

Academics' experiences of networked professional learning

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Abstract

This paper explores academics' writing practices, focusing on the importance of digital platforms in their processes of collaborative learning. It draws on interview data from the first phase of a research project working closely with academics across different disciplines and institutions to explore their writing practices, adopting the perspective of understanding academic literacies as social practices. The paper outlines characteristics of academics' ongoing professional learning, demonstrating the importance of collaborations on specific projects in generating learning in relation to intellectual and disciplinary aspects of writing, writing strategies and structures, and using digital platforms. A very wide range of digital platforms have been identified by these academics, enabling new kinds of collaboration across time and space on writing and research; but challenges around online learning are also identified, particularly the dangers of engaging in learning in public, the pressures of 'always-on'-ness, and the different values systems around publishing in different forums.

Keywords

Academic writing; academic literacies

Researching academics' writing practices

This paper draws on academics' accounts of their writing practices and histories to show the importance of informal networked learning in academics' professional learning, and to draw out some of the characteristics of this learning. Following Banks, Goodyear, Hodgson and McConnell's (2003, p. 1) definition of networked learning, our focus in this paper is on the collaborative and co-operative connections which develop between academics in their scholarly, teaching, and administrative communities. In particular, we focus on how digitally-mediated resources and platforms support academics' extension and development of their understandings and capabilities around the writing demands they face and the writing practices in which they engage within these communities. We will argue that a very wide range of digital platforms are used to support collaborative writing projects through which academics learn in an ongoing way throughout their professional lives. However, there is for our participants little engagement with (and some suspicion of) unstructured social networking; most of their networked learning related to specific projects and purposes.

The ESRC-funded project we are reporting on here, 'Dynamics of Knowledge Creation: Academics' writing practices in the contemporary university workplace' (<http://wp.lancs.ac.uk/acadswriting/about/>), explores the range of writing practices which academics engage in, working closely with individual academics in different disciplines and in different kinds of institutions. We are currently at the end of the first phase of the project, in which we have asked academics to 'look back' over their professional lives using technobiographical interviewing (Barton & Lee, 2013), and used 'day in the life' and 'go along' interviews to understand how they are 'moving forward'. This focus on their accounts of their histories, experiences and practices has helped us to develop an understanding of what people learn from one another, and how digitally networked collaborations have a crucial part to play in enabling these learning processes. The next phase of the project will move on to detailed observations of our participants' writing practices.

A social practice, sociomaterial approach

The project is framed within a social practice perspective on literacy, which sees reading and writing as practices developed and maintained through participation in a social context, shaped by aspects of people's purposes, histories and institutional positionings (Barton & Hamilton, 2000; Barton, 2007). Within this perspective, digital literacies have been defined as "the constantly changing practices through which people make traceable meanings using digital technologies" (Gillen & Barton, 2010, p. 9). Gourlay, Hamilton and Lea

(2013) highlight the implications of a practice perspective for our understandings of digital literacies as situated practices. Seen this way, digital practices cannot be reduced to universal skills, but need to be understood in their diversity as involving texts and material semiosis wherever they occur, through close observation rather than general claims. They change over time, and newer practices are 'layered' over older ones (Selfe & Hawisher, 2004). They are socially and institutionally situated, and form part of the way orderings of power and social structure are arranged. And most relevant to the current paper, they are learned in many ways, particularly through processes of informal learning in networks of support and through engaging with sponsors of learning (Brandt, 2009), rather than through formal training or education.

The current paper focuses particularly on this kind of informal learning, which is not mandated by an educational institution; does not follow a planned curriculum; is not accredited using formal assessment; and is not delivered through interactions or relationships which could be characterised as 'formal' (Tusting, 2003). We will demonstrate the importance of informal learning with colleagues, collaborators and students in academics' trajectories of learning writing practices. In particular, we will explore how digital networks support these processes of engagement in academics' communities of knowledge and practice, paying attention to the material tools and resources which are brought into play. This attention to how the social and the material are entangled in the dynamics of practice - adopting a sociomaterial perspective (Fenwick, Nerland, & Jensen, 2012) - highlights the important role of a wide range of digital devices and platforms in academics' networked learning.

Diversity, change and learning in academics' writing

The role of an academic in higher education is diverse, and almost every aspect of this role involves specialised forms of writing and knowledge creation in a very wide range of genres for many different kinds of audiences (Hyland, 2011). Academics engage in these writing practices with little formal training. While most have completed an advanced research degree, perhaps with a training component that provides insight into the process of producing scholarly publications, this does not necessarily provide beginning academics with an understanding of how to go about consistently producing the kinds of publications necessary for career progression, particularly in a working environment where other kinds of pressures are constantly at play (Nygaard, 2015). Moreover, it seldom provides training in producing all the other kinds of writing that academics are expected to do, such as research evaluation framework data, audits of teaching such as Periodic Quality Reviews, research bids to different kinds of funders, and social media profiles.

As the demands of academic life have changed in recent years, so writing practices have also changed. Recent transformations in the social and institutional structuring of higher education have changed the nature of the writing demands faced by academics. The introduction of a more managerialist approach (Deem, Hillyard, & Reed, 2007) has required academics to learn how to handle new kinds of genres and engage in different rhetorics. Lea and Stierer (2011), in their study of the range of writing academics engage with, provide the example of a senior academic who was required to produce a one-page briefing paper for the Vice Chancellor of the university. This was to be used to 'showcase academic stars', in an attempt to procure further funding. The academic and his colleagues had to figure out together a way to reconcile the requirements they had been given - to highlight the achievements of individuals and thereby 'sell' the centre - with their own understandings of the collective nature of their research enterprise. With increasing demands being placed on people to produce documents which give an account of their own practices (Strathern, 2000), these complex negotiations between conflicting priorities and perspectives on academic work can be an everyday tension for academics in the writing practices they engage in.

