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*building on what we know*

career learning on the net:  
**the information**

Bill Law

*The* Career-learning CAFÉ

[www.hihohiho.com](http://www.hihohiho.com)

Bill Law (2010)  
careers work on the net  
the information

free on-line at  
[www.hihohiho.com/newthinking/crlrnintrntbox.pdf](http://www.hihohiho.com/newthinking/crlrnintrntbox.pdf)

what research and commentaries say about careers work on the net - helping career management - hindering career management - critical thinking on the net - new practice

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information supporting  
Bill Law (2010)  
careers work on the net:  
colonise or inhabit?

free on-line at  
[www.hihohiho.com/newthinking/crlrninternet.pdf](http://www.hihohiho.com/newthinking/crlrninternet.pdf)

how 'colonising' the net with conventional careers-work thinking is missing a bigger opportunity - which is to engage students and clients in critical thinking - probing and interrogating what they find - working with them as partners

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a companion piece with  
Bill Law (1992, 2010)  
a career-learning theory

in A G Watts, Bill Law, John Killeen, Jennifer M Kidd and Ruth Hawthorn  
*Rethinking Careers Education and Guidance - Theory, Policy and Practice*  
London: Routledge

now free-on-line at  
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an account of critical thinking in career management - thinking-feeling - processing stage-by-stage - leading to readiness for action.

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## contents

Pages iii-xvi contain the detailed and referenced information which is signposted from information boxes in the monograph

### *careers work on the net: colonise or inhabit?*

The information is set out in handout form. The collection is resource material to support your enquiry-and-development work with colleagues.

Each set of references appear at the end of each panel.

A summary of the coverage of each is set out and indexed below.

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### doubts

#### *the extent of careers work on the net*

- |                   |   |                         |
|-------------------|---|-------------------------|
| <b>box<br/>#1</b> | <ol style="list-style-type: none"><li>1. at first careers work grafted its professional process onto digital technologies;</li><li>2. educational attitudes to ict are in general instrumental and not overly impressed;</li><li>3. career workers do not make wide-ranging use of the net - neglecting its interactive forms;</li><li>4. findings like these seem to support more digital literacy in careers workers;</li><li>5. but students and clients use the net independently of careers workers;</li><li>6. career-workers do not judge efforts to become technically expert as cost-effective;</li><li>7. the range of possibilities for engaging with internet is becoming overwhelming;</li><li>8. professional preoccupations persist on how careers-work processes can be digitised;</li><li>9. students and clients make little use of dedicated careers-work sites.</li></ol> | <b>pages<br/>iii-iv</b> |
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### hopes

#### *the net helping career management*

- |                   |   |                       |
|-------------------|---|-----------------------|
| <b>box<br/>#2</b> | <ol style="list-style-type: none"><li>1. the internet is celebrated as liberating people from inept authoritarian interference;</li><li>2. it has, in gaming, untapped skill-development potential;</li><li>3. the net's interactivity empowers people for more satisfying relationships to work life;</li><li>4. it can especially advance the careers of the poor and the disconnected;</li><li>5. it draws on a range of skills which equip people for contemporary life;</li><li>6. it's interactive dialogue can deepen self-awareness;</li><li>7. it helps to form a self-image which can be shared and transferred into off-line life;</li><li>8. Its use of words and images are bridges between on-line and off-line life.</li></ol> | <b>pages<br/>v-vi</b> |
|-------------------|---|-----------------------|

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## **risks**

### ***the net hindering career management***

**box  
#3**

1. the assertion of property rights can distort what people put on the net;
2. producer interests may expose users to risk;
3. anecdotal evidence suggests that habitual use of the internet trivialises thinking;
4. some delicately-balanced learning may be inadvertently damaged;
5. the net's engagement of short-term memory alters self-awareness;
6. changed reading methods may distort what we notice in off-line experience;
7. there is no basis for optimism concerning the critical use of the internet;
8. the net creates commercially- and socially-defined enclaves which can limit horizons;
9. any social interaction can unfairly harm some poorly-positioned users;
10. the net encourages seeking what is merely familiar, comfortable and reassuring;
11. providers of internet services can have an interest in controlling what we seek;
12. the use of the internet may be an example of a general invasion of harmful technologies;
13. we may be over-impressed by the technology and not-enough interested in social value;
14. we might heed a deepening modern-life antagonism to the intrusion of machines.

**pages  
vii-xi**

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## **response**

### ***critical thinking for career management***

**box  
#4**

1. the internet should present mind-broadening approaches to careers work;
2. it is tool, which students need to be helped to use - to expand their thinking;
3. it develops a social need to reflect on an unfolding public performance by a private self;
4. some immediate responses are for teachers positively to teach useful strategies;
5. process-driven work using research-based cross-curricular scholarship is also urged;
6. the internet calls on more than one kind of literacy - and these are transferable skills;
7. it shifts emphasis from content to process - the teacher as more a partner than a source;
8. critical skills need engagement with complex tasks - involving the use of the internet;
9. the task is to enable them to make sense of what they find;
10. collections of attractive and performative learning tools are beginning to appear;
11. critical thinking is increasingly urged as the core need.

