Information Literacy: where next?

Stephen Thornton
School of European Studies
Cardiff University

ThorntonSL@cardiff.ac.uk

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Abstract

The aim of this paper is simply to explain some recent developments in the world of information literacy. To introduce the topic, some comments will be made about the manner in which the very concept of information literacy has been expanded beyond its traditional competency-based 'frame'. In addition, a further related concept that is gaining some traction will be introduced, the idea of 'information obesity', as popularised by Andrew Whitworth's book of the same name (2009). The bulk of this paper will examine two influential reports that have been written in response to the perceived challenges particular to students currently entering higher education, one from the UK another from the US. The first is an influential report, *Higher Education in a Web 2.0 World* (2009), written by the Committee of Inquiry into the Changing Learner Experience chaired by Sir David Melville. This independent report, supported by all the principal bodies and agencies in UK post-compulsory education, was established to assess the strategic and policy implications for higher education of the experience and expectations of learners increasingly familiar with new technologies. The second report to be illustrated is *Lessons Learned: How College Students Seek Information in the Digital Age* (2009) by Alison Head and Michael Eisenberg of the Information School at the University of Washington, which exposes the information seeking strategies of students in the US, based on findings from 2,318 students across six campuses. Despite some differences, one important aspect about which both reports – and, indeed, all the related literature – agree on is that in this current era, one that is characterised as 'a fast-paced, fragmented, and data-drenched' (Head and Eisenberg 2009: 2), the manner in which people learn is changing, and the higher education sector (and society in general) is struggling in the wake of this transformation.

Introduction

This paper will provide information about information literacy. What you do with that information is, or course, your business. If your internal information filter is working, it will set up some criteria such as 'Do I need this? Do I like this?', and there is every probability that the information contained in this paper will fail one, or both, or some other test. I don't mind. And, even if some of the information contained in this paper gets through these internal barriers, there is very little chance that it will mean the same to you as it does to me. As Andrew Whitworth - or indeed anyone with a constructivist approach to learning - argues 'any information we absorb only becomes knowledge if we assign it some kind of value and actively construct this knowledge through an education process' (2009: 9). So, chances are, the information I'm about to distribute through this paper is either going to slam straight into some internal firewall, and slither away wounded and defeated, or, if it does get through, will be interpreted in a very different manner depending on the various norms and knowledge of the members of the audience.

Is it worth the effort? Perhaps. Hopefully, merely thinking about this issue will make you alert to what, for most people, is a largely unconscious process, namely the role of information in the learning process (Hepworth and Walton 2009: 229), and that, effectively, is what information literacy is all about. It is, according to many recent conceptions of the idea, at the heart of all pedagogy; and, as such, it is also, as Hepworth and Walton argue, a matter of empowerment:

> Empowerment is underpinned by information literacy. Being able to learn effectively and independently and use the knowledge, data and information…around them is likely to result in people having more choice. When people have choice, they are usually better informed about their situation and can see alternatives in a critical light, and then may be able to choose from or create a range of solutions or strategies. This can lead to people having more options when deciding how to participate and interact socially, and how to use and contribute more to the resources and services available (Hepworth and Walton 2009: 3).

In a similar vein, Whitworth, a critical theorist, draws heavily on the work of Habermas and Fey, to suggest that changing individual's perceptions of information can lead to political liberation: 'Ultimately' Whitworth claims, 'the aim of a truly *critical* IL [information literacy] education would be the reversal of general trends towards the exclusion of most people from participation in the debates, decisions, activities and processes of knowledge formation affecting their lives' (2009: 118). Perhaps Whitworth's main contribution to the debate has been to illustrate, through a piquant metaphor, the dangers individuals face by not being sufficiently information literate in this era of mass information, where access is no longer a problem but discriminating and managing it certainly is; where 'quantity rises, but quality and balance drop' (2009: xi). This is information obesity, where the individuals' internal filters become saturated by the sheer volume of information, and our critical functions

become sclerotic. Moreover, just as physical obesity is not simply the result of an overabundance of food, but also a reduction in the quality of food, commercial pressures to consume unhealthily, and lack of basic cooking skills, so, Whitworth argues, information obesity is not the result simply of the presence of too much information, but also a decline in the quality of that information, commercial pressures, and a dearth of basic skills (2009).

