals and for the smooth functioning of the labour market. However, indications from the research are that differentiated needs-based services would be the most cost effective way of ensuring that the career development support needs of individuals are appropriate or relevant to particular phases and stages of their career trajectories. For example, workers in

undemanding jobs (low skilled employment), those wishing to change sectors or seeking to change intensity of work because of changed responsibilities, and older workers seeking a career change are all groups which could benefit from improved access to information, advice and guidance. Additionally, policy could give greater emphasis to the value of guidance in helping individuals articulate and possibly align goals, expectations, development strategies and outcomes in relation to learning and career development.

#### **4.2. Validation:**

The right for individuals to have major developments in their skills, knowledge and competences recognised is important, and the development of suitable facilitating mechanisms like recognition and validation systems enables such learning to be recognised for the purposes of progression in employment, training or employment. However, the potential scale of this right is so huge it is important that there should be differentiated needs-based provision. For example, a relatively formal review may be appropriate at a point of transition or for a particular purpose. At other times, it may be sufficient for an individual's career development purposes to maintain a portfolio of recognised achievements without further formal accreditation. Equally, however, validation may be valuable in accessing formal continuing vocational education and training (and HE) programmes which can consolidate such learning whereby individuals can use such programmes as a platform for further individual development (and in some cases transformation of significant aspects of their life).

#### **4.3. Rebalance resource allocation more towards CVT:**

By far the greater proportion of the overall VET budget is spent on initial VET. So even a small rebalancing towards continuing vocational training could expand opportunities for adult workers. There is particular value in some substantive CVT programmes such as Master's courses and Meister programmes in lifting workers to a new level of understanding and helping them adopt new ways of thinking and practising. In addition to personal development individuals often highlighted that the social networks they developed on such programmes were also valuable to them in relation to their further career development.

#### **4.4. Build capacity (numbers and quality) of those able to support the learning of others at work**

Managers, supervisors, trainers, mentors, working coaches and 'key workers' may all have responsibilities to support the learning of others at work but may require support to do so effectively.

#### **4.5. Re-engaging older workers in learning and development**

Many older workers in our sample were committed to learning and development, so it is clear that a lack of engagement with learning is not a function of age per se. It is partly about access to opportunities to learn and partly about motivation, so for those who have not engaged in learning for some time then involving them in identifying the type of learning with which they want to engage is critical. This approach underpins both the union learning provision and some state-funded CVT provision. Older workers could also be encouraged to become coaches, mentors or trainers.



#### **4.6. Recommendations about continuing vocational learning:**

CVT policy makers and practitioners should consider the following points of leverage in trying to engage more people in CVT. It is important to recognise importance of the personal dimension in generating commitment to continuing learning; consider the idea of using key transition points to help target provision; and to acknowledge the significance of networks in supporting skill development at work. In constructing a model of how to support effective learning and development at work practitioners could consider the following characteristics in developing or evaluating CVT provision:

- is it personally meaningful for individuals in relation to development in their current occupation or career progression and / or is it personally rewarding, for example, resulting in an increase in self-esteem, confidence as a learner or self-efficacy;
- does it resonate with an individual's motivation, where the individual feels a clear drive for achievement and development;
- does it require active engagement of participants – is it sufficiently demanding (for example, does it challenge or extend current ideas, assumptions, attitudes, constructs, knowledge and understanding);
- does it use reflection upon experience (including reflections on prior learning) as a driver of further learning;
- does it support collaboration between learners: for example, are learners engaged in a collective enterprise (for example, in relation to performance improvement activities; or as a member of group engaged in a formal programme of study) or even if the learning activity is predominantly individual does it draw on the support of significant others in order ways, for example to help consolidate their learning;
- does it require engagement with particular ways of thinking and practising (including how individuals are connected to particular knowledge cultures). This might include development of particular approaches to critical analysis, evaluation, problem-solving etc.;
- is it relevant for vocational progression (either as part of an established progression pathway or through establishing an enhanced personal base from which to seek further career development – for example, through the completion of a substantive further qualification);
- is provision linked to a clear career orientation in that it is linked to an individual's career goals directly or else was helpful in developing skills which were also helpful for career management purposes and does it fit with an individual's clear career narrative (about 'becoming');
- does it provide opportunities for a significant shift in personal perspective (whether this was values-based or interest-based);
- does the CVT require provision of timely feedback to learners;
- does provision help individuals develop greater opportunity awareness, especially because much continuing vocational learning is at least partly dependent upon an

individual being aware of and then taking advantage of opportunities for learning and development;

- does it help individuals' develop judgement, for example in the ability to make choices in relation to values, goals, plans and aspirations; make decisions; self-motivate; and display resilience.