**pages  
xii-xiv**

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## **resolution**

### ***inhabiting the net - in practice***

**box  
#5**

- > web 1.0 can equip people to think about career on a full range of life-related dimensions;
- > web 2.0 can increase the interactive scope of ready-made psychometrics and date-bases;
- > web 3.0 can engage students and clients in probing examinations of all that they find.

**pages  
xv-xvi**

### information-box #1 - doubts *the extent of careers work on the net*

1. More than a decade ago A G **Watts** (1996) set out a classic case for grafting careers-work ideas and methods onto ict. Its analysis ranged from using digital technologies to present self-assessment profiles, through to using them in preparing cvs. It was before the potential of web 2.0 and 3.0 had become visible. And, so, the principal issues raised were whether digital technology is wide and reliable enough to do justice to careers-work processes set up by expert professionals. But the author foresees a time when individual control of ict career-management processes will become more prevalent.
2. That prediction has not been realised in partnership with professionals. Nick **Morrison's** (2010) background study of teacher attitudes to ict explains why. Value-for-money is the issue. A survey of practitioners, managers and researchers in education suggests that much ict kit is never used and is quickly outdated. It is used in part because it is seen as a way of meeting official expectations or is thought to be something that students expect, It is seen less as a way of improving learning. Sophisticated equipment is sometimes used in mundane ways. Some claims by ict producers are unsubstantiated. Formal research does not invariably show benefits. And teachers are pragmatic: if ict will do things better, quicker or cheaper, then they will use it. But they see the experience of learning as more important than the tool - and good ict cannot make bad teaching better.
3. A survey by Chris **Bosley** and colleagues (2005) illustrates a similar resistance among today's careers workers. It is associated with a lack of confidence in using it. Teachers appear reasonably comfortable with using word processing, data-bases, e-mail and presentation software (such as powerpoints) to enhance the kind of things that they are already doing. And there is some use of chat-rooms. But there is greater unease about what careers workers feel they have to bring to all that is now happening on the net.
4. An analysis by Anthony **Barnes** and colleague (2010) accords with this view. They argue for increased technological literacy on the part of careers workers, but they suggest no headway in the use of the latest versions of the internet.
5. Tristram **Hooley** and others (2010) recognise how students and clients use the internet independently of careers workers. They seek an untapped breadth of possibilities calling for the engagement of an internet-based 'culture, education and skills' - standing alongside 'ict skills'. The researchers detail a limited range of activities that guidance has undertaken on the net. But, because they are primarily looking for policy recommendations for face-to-face information-advice-and-guidance, they say little about the need for curriculum support for the better use of the net.
6. A small-scale enquiry into how careers advisers use the net to convey labour-market information (Jenny **Bimrose** and others, 2010a) explains some of careers workers' reluctance to make extensive use of the net. The effort to become technically expert is commonly assessed as not cost-effective - not worth the effort. The researchers reports low levels of engagement - not a priority for development. The technology is used is mainly for communication by e-mail, but is not much for developing new material. Little has been done to relate advisers skills to the use of the internet.
7. A parallel report for the UK Commission for Employment and Skills (Jenny **Bimrose** and colleague, 2010b) elaborates findings on provider reluctance. It shows the sheer range of digital formats available as appearing to careers workers as overwhelming. That range is argued to be particularly important for vulnerable groups in most need of career-management help. However, the report finds that - although some limited and static resources have been developed - the more interactive possibilities for communication and material development have been neglected. The researchers attribute this shortfall to the a lack of professional familiarity with the processes.

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8. Despite all of this, the idea that digital technology can be a servant of professional careers work persists. James **Sampson** with others (2010) maps the careers-work uses of ict over the past decade. They find nine categories of use, all of them about how careers work can incorporate digital technologies. They cite approaching 200 references in the professional literature - mostly reporting what careers work people say about the net. The issues are: how practitioners find value-for-money products, and what developer-responsibilities are in this regard. All refer to the uses of the net in guidance and counselling. Few speak of the career-management uses the students and clients make of the other-than-career-work internet. And this is not a report on frequency of use. But we may wonder how many pages of citations might be found which look at how users turn to those other sources, how they rate careers-work sources, and whether the uses of curriculum can usefully figure in how they search for credible and useful help. The accompanying pamphlet may be one of the first - on a short list

9. Provider reluctance is mirrored by user neglect. Kezia **Richmond** and her colleague (2010) conduct a survey which shows how graduates make use of social networking in managing careers. To a lesser extent graduates also use blogs and forums for seeking useful information and contacts. They prefer the internet to books. But they see a need to keep the personal and professional separate - their main use of social networking is for leisure purposes. A few make direct contact with recruiters, and all of these found it a positive experience. The university has its own careers-service website linked to career management sites. But the researchers report no evidence that graduates used any other careers-work sites as part of any of search.