All of this suggests that information literacy is one powerful, multi-dimensional concept, one, some suggest, that can change society for the better, or, if it is ignored, for the much worse. And yet, this 'superhero' conception of information literacy is not the one of which most people of aware, if they are aware of information literacy at all. For most students, academics, and – quite possibly – librarians, information literacy is likely simply to be that part of a study skills programme which tackles issues like plagiarism and referencing. It is regarded as a functional tool, where students simply gain certain competencies to tick off a list, a frame implied by the still commonly cited definition devised over twenty years ago by the American Library Association Presidential Committee on Information Literacy, which announced that 'to be information literate, a person must recognize when information is needed and have the ability to locate, evaluate, and use effectively the needed information' (American Library Association 1989: 1). Though research needs to be done here, the impression is that the rather behaviouralist competency-based perception of information literacy remains the 'default' setting in higher education.

The Google generation

Whether that perception that information literacy is regarded as little more than a functional tool is correct or not, what is certainly the case is that there is growing disquiet about the current state of information literacy education. In the UK, for example, some of this unease has been reflected in a number of books and reports that have focused on the challenges to be faced by the higher education sector by the perceived particular learning behaviours of the so-called Google generation, 'the world of a cohort of young people with little or no recollection of life before the web' (CIBER 2008: 5). Perhaps the most bristly of these responses has been that of Tara Brabazon, in her book *The University of Google* (2007). Brabazon claims that the increasing popularity of public search engines, such as Google, is damaging the education of a large proportion of her students, a group that 'invariably writes assignments in the days before they are due, runs a spelling checker through the document rather than drafts it, and relies on the internet for research material rather than refereed course readings' (Brabazon 2007: 15), in short, Brabazon argues, 'the popularity of Google is facilitating laziness, poor scholarship and compliant thinking' (2007: 15).

An influential report, by the Centre for Information Behaviour and the Evaluation of Research (CIBER) at University College London, was less apocalyptic, and indeed demolished a number of the myths about the Google generation, not least the one that holds that young people are all inherently savvy with the latest technology, and that they are any less markedly less patient than any other age group in relation to their information needs (2008: 18-19). Yet the study did suggest some grounds for concern. It claimed that a large minority of those entering university over the next few years 'think that everything is on the web (and it's all free)', and that many young people

'are unaware of library-sponsored content, or at least reluctant to use it' (CIBER 2008: 20). Furthermore, the CIBER report suggests there is some credence to accusation that the Google generation is, to a greater extent than other cohorts, 'the cut-and-paste generation', and that 'plagiarism is a serious issue' (2008: 19). Thus, though it suggested that it is quite possible to over-emphasise the challenge provoked by the arrival of Google generation, the CIBER report did reflect growing concern about the information behaviour of many students entering, or about to enter, university education. These fears were developed in a more wide ranging study that reported in 2009.

Higher Education in a Web 2.0 World

Higher Education in a Web 2.0 World (2009) was written by the high-powered Committee of Inquiry into the Changing Learner Experience chaired by Sir David Melville. This independent report, supported by organisations such as Becta (what was the British Educational Communications and Technology Agency), the Higher Education Academy, the Joint Information Systems Committee (JISC), and the various national funding councils, was established to examine 'the strategic and policy implications for higher education of the experience and expectations of learners in light of their increasing use of the newest technologies' (2009: 5). Using the method of examining the latest literature, supplemented by the testimony of expert witnesses, and presentations by 'futurologists', the aim of the report was to provide an accessible and coherent report of the potential for Web 2.0 technologies – such as MySpace, Facebook, Bebo and YouTube – in the higher education environment, and to make recommendations to help higher education institutions (HEIs) 'navigate their own paths in such interesting times' (Melville 2009: 4).

Though the potential impact of Web 2.0 technologies more widely in the field of higher education was, naturally, the primary focus of the Melville report, the state of information literacy amongst students was highlighted throughout the report. For example, of the critical issues that Melville's team highlights, only two of which are regarded as both 'immediate and fundamental': 'the digital divide' and, as pluralized by this report, 'information literacies' (Melville 2009: 7). Regarding the first of these issues, the digital divide, it is suggested that, for students, there remain inequities in access to and engagement with relevant technology, and, for staff, questions remain about their ability to keep up with the latest developments in the practice of 'e-pedagogy – learning with and/or through technology' (2009: 7). Regarding information literacies – which are defined here as 'activities such as the search, retrieval and critical evaluation from a range of sources, and also its responsible use from the point of view of attribution (2009: 34) – the report states that this represents 'a significant and *growing* deficit area' (2009: 24; author's emphasis). And, linking it to the first critical issue, the Melville's team highlights the need to develop the 'web-awareness' of students, and for staff to maintain the 'currency of skills in the face of the development of web-based information sources' (2009: 7).

