

career learning and the internet

The more intense is people's experience of change and complexity, the greater our need to understand how they make sense of it. That was the argument when career-learning theory was first published. But, now, the extent of change and complexity is greater than anything I dreamed of, then. In 1996 the internet we now know had not been born. Now, it is where people are faced with an unprecedented range of influences. And they are being updated and replaced at an unprecedented rate of change. Whatever theory of learning we choose to work with, it needs constantly to be re-applied. The career-learning theory, set out on earlier pages, is robust enough to accommodate that re-application.

The internet began life presented as a series of more-or-less static pages. You could read or view them like lectures, handouts and monographs. But now we have *Facebook, YouTube, Second Life, Twitter, Blogs, Skype* and *Warcraft*. These are not library or lecture-theatre events. They are where friends are sought, plans are hatched, alliances are forged, and action is rehearsed. We have no idea how much farther that journey, from quiet library to noisy forum, can be extended.

colonise or inhabit: There is a tendency for careers workers to start by wondering how our work can best be served by linking it to all this activity. This is understandable, but we seek to colonise the net's resources for our purposes.

The line taken here is different; it is to wonder how we need to change careers work in response to what is happening on the net. That is to seek to inhabit, rather than colonise, the net. The issues posed here are not for how we adapt its activity to what we do, it is for how do we adapt what we do to its activity.

It would be a step forward. A survey of how careers workers engage with technology (Chris Bosley and colleagues, 2005) illustrates some resistance to its use. That resistance is associated with a lack of confidence in its use. 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 in their work. And there is some use of chatrooms (forerunners of blogs). But there is greater unease about what they have to bring to all that is now happening on the net.

An analysis by Anthony Barnes and Nelica Le Gro (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 internet technologies

We are past the point where arguing for increased technological literacy on the part of teachers is appropriate. We certainly cannot assume that teachers are expert enough to colonise the net, by showing students - who are already there - how they can use it for career-management purposes. Teachers need another way of inhabiting the net. It would put them into partnership with their students. Each would show how they can help the other. Where we incorporate mobile phones, cameras, texting, social networking and gaming into our work, it is our students who show us how best to do it. This is not colonising the net with what we think should be done; it is inhabiting it with the people who know more about it than we do. From what Chris Bosley and Anthony Barnes - with their colleagues - report such an approach might come as a bit of relief.

The argument here is for the usefulness of career-learning thinking in that approach. The thinking draws on the people's ability to interrogate what they find on the net. It puts teachers in another, and more promising, relationship with what is going on.

the story so far. So what is going on? What has happened on the net is usually related in three stages. This is how Christian Fuchs and his colleagues (2010) speak of it. They characterise it as calling, at first, on *cognitive* processes (this is called 'web 1.0'); then, on *communicative* process ('web 2.0'); and, now, on *cooperative* processes ('web 3.0').

Careers work has, at least to some extent, been active in this story.

careers-work on the internet

	net activity	careers-work examples: in general	careers-work examples: on the net
web 1.0	cognitive enquiring searchable sources for finding and using material	in collections, libraries and lectures	data-base technology, texting and e-mailing
web 2.0	communicative interacting conversations in chat-rooms and blogs	in interviews, discussions and workshops	tick-and-click self- diagnosis and action- planning - limited
web 3.0	cooperative changing probing and challenging activity	in role-plays , simulations and community-linked projects	narrative-based websites - not really

'Limited'? and 'not really'? It is true that some of the career use of digital technologies invite a kind of questioning. But, for the most part, they do so in the sort of circumscribed terms used in a conventional careers interviewing. There is a growing number of websites which set out career-management experience in narrative terms (Career-learning Network, 2010a). At first site they resemble the sort of web-3.0 activity you might find on YouTube. But on YouTube they would be liable to being probed and reworked. Visitors may even seek to undermine what originators had in mind. YouTube is noted for its cut-and-paste 'mashups' of other people's work. They are questioning, ironic, and - at the extremes - subversive.

leverage and learning: Careers work has not moved as far or as fast on-line as it might have done. Elsewhere there has been a more welcoming response - particularly with regard to the opportunities that web 2.0 and 3.0 offer to young people - sometimes called 'the net generation'.

Enthusiasts have welcomed the way in which access to the internet has overtaken the influence of parenting, education, economics and government (Don Tapscott, 1998). Exponentially-growing digital technologies are argued to be empowering - releasing high levels of creativity. Maybe. But there is surprisingly good case to be made for the life-relevant skills to be gained from interactive video games (Tom Chatfield 2010).