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Jenny **Bimrose**, Sally-Anne Barnes and Graham Attwell (2010a). *An Investigation Into the Skills Needed by Connexions Personal Advisers to Develop Internet-Based Guidance*. Bedford: CfBT

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Nick **Morrison** (2001). Byte the Dust. *Times Education Supplement*, 20<sup>th</sup> July/ Website: <http://www.tes.co.uk/article.aspx?storycode=6052462>

Kezia **Richmond** & Louise Stephens (2010). *Social Networking and Careers - a Survey Investigating the Use of Social Networking Sites for Career Research, Networking and Profile Among LSE Students and Graduates*. London: LSE Careers. Website: <http://www.slideshare.net/Richmonk10/lse-careers-social-networking-and-careers-survey-2010>

James P **Sampson** jr, Jon D Shy, Marcus Offer and V Casey Doziere (2010). 'An analysis of the design and use of information and communication technology in career guidance from 1990 to 2009'. *Career Development and Research*, 25.

A G **Watts** (1996) 'Computers in Guidance' In A.G. Watts and others, *Rethinking Careers Education and Guidance: Theory, Policy and Practice*. London: Routledge.

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## information-box #2 - hopes the net helping career management

1. Enthusiasts like Don **Tapscott** (1998) seek evidence showing how access to the internet has liberated what he calls 'the net generation' from the influence of parenting, schooling, and other 'authorities'. Don Tapscott doesn't develop the career-management implications. But such influences can easily be seen as authoritarian. And where they are arbitrary and damaging - and they all can be - finding alternative sources of help and advice will be felt to be liberating. Indeed, we have career-work narrative sites which make a point of including a range of stories showing how people have successfully moved on - beyond the hurtful, disappointing or annoying influence of family, school or careers adviser (Bill **Law**, 2010).

2. There is a case to be made for how life-relevant skills can be gained from interactive video games (Tom **Chatfield**, 2010). Play has evolved for its value in learning how to manage things. And on-line play develops skills in the management of space, time and logic. We still need to find how such play develops skills which can be transferred into other uses - which is not easy to substantiate. But there are two potentially useful claims. One is that on-line gaming techniques can be adapted as research tools for extending our understanding of how people work on life-management issues. The other is that digitally-based gaming is worth further development as a learning tool. Both claims deserve further attention. And both are potentially useful to understanding and enabling career management.

3. Clay **Shirky** (2008) is an enthusiast for the self-propelled creativity afforded by the internet. He describes what he calls 'crowd-sourcing' as a fruitful way of gathering knowledge from on-line groups. He develops the case (2010) by suggesting that social networking brings together human resources in a way that is independent of formal organisational interests. He draws a parallel between the impact of the internet and the printing press - both change the way we think. But he sees the current change as not so much creating something new, but restoring an older and more intimate form of social relations. While tv commands attention, tells stories and passes the time, web 3.0 invites 'consuming, producing and sharing' - in a way driven by love not money. If he is right about the independence, motivations, liberation and creativity that the internet brings, it will reposition people in relation to working life - and in ways that we have barely begun to understand.

4. Evgeny **Morzove** (2010) acknowledges that the internet may well mislead some addicted people into embracing a shallow view of things. But he argues that we can worry too much about these damaging personal effects. We should not evaluate the internet on such a narrow a basis. There is also a public good: the internet can improve how people are heard, get educated, earn a living, and move up the social ladder. Whatever problems may be posed will not be resolved by just attending to what we are currently reporting, we should be using a broader frame of reference. It is worth asking - 'would the world's poor pass up the benefits of the internet in case it made them too shallow?'

5. There are also arguments that the internet modifies brain functioning. But, argues John **Naish** (2010), they are overstated. The fact is that there is no experience - on- or off-line - which does not in some way modify that kind of brain plasticity. We may appear to be observing some increased narcissism among habitual net users. But there are also positive effects, two in particular: those associated with coordinating group responses to social and political change: and those associated with rapid gathering and assembling data. Indeed, much of what we now observe was anticipated by James **Flynn's** (2007) carefully constructed explanation of apparent increases in intelligence. He shows that much contemporary experience favours the sort of specialised adaptations that, we now find, the net calls upon. Our tests bump-up scores, particularly by seeking these kinds of adaptive abilities, more than they seek longer-established everyday skills that belong to another era. The net is drawing on a new range of skills for working life.

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6. John **Bishop** (2009) is among the first to probe for a deeper and more detailed examination of how the net helps in career management. His conclusions are based on ethnographic observation of trainee teachers using multimedia digital technologies as part of their training. They are preparing for what they will do in off-line work with their own students. This researcher finds the internet is a dialogue between - on the one hand - what is found, and - on the other - a person's inner life. And it is on-going - a continuing discourse. Everything becomes a matter of interpretation and re-interpretation - which is a process of achieving deeper self-awareness for the management of off-line life.

7. Kerry **Mallan** (2009) finds a less formal but similarly interwoven connectedness among young people social networking on the net. They seek greater visibility for self, but in a space shared with others. Their use of digital imagery, in trusted and disclosing social networks, supports a playful working with interpretation and reinterpretation of what they find. This process can become subversive. But underlying everything it is saying both 'look at me' and 'look at us' - creating a shared image of self. Like John Bishop's trainee teachers, this on-line virtual experience becomes a basis for off-line real action - in both social life and work life. Kerry Mallan acknowledges that such disclosure has both promise and peril.