The Report goes on to suggest a number of recommendations to address the expanding problem of information 'illiteracies'. Citing the CIBER report, Melville's team highlight the role of the early stages of education in preventing the development

of ‘bad habits’, such as an ‘uncritical trust in branded search engines’ (Melville 2009: 34). While waiting this important piece of socialization to feed through, Melville suggests that HEIs should place much emphasis on traditional competency-based programmes, to develop ‘skills in effective search, authentication and critical evaluation’ of information (2009: 35). Though rather vague about practical details - and keen for individual institutions to construct their own tailored responses to the challenges identified - Melville does, however, suggest, as one concrete method to help achieve increased information skills, the redesign of assessment in such a way as to ‘require location and critique of web-based source materials’ (2009: 35).

Though the perception of information literacy in the Melville report does appear to be one heavily based on a rather old fashioned ‘competency frame’ of the concept (Bruce, Edwards Lupton 2007: 41), more generally the report promotes a more constructivist pedagogic approach:

> ‘which holds that learning is most effective when active – by doing; undertaken in a community; and focused on the learner’s interests. It is a learner-centred approach and one in which the process of learning takes precedence over subject content. It is one that can be applied to all disciplines, not excepting those that demand mastery of a core of basic non-negotiable facts. The teacher/tutor is a facilitator of learning, designing experiences that help students to become self-directed, independent learners’ (Melville 2009: 36)

Lessons Learned: How College Students Seek Information in the Digital Age

Concern that students’ information behaviours are not being catered for effectively by the twenty-first century HEI is not solely a British preoccupation. Indeed, regarding information literacy, the UK is somewhat of a laggard in comparison to states such as the Australia and the US. And it is in the latter of countries that Project Information Literacy (PIL) is situated; a national research study based in the University of Washington. In December last year, PIL delivered a project report, authored by Alison Head and Michael Eisenberg, which exposed the information strategies of a sample of 2,318 college students distributed across six campuses in the US. The results were illuminating, and do seem to chime with similar – if less extensive – studies conducted in the UK, such as the CIBER report.

The primary finding of Head and Eisenberg’s extensive study is that a large majority of students have rather conservative information-seeking strategies, and that, despite the large variety of resources available in the digital age, most are ‘reliant on a small-set of common information sources – close at hand, tried and true’ (Head and Eisenberg 2009: 3). Echoing Whitworth, Head and Eisenberg suggest this security-blanket response is a reaction to the ‘effects of information overload and the sense of being inundated by all the resources at their disposal’ (2009: 9). As they state later in their paper, the proliferation of information resources has provoked a safety-first ‘less is more’ approach (2009: 15): one that trades the thrill of access to a potential cornucopia of unexpected information riches for a more staid strategy marked by the less stimulating qualities of consistency and predictability.

In more detail, in terms of resource prioritization, one clear conclusion is that in most situations – academic and everyday – 'Google was the go-to resource of almost all students' (Head and Eisenberg 2009: 15). Yet, when it came to course-related research, the resource that nearly all students turned to first – before Google and Wikipedia and the like - were the course readings. The reasons given by the students for this information prioritization were that the course readings were 'inextricably tied to the course and the assignment, were at hand, and were sanctioned by the instructor' (2009: 15). Scholarly databases (such as EBSCO, JSTOR and ProQuest) were, according to this study, amply consulted by students during the course of their course-related research. However, suggesting that the demarcation line between academics and information specialists is still vivid (at least in the perceptions of many students), one resource distinctly under-utilized were librarians themselves, with course instructors being consulted about research information for a particular task much more readily than the information professionals. Summarizing, Head and Eisenberg concluded that their respondents information strategies were 'driven by familiarity and habit', an approach that prioritized the convenient over the adventurous (2009: 15). Head and Eisenberg are careful not to accuse today's students of being lazy or unthinking. Though convenience is a priority for this generation, this is not a major change from earlier generations (a point made in the CIBER study). What has changed, Head and Eisenberg suggest, 'is that today's students have defined their preferences for information sources in a world where credibility, veracity, and intellectual authority are less of a given – or even an expectation from students – with each passing day' (2009: 33). Again this appears redolent of Whitworth's thesis.