CVT development should also recognise the complementarity of different forms of learning in support of skill development at work. Our research findings provided a strong endorsement for the complementarity of learning through engaging with challenging work and institutionalised learning which is able to help individuals look beyond their immediate context. Such complementary learning has underpinned many apprenticeship systems, sandwich degrees and much professional training. However, we found many examples of the value for individuals when they applied such modes of alternance learning across the life-course: that is, where learning was predominantly work-based but with periods of institutionalised learning interspersed. Learning through challenging work alone may be insufficient and other forms of learning may be necessary to help the employee make a quantum leap in their broader understanding of a particular field.

Quality of work remains a key factor in determining the extent of continuing vocational learning and skills development. Where individuals are engaged in challenging work they are likely to have opportunities for development in significant ways from learning while working. However, a company's field of operation, future horizons, product market strategy and organisation of work may all place constraints on the extent to which workplaces offer 'expansive learning environments.' Where a company offers only limited opportunities for substantive learning while working efforts to encourage employers to offer additional training have had only limited success, not least because employers may think employees would then be more likely to leave. Public policy should therefore perhaps focus upon giving workers entitlements to guidance and further learning opportunities.

CVT development could also be linked to the notion developed by Amartya Sen (1999) of the importance of developing individual capabilities in a broader sense. Applying this idea to skill development at work the ultimate goal is to increase the freedom for individuals to exercise greater control over their own lives (in relation to what they value being or doing): this includes expanding opportunities to access knowledge, meaningful work, significant relationships and exercise self-direction. Other capabilities (ways of being and doing) could benefit from engagement with other forms of education and training.

## References

- Arthur, M. B., Hall, D. T., & Lawrence, B. S.** (1989). *Handbook of career theory*. Cambridge: Cambridge University Press.
- Ball, B.** (1996). *Assessing Your Career: Time for Change?* Leicester: British Psychological Society, Blackwall.
- Banks, M., Bates, I., Breakwell, G., Bynner, J., Elmer, N. and Jamieson, L.** (1992). *Careers and Identities*. Buckingham: Open University Press.
- Boyatzis, R., Goleman, D., & Rhee, K.** (2000). Clustering competence in emotional intelligence: Insights from the emotional competence inventory. In R. B.-O. J. Parker (Ed.), *Handbook of Emotional Intelligence* (pp. 343-362). San Francisco: Jossey-Bass.
- Bright, J. E. H., Pryor, R. G. L., Wilkenfeld, S. H., & Earl, J.** (2005). The Role of Social Context and Serendipitous Events in Career Decision Making. *International Journal for Educational and Vocational Guidance* 5(1), 19-36.
- Brynin, M. and Ramioul, M.** (2007) The transformation of work? A quantitative evaluation of the shape of employment in Europe. An introduction to the research reports from the quantitative research of WORKS. In N. Greenan, E. Kalugina and E. Walkowiak *The transformation of work? D9.2.2 – Trends in work organisation*, CEE, France: WORKS Project.
- European Commission Communication** (2009) *Key competences for a changing world: Draft 2010 joint progress report of the Council and the Commission on the implementation of the "Education & Training 2010 work programme"* SEC (2009) 640 final, 25.11.2009: Brussels.
- Gati, I., & Saka, N.** (2001). High school students' career-related decision-making difficulties. *Journal of Counselling and Development*, 79(3), 331-340.
- London, M., & Smither, J. W.** (1999). Career-related continuous learning: defining the construct and mapping the process. In G. E. Ferris (Ed.), *Research in Personnel and Human Resources Management* (pp. 81-122). Oxford: Elsevier.
- Mitchell, K. E., Levin, A. S., & Krumboltz, J. D.** (1999). Planned Happenstance: Constructing Unexpected Career Opportunities. *Journal of Counseling and Development*, 77(2), 115-124.
- Osipow, S. H., & Fitzgerald, L. F.** (1996). *Theories of career development* (4th edn.). Needham Heights, Massachusetts: Allyn & Bacon.
- Quigley, N. R., & Tymon, W. G.** (2006). Toward an integrated model of intrinsic motivation and career self-management. *Career Development International*, 11(6), 522-543.
- Rowold, J., & Schilling, J.** (2006). Career-related continuous learning: Longitudinal predictive power of employees' job and career attitudes. *Career Development International*, 11(6), 489-503.
- Sen, Amartya** (1999). *Development As Freedom*. New York: Knopf.
- Young, R.A. & Collin, A.** (2000) Introduction: Framing the future of career, in A. Collin & R. A. Young (Eds.) *The Future of Career*, Cambridge: Cambridge University Press.
- Van Esbroeck, R., & Athanasou, J. A.** (2008). Introduction. In J. A. Athanasou & R. Van Esbroeck (Eds.), *International Handbook of Career Guidance* (pp. 1-22). Dordrecht: Springer Science + Business Media B.V.