8. Graphic images feature widely in the uses of digital technology. And Stephen **Warburton** (2010) assembles material illustrating how students can usefully learn from producing their own photographic and graphic images. His interview-based review leads him to argue that digital images make a bridge between on-line technology and off-line life - including working life. In using them students can call on both professional and personal sources. Like Kerry Mallan he sees the possibility of collisions between on-line and off-line identities. He therefore suggests that these methods as best used where students can work tentatively and reflectively.

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John **Bishop** (2009). 'Pre-service teacher discourses - authoring selves through multimodal compositions'. *Digital Culture & Education*, 1(1), pp.31-50. Website: [http://www.digitalcultureandeducation.com/cms/wp-content/uploads/2009/05/dce1014\\_bishop\\_2009.pdf](http://www.digitalcultureandeducation.com/cms/wp-content/uploads/2009/05/dce1014_bishop_2009.pdf)

Tom **Chatfield** (2010). *Fun Inc - Why Games Are the 21st Century's Most Serious Business*. London: Virgin Books

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Evgeny **Morzove** (2010). 'Losing our minds to the web'. *Prospect*, July

John **Naish** (2010). 'Rise of the laptop revolutionaries'. *New Statesman*, 12th July

Clay **Shirky** (2008). *Here Comes Everybody - The Power of Organising Without Organisations*. London: Penguin Group

Clay **Shirky** (2010). *Cognitive Surplus - Creativity and Generosity in a Connected Age*. London: Penguin Group

Don **Tapscott** (1998). *Growing Up Digital - The Rise of the Net Generation*. New York: McGraw Hill

Stephen **Warburton**, (2010). *Identity Matters*, London: Creative Commons King's College. Website: [http://digitaldisruptions.org/rhizome/wp-content/uploads/2010/06/rhiz08\\_DigitalIdentityMatters.pdf](http://digitaldisruptions.org/rhizome/wp-content/uploads/2010/06/rhiz08_DigitalIdentityMatters.pdf)

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### information-box #3 - risks *the net hindering career management*

1. Some doubts about the net are principally concerned with income and the protection of property rights. Tony **Curzon Price** (2010) develops this concern with an examination of how empowerment may mean freedom to users, but it means tyranny over providers. He calls for tighter regulation. But such concerns for such gains call for wider discussion than this author allows. Seeking income or funding influences ideas about what should appear. For example, career narrative sites - seeking sponsorship - might favour enticingly up-beat stories from celebrated characters, in order to attract more visitors. The wider point is that the need for measurable success influences what kinds of material we work with. And such calculations hardly count as 'impartiality' in careers work.
2. The issue raised above is diffuse. Some others may put students and clients at immediate and specific risk - particularly where interaction invites unguarded disclosure. Even net supporters are prepared to acknowledge such risks. For example, concerning recruitment-and-selection people trawling the internet for information about applicants. Users can protect themselves against that kind of intrusion. But employers can now pay for 'deep-net' searches which breach protective boundaries around shopping, surfing and networking behaviour. It is estimated that the deep-net may be 500-times larger than the conventionally-searched net. Alongside that, the degree of exposure is constantly increasing: it is now possible, using global positioning systems, to track how users are geographically moving about. This is useful to providers for timing and directing promotional material. There are some indications - investigated by Leo **Hickman** (2010) - that the owners of social-networking sites are unwilling to forego these kinds of commercial advantage. The implications call for careers-work attention to how they best work with students and clients using the net as a source of information and advice.
3. There may also be effects that nobody intends but which are nonetheless damaging. There are claims that use of the internet actually damages learning. There is little hard evidence on this. But responsibly-reported anecdotes (for example Laura **Miller**, 2010) should not be summarily dismissed. The Web, she claims, '...with its countless spinning, dancing, blinking, multi-coloured and goodie-filled margins, tempts us away (to a) scattered, skittering, browsing mind-set'.
4. Some such doubts rest on an understanding of the complexity of learning processes. Maryanne **Wolf** (2008) assembles a detailed account of the various ways in which damage can be done to our delicately-poised ability to read in any depth. And Tara **Brabazon** (2002) attacks the way in which digitisation of education and assessment undermines the discovery of underlying meaning in what we find. Arguments like these often point to brain plasticity. We know that innate neurology can be altered by acquired experience (memorising traffic routes enlarges a taxi-driver's hippocampus). It means that brain functioning can be inadvertently reshaped - for ill as well as for good. The worry is about what aspects brain functioning are being lost. This is relevant to career management. Careers thinking has draws heavily on the value of planfulness rather than distractibility, deep commitment rather than superficial distraction, and reliability rather than detachment. We should be examining whether internet processes, which may work well enough for personal shopping, are helpful in career management. Because career management calls up a wider range of critical domestic and work-based interests in what people do about working life.