It is easy to see these routes to learning as 'empowering'. They relocate users in a new relationship with sources: they can access more material, engage in more conversations, and exercise more influence. This is liberating. And the sense of liberation is most exhilarating for people who are not used to consulting professional

experts - such as teachers and advisers. They may also be people who, in any event, do not find their experience well enough understood by professionals. The internet can feel like a new basis for independent thought, congenial association and attractive action. The term empowerment speaks of this extended leverage on life.

But there is more to the net than that. What you find in one web location is complicated by what you can find in another. Everything is quickly overlaid with updating, elaboration, illustration, and contradiction. Indeed, web 3.0 is celebrated as the places where nothing is singular, agreed or enduring. Alongside that kind of ideology a range of commercial, political, cultural, and ideological groups have - themselves - colonised the net. And, overall, the reduced costs of dissemination and distribution have made it possible to reach what is called a 'long tail' of separate and different niche positions for people to inhabit. Users can meet whom they want to meet, believe what they want to believe, and do what they want to do. It is hard to deny that this is empowering.

But there are concerns. The repositioning of people in relation to what constitutes 'knowledge' may have damaging consequences. There are various takes on this.

Some are principally concerned with property-rights. Tony Curzon Price (2010) extends this concern into an examination of how the empowerment of the internet bring both freedom and tyranny. Issues of ownership call for tighter regulation - although it is hard to see how regulation would be sanctioned. The author has allowed himself to be diverted from any consideration of how the internet can enable learning.

Some entertain the possibility that the internet actually damages learning. There is little hard evidence on this. But responsibly-reported anecdotes (for example Laura Miller's, 2010) should not be summarily dismissed. More firmly-founded concerns for learning refer to brain plasticity. The term refers to how innate characteristics can be altered by acquired experiences. Maryanne Wolf (2008) and Tara Brabazon (2002) both wonder about the simplifying and limiting effects on how we learn of digitising material. Anecdotes report loss of concentration, distractibility, and resistance to deep engagement with a text,

Yet-further concerns are based in the psychology of cognitive dissonance. It points to the way in which we prefer what we find to confirm our views, rather than challenge them. Cass Sunstein (2009) worries about the way in which the web panders to this 'cascading' effect - populating the internet with more-or-less isolated enclaves. Their inhabitants recycle, rather than expand, existing beliefs.

And, most broadly-based, Nigel Selwyn's (2010) understanding of the internet is in its relationships with society. The very subversion, which some welcome, is questioned by others. The social constructions which any society must to some extent share, are confronted with alternative ways-of-seeing. There is nothing new about this; but it is argued that we need to think more about how society uses the net and how the net shapes society.

There is widespread agreement about the leverage on life that the internet offers. There are also concerns about how people are learning from that experience. But liberty needs both empowering leverage and learning enablement. But there are no suggestions on the way to work with this. How can we establish closer partnership between empowering access and enabling learning?

learning on the net: Most people's attention is drawn to a more pressing and immediate issue. Families are naturally concerned about the dangers to their children associated with net-based grooming - they are reported to be more concerned about that than they are about children overreacting. But both anxieties

are rooted in how much trust their children can place in what they find on the net. All of these issues - wide ranging and immediate - are about how people learn to assign reliable credibility to what they find on the internet.

To be fair, the internet is not the only technology to raise these issues. It is media technology: like all books, articles and presentations, it mimics reality with virtualities. The significant news is that it is a convincing mimic. The troublesome news is that it can be accessed anywhere, any time, and without support. That's what 'the net generation' like about it. It's what others worry about.

Increasing leverage won't resolve it: you don't test credibility by upgrading your on-line device. You do it by asking questions.

*might this be a lie?
and even if it is not, is it believable?
and, even it is, is it enough to go on?
and, even so, should I go with it?
and, even if I should, would it work out for me as it promises?
and, even if it would, is that good news?
and, even if it is, could I still find a better, way?
so how sure can I be that really want to do this?*

I may have over-elaborated this - such pedantry looks dauntingly complicated. But we take it in our stride: it is how we survived on the savannah, and it is what we do every time we safely cross a busy street.

Effective and sustainable career-management is at least as complicated. But net-based activity which can damage our careers has a less obvious profile than a predator, and is less rigorously regulated than traffic lights.