Thoughtfully, Head and Eisenberg provide some recommendations in light of their study. One of these, interestingly, is similar to the one in the Melville report which recommended the redesign of assessment (Melville 2009: 35), yet the US-based suggestion is much more nuanced. Indeed, Head and Eisenberg strongly argue that thoughtlessly flinging a few information-related assessment criteria into a module can do more harm than good: 'course-related research assignments should not indirectly encourage students to half-heartedly engage in a narrow exploration of the digital landscape (e.g., assignments that state requirements such as, "must use five sources cited in your paper")' (Head and Eisenberg 2009: 34). Instead – highlighting the importance of the development of critical faculties rather than simple skill acquisition – Head and Eisenberg recommend that 'students be given course-related research assignments that encourage the collection, analysis, and synthesis of multiple viewpoints from a variety of sources, so the transfer of information literacy and critical thinking competencies may be more actively called up, practiced, and learned by students' (2009: 34).

Closer collaboration between the worlds of the academic and information specialist is another recommendation made by Head and Eisenberg. They list a variety of forms that such a conversation could take place, but the central point they make is that 'librarians need to actively indentify opportunities for training faculty as conduits for reaching students with sound and current information-seeking strategies' (Head and Eisenberg 2009: 35). Politely they do not add the additional point, that as well as librarians needing to find opportunities to engage in dialogue, academics need to listen. Futhermore, Head and Eisenberg make a useful distinction between *library services* and *library resources*, suggesting that many students have 'a very narrow

view of all that libraries offer', with the resources – such as scholarly research databases – being utilized more readily than the expertise that information professionals have to offer.

Head and Eisenberg's main recommendation, though, is a broad and ambitious one – and one that goes beyond the somewhat skills-based conception of information literacy implicit in the Melville report. In setting the scene, Head and Eisenberg describe a 'perfect storm' that has been brewing in the higher education system:

> '(1) many students have imperatives to graduate in four years or less, because of the weak economy, rising tuition costs, and pressure from the institution and family; (2) many students take a brimming course load each term, which may require more work than they are capable of completing; (3) many students develop a work style that tries to get as much done in as little time as possible and work expands to fill the time allotted; and (4) many students' information-seeking competencies end up being highly contextual, a set of predictable skills developed for passing courses, not for lifelong literacy and professional goals beyond college (Head and Eisenberg 2009: 34).

In consequence, for Head and Eisenberg the feature that would most improve students' information literacy is for each institution to perform a systematic review of 'student workloads across classes….in light of an institutions educational goals', analysing any gaps that appear across 'desired results and existing conditions' (Head and Eisenberg 2009: 34). One aspect that they would most like to see removed is 'learning by rote', which, Head and Eisenberg suggest, is a feature of too many research methods courses. They also claim that, without reform, 'the very important pedagogical goals of "deep learning" and "critical thinking" are at risk of being greatly impeded within the academy' (2009: 34). Though obviously referring to the system in the US, the parallels with the situation in the UK are obvious, and Head and Eisenberg's recommendations are worth consideration on both sides of the Atlantic. There certainly seem to be parallels with the Melville's recommendation to cultivate a more constructivist learning environment, and Andrew Whitworth's ideas about the threat of information obesity.

Conclusion

So, where next for information literacy, at least in the world of higher education? All the work highlighted in this paper does suggest that there is a growing problem about the superabundance of information in society and that we, in HEIs and beyond, are struggling to come to terms with it. Some, like Andrew Whitworth, see the danger as one that threatens the very health of society: like Morgan Spurlock's liver in the film *Supersize Me*, over-consumption is threatening to turn our critical faculties into pâté. Information literacy is generally perceived as offering some salvation, but there are major problems with this concept that are getting in the way of its saving of the world. As was evident in the Melville report, there seems to be uncertainty about the very nature of the concept: whether it is a simple competence-based frame, or something grander. An increasing sense of 'conceptual stretching' is being generated, and there does appear to be a disconnect between what experts, such as Whitworth, mean by the term, and how it is perceived by the wider world. Here it is more likely to be

identified as a few lessons taken by a librarian as part of a – probably rather dull – research skills module, rather than as a vehicle of empowerment and political liberation. Tackling this identity crisis is the necessary next step for supporters of information literacy.

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