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5. Nicholas **Carr** (2010) points to accumulating evidence concerning these individual effects. The web presents graphics and text in multi-dimensional space. It does more than show a stage-by-stage unfolding of a linear story or argument. It also offers diversionary links which invite abandonment of what you first found. Some people leave the text, part-read - and do not return. This is what Laura Miller anecdotally reports. But Nicholas Carr suggests a deeper loss: the constant diversions that the net signpost means that we engage short-term memory more than long-term memory. This is different from working through linear text which - Nicholas Carr claims - we better enjoy, understand and remember. But short-term internet overload scrambles long-term memory. And it is long-term memory which is the very material of the self. So, where there is less uninterrupted and meditative thinking, less gets embedded in long-term and re-usable form. Nicholas Carr argues that web 3.0 - with its repetitive, intensive, interactive and addictive features - might have been designed for remoulding brain plasticity. However, there is a trade-off: we get better at visual-spatial thinking and multitasking; but we lose some of our capacity for the deep processing - which supports critical thinking, creativity and mindful reflection. There's nothing wrong with skimming - but brain plasticity can make for habitual cursory reading and hurried-and-distracted thinking. This not only effects the individual, it changes the culture - not least, because it reduces the demand for material that needs to be attended to deeply and attentively. Cultural change means that people are changing the way they learn for career management. And if they do that we must change the way we help them. If we can work out how best to do that.

6. There is some support for Nicholas Carr's suggestions in the evidence of eye-tracking devices. They record, second-by-second, how people scan website screens (Jakob **Nielsen** and her colleague, 2010). Habitual users skip from item to item more frequently, and abandon each screen sooner. The habit may transfer to their use of print media. We may be losing the pleasures and insights of slow and attentive reading (John **Miedema**, 2009). Slow reading internalises material, so that it becomes a shared experience with the source of the writing - bringing a sustained sense of contact with other people and different values. If we were losing this it would have observable consequences for career-management, for example in the hit-and-run way people conduct exchanges with educators, selectors, trainers, colleagues, customers and managers.

7. More direct evidence on the superficiality of net-use by individuals comes from Eszter **Hargittai** and her colleagues (2010). It is a study of over 100 American students - both by questioning users and directly observing their behaviour. It shows that so-called 'digital natives' are not as sophisticated users of the net as enthusiasts claim. They can get what they seek from the technology, and they value the net mainly for its ease of use. Returning to issues of provider partiality, habitual net-users pay little heed to who owns and operates a site, and they do not probe the credibility of sources. This level of probing would be worrisome enough if the net were used only for fun and shopping purposes. Such superficial levels of use in career-management would be more worrying. The study finds that students are too trusting in website listings by search engines. Few bother to check source credentials. These findings flatly deny the optimistic claims concerning liberation and empowerment made by net enthusiast. The plea here is for informed internet citizenry; and the claim is that the help needed is not commonly provided.

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8. There are changing social conditions. A factor is the way in which digital technologies have had two effects: they massively reduce the costs of manufacture and distribution; and they permit the processes of precisely locating and communicating with markets. These changing dynamics mean that commerce can be profitable in smaller market-places: it is no longer exclusively about seeking economies of scale; it is increasingly about optimal selling into small markets. The techniques are interactive with customers. Commercial sites can tell you what 'people-like-you' also buy - establishing how your choice links you to a group sharing similar market-place preferences. The resulting economic statistics do not represent markets in a centrally-dominated bell-curve, instead they track what Chris **Anderson** (2008, 2009) calls 'the long tail'. It stretches from a few markets which attract big trade, and tapers into a long line of small markets each attracting enough trade to prosper. Each is a niche. Career-management also has its long tail. People occupy different niches in the way they see working life. Some have concerns for their own advancement, others for the impact of work on family life. Yet others have concerns for the impact of work on local communities. And there are concerns for working conditions in developing economies, for the impact of work-life for threatened species, and for the carbon footprint of work. Just as commercial markets have adjusted to these social changes for their purposes, so contemporary careers work needs to recognise the different significances that work can have for different groups of people. But, for its different purposes, it needs to resist the trend for searching more narrowly.

9. Ideas about social change raise issues for social and cultural capital. These ideas, though not developed with reference to the internet, but they are relevant to any balancing of how it helps and hinders career management. Robert **Putnam** (2000) argues the value of all social links. A major distinction is useful to thinking about the internet: 'bonding' links a person to a familiar group - useful for 'getting by'; while 'bridging' links a person to a new group - useful for 'getting ahead'. In both ways a range of contacts equips a person to deal with life's challenges - including those in working life. The analysis focuses the individual - who may be harmfully 'bowling alone' or helpfully joining a league. The analysis raises no questions about whether society is organised so that the advantages are fairly accessed. By contrast, Pierre **Bourdieu** (1973) finds both help and hindrance in social inhabitation. He argues that this 'habitus' socialises people into habits-of-mind which may help some people move on, but hold others back. Social inhabitation can help the well positioned to use their 'cultural capital'. But it can hinder people disadvantageously located in an inequitable system. Paul Bourdieu's work is commonly cited in career literature. Phil **Hodkinson** and his colleagues (1996) do so - with some reference to the need to deal with possible harmful effects of some social memberships. The various ways in which such allegiances can hinder career management is developed in more detail by community-interaction thinking (Bill **Law**, 1981, 2009) - although not yet in terms of internet uses.