Internet predators, commercial and other, will not go away. And regulation is not an option. The case here is that careers work is best engaged by enabling probing interrogation. And for that we need a version of career-learning thinking. It points to the need to engage students in becoming aware of how they learn. There are, it suggests, four thinking-and-feeling levels of learning: (1) finding things out, by experiencing and enquiring; (2) sorting them out, by linking things into 'like-not-like' patterns, (3) checking them out, by concentrating on what people can then see is important to them; and (4) figuring out how things got this way, and - so - how they can effectively be managed.

This not elitist patronage of students who are thought to be in some state of learning deficit. It is an invitation to draw on the abilities with which our evolutionary history has equipped us. These are our abilities to learn, and we neglect them at our peril - on the savannah, on the street, and on the net.

getting down to detail: Few people understand this better than Jaron Lanier (2010). He was in a team that set moving the digitisation of experience; but he is not an enthusiast for what is happening now. His disquiet rests on some depth of understanding. He is not glib: his case is reflective, discursive, repetitive and - at times - speculative. I don't find it easy to follow. But I've teased out ten issues he raises. They are analysed in the table - on the following page. It sets out a web-3.0 agenda for careers work.

The middle column is a practical place to start. It describes aspects of behaviour which you can recognise in your students. The left-hand column points to what Jaron Lanier sees as factors in this behaviour. It would be unfair to argue that the middle-column consequences are wholly attributable to the factors that Jaron points

to. It is only that they help to shape those ways-of-seeing. If he is right, we would be foolish to ignore them.

The right-hand column suggests educational responses. Education cannot offer leverage - it is not in our gift. But caring for students is a matter both of empowering them for freedom and enabling them for autonomy. Both empowerment and enablement are liberating - there is more than one dimension to liberty.

An aside: the web 3.0 agenda for careers work has more than one application. It is here applied to career management. But it might as readily apply to the research-and-development on which we base that work. A feature of career learning is its claim that it is rarely useful to move straight from a finding to a response. Career learning is process of taking one thing with another, and assembling them into a basis for action. This is, indeed, the same sort of strategy which is required of our research-and-development programmes - more exploratory, more interdisciplinary more circumspect.

a web 3.0 agenda for careers work

	web 3.0 can empower but...	...your students are reinforced in...	...and would be helped by being enabled in...
1.	people get 'locked in' to self-perpetuating ways-of-seeing (Jaron Lanier - 2010 - pp.2ff)	...embracing and coming back to what they find familiar and undisturbing	...welcoming and exploring alternative points-of-view
2.	on-off digital signals lose nuances of human interaction (pp.9ff)	...communicating through immediate 'agree'-disagree' tick-and-click responses	...communicating in sustained and sequential terms
3.	careless cut-and-paste 'mashups' displace creativity (pp.19ff)	...getting bored with what is not immediate, spectacular or celebrity-iconic	...engaging careful and sustained application-of-mind
4.	the accumulating mass of on-line material can feel like 'everything' and 'everybody' (pp.26ff)	...believing that they know all that they need to know	...experiencing 'finding' as beginning a process of 'knowing'
5.	people occupy enclaves in a 'long-tail' of market niches circumscribing their tastes (pp.36ff)	...seeking reassuring confirmation of what they already believe	...learning from the surprising and the disturbing
6.	users can work only with what on-line sources disclose (pp.69ff)	...embarking on action without realising that something else is possible	...grasping that whatever they do they could do something else
7.	digital images are virtually whole but actually partial (pp.70ff)	...taking simple appearance for complex reality	...taking account of more than what at-first-sight seems obvious
8.	binary system 'run' or 'don't run' - they do not 'sort-of run' (pp.68ff)	...acting on what they can most readily see	...dealing with 'what if...', 'suppose I...' and maybe, but...' contingencies
9.	digital imagery misses the overlapping nuances of metaphors (pp.168ff)	...working with sharp-and-fixed branded self-images	...imagining a range possible selves in a range possible futures
10.	in all these ways we invite childlike dependency (pp.179ff)	...seeking uncomplicated answers from quick-fix sources	...anticipating and owning the muddled consequences of one's own action

The middle column (previous page) speaks of conversations. It is enjoyable to talk in these terms: where life can be 'as simple as that', and brings 'what it says on the tin', where 'just do it' is good advice, because 'who dares wins', and there are 'no problems, just opportunities', which mean you should always 'go for it', because you can 'follow your dreams', and 'wishing can make it so', for - whatever celebration of ourselves we seek - we are all 'worth it', and whatever we see as good is 'brilliant'.