10. Some concerned commentators have started to get into detail, specifically on the consequences of internet niches which can both liberate and entrap. The processes of finding friends, listing favourites, and following tweets form enclaves. Each group of followers welcomes 'people-like-us' - and excludes 'people-not-like-us'. It is true that on-line friends are often also off-line friends: social enclaves are both digitally listed and geographically post-coded. The internet reinforces what face-to-face contact initiates. Some reports suggest that internet empowerment is less a liberating lever than a bullying cosh. In all cases, the dynamic is in the way people are expected to see things. Remaining inside a group is to settle for a fragmentary way-of-seeing - the enclave becomes an enclosure, and the enclosure can become a trap. Cass **Sunstein** (2009) claims to find these effects. He links them to the psychology of cognitive dissonance. That thinking shows how we prefer to find what confirms our views, rather than what challenges them. He worries about the way in which the internet panders to this 'cascading' effect - populating itself with more-or-less isolated enclaves, their inhabitants recycling, rather than expanding, existing beliefs. Effective career management relies on a willingness to search beyond the familiar and the comfortable. In a changing world people increasingly need to find how they can 'let go and move on'. In this respect, fragmenting enclaves are bad news for career management.

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11. There are signs that this is a fragmenting trend that the major internet players want to pursue. Christopher **Mims** (2010) reports that internet giants - Microsoft, Google and Facebook - are developing a single shared standard for signposting users to websites. A shared icon replaces all other ways of signalling feed-and-link preferences. The icon flags sources in a comprehensive signposting of three bases for links: the subject, the activity and the contact. Proposed activities prominently include 'follow', 'join', 'play', 'share' and 'tag'. The central design feature is to 'coalesce and merge' all contacts into a single device for making and controlling links. Such one-track routing is convenient. But, if Chris Anderson, Pierre Bourdieu and Cass Sunstein are right, it will narrowly channel thinking for career-management.

12. Susan **Greenfield** (2003) works on a broader canvass - characterising the internet as a feature of a more general technology-driven trend. She argues that what we do about our lives - in diet, in social life, in working life and in conflict - is influenced by our use of pharmacology, genetics and the communication media. She worries that these technologies can make it impossible to hold on to any meaningful concept of self. These are issues worth raising. But the case is more of a warning about what might happen than a report of what is happening

13. However, there are other more closely argued understandings of the internet in its relationships with society. The very subversion, which some welcome, is questioned by others. Neil **Selwyn** (2010) agrees with Leo Hickman that there is a social, moral and cultural context for the use of digital technologies. The net does more than afford empowering technical possibilities. Neil Selwyn argues that we need better to understand how the 'messy realities' of technology are understood in this social context. The question should be less to do with how technology 'works', and more about how technologies relate to the social relations they produce - and reproduce. And with whose interest these processes serve. Those interests confront social constructions which any society must to some extent share. There is nothing new about confronting alternative ways-of-seeing; but Neil Selwyn argues that we need to think more about how society uses the net - and how the net shapes society.

14. There may be a yet deeper collective-mind lurking beneath some of these more broadly-based attitudes to the net. Tom **McCarthy** (2010) carefully tracks a prevalent unease in writing about relationship between machinery and humanity. Machines are variously portrayed in negative terms - as an enemy, a usurper, a disappointed hope, an augury - and, now, a 'meaningless crackle'. For characters like Don Quixote, Thomas Jefferson, Franz Kafka, Sigmund Freud and Charlie Chaplin these negative feelings energise how people go about their work. Their doubts and fears are embedded in both early- and late-modern experience of work. It is not fanciful to find how they are now being incorporated into contemporary responses to digital technology - the word 'luddite' occasionally crops up. In our work the word is not usually made to refer to students and clients; it is more-often made to refer to teachers and advisers.

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## **information-box #4 - responses** ***digital literacy for career management***

1. An enquiry into the views of opinion-leaders in guidance (**Skills Commission**, 2010). suggests that guidance needs to extend its methods beyond matching people's traits to work opportunities. It urges that the internet be used to help a broadening of uses - rather than merely extending existing techniques. It suggests that this would be of particular use to people who do not have a range of contacts in the working world. However, this is an enquiry into guidance; and it speaks of careers education as no more than an adjunct to guidance. No attempt is made to understand what the distinctive uses of curriculum may be for enabling career management on the net.

2. Lev **Vygotsky** (1978) does not mention the internet, but his understanding of the psychology of learning speaks of it. He shows that learning, whether formal or in imaginative play, always engages a linguistic and graphic 'tool' - which is what the internet is. The research leads him to see curriculum as enabling the use of that tool. In that thinking the tool always belongs to a particular culture - at a particular time and location. And how this works out shapes the learning that people engage. But he sees these realities as no more than starting points. This is because the role of teachers can 'scaffold' new learning in a stage-by-stage departure from this starting point, moving students into new 'zones of learning'. Learning for career management can therefore draw on internet 'tools'. They enable students, supported by educative 'scaffolds', to enter unforeseen 'zones'. There are important implications here for learning methods for students in their use of the internet - not least for expanding career-management horizons.

3. In setting this process in social context, sociologists - also unwittingly - anticipate the internet. Long before the net appeared Erving **Goffman** (1959) speaks of social interaction as performance. He shows how we each act out roles to belong to particular social situations - adapting what we do to fit each setting. This thinking anticipates the side-by-side use of off-line and on-line behaviour. The one is a real-and-private, the other virtual-and-public; the one speaking of an inner life, the other engaged in an outer performance. At about the same time David **Riesman** (1961) suggests an unfolding of era-by-era changes in how we maintain that inner-outer balance. In a period of more-or-less stable early-modern conditions we find it natural to see ourselves as part of an inherited tradition. But as new and unfettered opportunities expand horizons, we each need a portable and inner self - what David Riesman calls a guiding 'gyroscope'. But, then, as economy-and-society becomes more constrained we become more anxiously alert to the need to meet the expectations of others - as if tuned to a social 'radar'. The net can be understood as relating that private self to that public performance. Where performance dominates, attention is directed to attractiveness, plausibility and pay-off. The career-management manifestation of all this is personal branding - shifting attention from what a person inwardly is to what a person appears to be. Culturally this would be reflected in extreme (rather than congenial) sports, plot- (rather than character-) driven stories, and instinctively- (rather than reflectively-) resolved conflict. Careers work needs a critical examination of these cultural factors. And the internet can help. With impressive prescience David Riesman sees how we can be enabled able to draw on any combination of social expectation, inner life and tradition. We can learn to juggle with where we are, who we are, and what we have come from. But we would then need to interrogate who is influencing us, where that is going on, and how we got here. And, in order to do that we would need to be capable of reflecting on the way we use those bases for autonomous action. Erving Goffman and David Riesman, between them, map much of the terrain where our work can most usefully engage the net to enable career management.

4. But how to do that? Neil **Selwyn** (2010), who acknowledges the cultural importance of internet use, urges an interventionist response. We should look, not to more freedom from rule-bound teaching, but to more respect for formal schooling. His argument is that students don't know enough to know how to respond to technology - 'they cannot know what they do not know'. The teacher must therefore be a positive source of strategies and expertise - informing and directing the activities of students. This is not a technique that careers work has welcomed - and it is not a technique for enabling self-propelled critical thinking for career management.

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5. Paul **Ramsden** (2010) looks to the need for critical thinking. He speaks of higher education curriculum, though much of the dynamics he engages is now net-transmitted. He claims that developing critical thinking in students is hampered by vocational pressures to produce compliant employees. It encourages students to work reproductively on what they find. A wider ability to think critically needs a willingness to work inter-disciplinarily - across boundaries. It also requires that this engagement is both rigorous and engaging. Most significantly it involves mutually-helping relationship between students and teachers. Paul Ramsden argues that this that level of scholarly activity is best enabled by teachers who are also researchers. This is because what matters is how students go about learning - that is to know enough to know how to change what they find. This, he claims, is the greatest gift that education can offer to students.

6. Thomas **Mackey** and colleague (2010) go into more detail. What they say about literacy in general applies to work-life in particular. They point to how contemporary learning requires an ability to draw on more than one kind of literacy. Like Erving Goffman and David Riesman, they can see that people need to engage with a great deal. They need to be able to see what is going on, make contact, evaluate what they find, incorporate that into their thinking, use it in their planning, understand it as a basis for action, produce information and share it. These researchers point out that the formats, and the information, that the media convey may change; but the ability to adapt and engage is transferable across the field, and from one stage-of-learning to the next. However, while the article points to possible applications, it does not go into the processes by which such learning can be enabled.

7. Robin **Mason** and his colleague (2010) survey issues emerging from interactive use of the web in curriculum. They report in some detail. They find that digital product developers are rebalancing designs - less now on providing structure to keep learning on track, more on maintaining freedom to enable creative and flexible learning. The issue shifts focus from developing content to designing processes. It changes the role of the teacher: rather than preoccupied with helping students to use the technology, the teacher works on how to engage sources, people and ideas. Teachers need to know what technologies students are using, but they also need to accept that those technologies develop their own, largely informal, social dynamic. The teacher is, then, less a deliverer of knowledge and more a facilitator of interaction. The learning process is now more important, and more lasting, than any particular content. And, as students generate their own content, teachers become as much a partner as a facilitator. The teacher sees the students as contributing knowledge, and engages them in the creation of content. The art of course design is, then to draw on the informal uses of the net, but to structure how students engage with it. The authors do not use these terms: but it is to 'inhabit' the net alongside students, it is not to 'colonise' it with ready-made teacher expertise. The authors call this empowerment - which it is. But the empowerment is not our doing, it is the net's. We can ask, therefore, what sort of useful learning students bring to the partnership, and what useful learning teachers can offer. This account does not go that far.

8. A questionnaire- and psychometrics-based enquiry into student use of the internet (Ebru **Kiliç-Çakmak**, 2010) suggests that learning from digital sources should be a primary goal of education. It is explicit about underlying need for meta-cognitive abilities - the ability to gain control of how we learn anything. This would encompass critical thinking - and is a significantly different approach to those suggested by Neil Selwyn. This article also finds other characteristics to be significant - notably effort management and cooperation. All are set out as dimensions of information literacy and self-efficacy - in a life which includes work-life. The article goes further than similar studies in giving examples of teaching objectives and processes. It suggests that students are assigned complex and shared tasks involving planning, monitoring and regulating the use of a range of information techniques. But there is no coherent teaching-and-learning framework supporting these suggestions.