And who wants to stop people enjoying such party-talk? You would need to be a curmudgeon. But there is more to life than the-bright-and-the-breezy. And on-line devices are more than toys. Career management calls for more: it requires a commitment which other people have an interest in - and depend upon. And trying to manage it without disturbing or troubling yourself denies the realities of learning.

inverting careers work: The more completely we inhabit the net, the more pressing these issues. But even if all we do is to present information in web-1.0 formats, we are involved. In contemporary conditions students need to know about more than can be conveyed by the labour-economic information that we habitually provide. People are increasingly wondering about the impact of working-life on personal well-being, on their families, on neighbourhoods, on the developing world, on the living planet and on the global environment. They need, and will increasingly seek, other-than-economic perspectives on managing career. We are going to need the internet to make that kind of taking-one-thing-with-another cross-referencing possible.

The issue sharpens as careers work moves into web 2.0. There is minimal interactivity in on-line use of psychometrically-based, tick-and-click, self-portrayal. But, even so, we are already circumscribing what students say, with ready-made assumptions about what is significant. Yet good teachers enjoy being told that, not only did the program not come up with the right answers, it didn't even ask the right questions. Now we are working with them, not on them

We can understand why careers workers have done so little to enable web-3.0 probing, on narrative-based websites. It may not, now, matter very much whether we incorporate much of it into career-learning practice - our students are way ahead of us. And they access these, and other, sites with hand-held devices, used in and out of school or college. We badly need to catch up with them.

We are not needed further to colonise the net with the conventional apparatus of careers work. We will not change what the internet does, we must allow it to change what we do. If people are changing the ways they learn, we must change the way we help them. We are needed for our ability to enable questioning what our students find...

is there enough information here?

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?

Reflective questioning affirms the value of learning. We are in no position to tell students the answers to these questions - even if they were to believe us. They must find them out for themselves. They are process-driven questions - how do people find things out? - how do you get any sense from confusion?, how can you know that you can trust a source? - what is a basis for moving on? This is what updated career-learning theory identifies as 'finding out', 'sorting out', 'checking out' and 'figuring out'.

It would be a change of direction. A significant proportion of the ict we currently use is more suitable for finding material than it is for scrutinising it. A recent careers-work article mounts a defence of psychometrically matching data-based programs (Pete Hulse, 2010). But how do teachers and students best engage with material like this? Psychometric coefficients may actually reinforce the influence of inappropriate questions. There is no shortage of such ways of finding things out. There is a critical shortage of ways of interrogating their usefulness.

The career-learning framework scaffolds a process of interrogation, embedded in 'three-scene storyboarding' (Career-learning Network, 2010b). It is a filmic technique, locating students as witnesses to their own lives - reviewing three cinematic scenes...

can you imagine that those scenes were some other person's?

what do you make of what that character is doing?

what would you tell her or him about who can be trusted?

and say about what he or she is doing about it?

It is part of the change of direction. We need to look less to developing the technical expertise of careers teachers, and more to their ability to do what teachers do best - enable learning. Where we need more technical facility we should develop learning partnerships - with both ict colleagues and students.

Seeking students' help, and posing questions to them, is an inversion of what student-teacher relations become in a right-answer-driven curriculum - where teachers are the experts, and students ask the questions. This inversion is where students say what they find, and we suggest questions.

And it is no-more needed by careers work than by education for citizenship - or any other aspect of personal-and-social development. Indeed, what students learn on the net, in any of these spheres, will be applicable to what they do in all of them.

And if we do not use career-learning theory to enable students for that use, then we must use something better - if we can find it.

This is draft material for your feedback. It will appear as part of a Career-learning Café package, up-dating career-learning theory. To alert your contacts, the link to this part of the package is <http://bit.ly/dqtL2v>

Ideas should come to me...

...in 140 characters on-line at twitter.com/billaw

or

...in 140 characters by direct message at the same url

or

...by e-mail - and any attachment - to bill@hihohiho.com

If you would like a Word.doc for annotation, just e-mail me 'internet'.

Feedback by 19th June would be particularly useful. But feedback at any time will be taken into account.

Hope you find something that helps. Let me know if not. Thanks for your time.

Bill Law
24/05/10

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