9. An enquiry into the uses of digital technology for thinking on the net (Jenny **Bimrose** and her colleague, 2010) shows that, once people have access to information, they need help in making sense of it. The researchers argue that it is crucial to develop user skills and competencies, not just in the use of ICT, but in applying what they find to their own career management.

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10. The most fully developed response to the challenges concerning critical thinking are part of an examination of the future of the whole curriculum. A guide produced by John **Morgan** and his colleagues (2007) is designed as a response to changes in the way we live. The authors mention rapid social and technological change now facing young people. The suggestion is for tools, including digital tools, which draw on the way students themselves probe and voice what they find - especially on the net. The proposed learning method is a four-stage process: (1) initiating and eliciting, (2) defining and responding, (3) doing and making, and (4) communicating, presenting and evaluating. The stages attractively describe students performing physically, and enjoying the active pursuit of knowledge. And there is some similarity with career-learning thinking - both in content and in how the ideas are framed. However, there is no reference to any research base or underpinning thinking. Neither is there any account of what sort of inner life this work enables. And, without that embedding, it is doubtful how transportable these activities - however performative and enjoyable - will be in life-long use. This work is important. But enabling career management needs a clearer understanding of how people learn about their inner lives, and of how they bring it to bare on their management of opportunities

11. In his contribution to an examination of a range of ict initiatives in education (edited by Julia **Gillen** and colleague, 2010) Fred Garnett lists 'critical thinking' as the most pressing issue. He characterises it as concerned with how we find things out, communicate with one another and gain knowledge and understanding. And he asserts that these learning skills need to be taught and supported.

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## information-box #5 - resolution *inhabiting the net - in practice*

1. **web 1.0:** Even if all we do is to present information in web-1.0 formats we will need to adapt career-work practice to internet potential. This is because we must learn to deal with more kinds of information than we have been used to working with.

In contemporary conditions people need to know more about working life than is conveyed by the labour-economic information that we habitually provide. People are increasingly wondering about the impact of working-life as it is seen in other perspectives. Those other life-perspectives include concerns for personal well-being, for family and neighbourhood, for society-at-large, for the developing world, for the living planet, and for the global environment. People need, and will increasingly seek, other-than-economic perspectives on managing career. And that means offering them a basis for career management which can collate any of these ways-of-seeing with any other. People increasingly need to be able to take one thing with another.

And that kind of cross-referencing needs the multi-dimensional capacity of digital media. Different people collate the information in different ways. But the information they seek will not be just labour-economics information, it will be taken from social surveys, developing-world enquiries, living-world predictions and the environmental impact of work. We will no-longer be able to call it 'labour-market information' - digital technologies can assemble and configure any combination of perspectives on 'working-life information'.

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2. **web 2.0:** Some of what we have put on the net is interactive - up-to-a-point. There are programs where students and clients answer questions about what they can offer to, and seek from, employment. They are based on psychometric procedures - importing click-mouse techniques from tick-box originals.

The output is a profile, sorting personal characteristics into frameworks which can be linked to job titles. The net is offering careers work providers significant gains: a way of updating and decorating both the psychometrics and the data-base. And a way of framing them in 'cool' language and images. Why would we not exploit those opportunities?

It is, nonetheless, minimally interactive. The data bases are limited by their derivation from labour economics. But there is a bigger issue with the process. The questions put to students and clients are based on ready-made assumptions about what is significant in career management. They probe factors for economically-significant abilities and motivations. But suppose students and clients don't see work-life in that ready-made way. His concern may be for ensuring that his child is not neglected, she cannot entertain work that harms Africa, they want to know about its carbon-footprint.

Where do people like that get a chance to challenge our frameworks? To point out its crudities and its blind spots? To suggest better questions? Good teachers enjoy being challenged that way. Things get interesting when students say 'just wait a minute!... what about...?'. Learning takes off when students and clients can talk about how the framework not only comes up with the wrong answers, it doesn't even ask the right questions.

We need on-line conversations that invite that kind of interaction. Then we would be working *with* students and clients, not *on* them - inhabiting not colonising.

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3. **web 3.0:** In web 1.0 we use the net as though it were a place to find information - like a quiet library. In web 2.0 the net is getting noisier, more like a conversation - at best a provocative conversation. In web 3.0 we treat the net as though people can make a difference - like a noisy, and maybe subversive, forum.

There is a case to be made for subversive careers work. Some of our ready-made assumptions could do with a kicking. But, to be fair, so could some of the other-than-careers-work sites that people allow to inform and influence their career management.

Is that why careers work has done so little to engage web-3.0 - too much potential for subversion? It may not, now, matter. Hand-held devices, accessing the net from any location, means that our students and clients are to engaging web 3.0 - with or without us.

No role, then, for careers workers? Not unless we acknowledge that, if people are changing the way they learn, then we must change the way we help them. This applies to whether they are finding information and persuasion on the net, or from us. We are needed for our ability to enable them to interrogate what they find...

*is there enough here to go on?  
who is pushing it?  
why are they doing that?  
what interests do they have?  
why would I pay attention to it?  
how can I check it out?*

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