At the same time, information and communications technologies have proliferated in the higher education setting. The range of different platforms for writing which people can engage with has expanded hugely. While articles for scholarly journals and research monographs are still the most highly-valued genres, academics may now also be involved with social media such as blogging (Davies & Merchant, 2007; Mewburn & Thomson, 2013), Twitter (Fransman, 2013; Ross, Terras, Warwick, & Welsh, 2011), or a range of other kinds of social media like podcasting or YouTube (Lupton, 2014). Most are now expected to have some involvement in maintaining a professional web page hosted by their employing institutions, including uploading publications to institutional research repositories. Many are also curating an online professional presence on sites such as academia.edu, ResearchGate and LinkedIn (Lupton, 2014).

Scholars such as Weller (2011) and Veletsianos and Kimmons (2012) have described how this proliferation of networked platforms has transformed the nature of scholarship. Goodfellow and Lea (2013, p. 1) identify the

range of new technological practices which extend "right across the spectrum of professional activity, from the digitizing of management information, to the use of virtual learning environments (VLEs) in teaching and learning, to the development of digital scholarship in academic research", acknowledging that the impact of this varies enormously between different settings. However, they say that support for this is limited and often focuses on the technological and skills aspects of using different kinds of platforms, rather than exploring the changes in social relations and practices associated with this new communicative order. Moreover, as Boon and Sinclair (2012) acknowledge, transitioning to working in online environments raises challenges to our established uses of language, understandings of the nature of academic identity, relationships with time, and ways of engaging in online practices, which extend well beyond technological skills.

Learning how to engage with these new kinds of genres and practices goes on throughout academics' careers. While a few programmes are starting to be set up to support particular kinds of writing, particularly writing for scholarly publication (eg Morss & Murray, 2001), and people are beginning to experiment with other kinds of support such as semi-formalised academic writing groups (Wardale et al., 2015), much of the learning which academics engage in happens in an informal way, collaborating with other people on particular projects and learning as they go along.

Methods

Phase one of the Dynamics of Knowledge Creation project has entailed a series of three interviews each with a total of 14 academics working at three different higher education institutions in the UK. In order to explore how practices vary by institutional context and situation, we recruited participants from one 'red brick' university first established in the 19th Century, one 'plate glass' university established in the 1960s, and one former polytechnic which was granted university status in 1992. In each university, participants were recruited from one STEM discipline (mathematics / chemistry), one social science/humanities discipline (history / English), and one discipline with a primarily applied focus (business / marketing), yielding a total of nine research sites, as follows:

Table 1: Research participants

	STEM	Humanities/social science	Applied
Red brick	2 professors (M)	2 professors (1M 1F)	1 lecturer (F)
Plate glass	2 lecturers (M)	2 senior lecturers (1M 1F)	1 professor (F), 1 senior lecturer (M)
Post 1992	2 lecturers (M)	1 professor (M)	1 senior lecturer (M)

Participants were recruited via a form of snowball method (Mewburn & Thomson, 2013), whereby we began by asking our professional networks for suggestions for potential participants, who then recommended others via their professional networks. In cases where this did not yield a contact in our target disciplines and institutions, we selected academics we considered suitable via their institutional webpages and contacted them directly to invite them to participate. Thus, the sample was self-selecting to an extent, although we did aim to achieve a reasonable spread of participants in terms of gender, nationality and professional roles. The sample consisted of 6 professors, 3 senior lecturers, and 5 lecturers. Four out of the fourteen participants were women. Participants had the project explained to them and they signed consent forms in line with the requirements of our own institution and the ESRC, which funds the research. We anonymised both the universities and individual participants, and in presenting the data have changed some identifying details.

Three semi-structured interviews, lasting between 60 and 90 minutes, were held with each participant. The first of these was a 'go-along' interview (Garcia, Eisenberg, Frerich, Lechner, & Lust, 2012), in which we invited participants to carry out a virtual and physical tour of their work place with us to help us understand the effects of the material space and resources on their knowledge creation practices. This was accompanied by photographs, screen shots, and observations. The second, technobiographical, interview (Barton & Lee, 2013) focused on the participants' use of digital technologies at different points and in different domains of their lives. Finally, the third interview focused on a specific day in the life of the participants to discuss the practices and networks they engage with.

The interview recordings were transcribed, anonymised and sent to interviewees for comment, as a form of member check (Guba & Lincoln, 1989) to establish the credibility of the data before they were analysed. The interview transcripts, photographs and observations were then entered into ATLAS.ti qualitative data analysis software for coding. The initial coding list was drawn from our research questions, with new codes being developed through engaging with the data. Specific literacy practices, events and genres were named and coded.

The coding process has enabled us to identify patterns emergent from the data which we have drawn on to develop the themes discussed in this paper.

What academics learn from others

Intellectual development

The principal focus of this research project is not on learning per se. However, analysis of the phase one interviews has seen learning emerge as a theme through many of the interviews, as people have talked about learning in a variety of different areas of their professional lives. This intellectual and scholarly development almost always emerged from collaboration with others, and usually in relation to specific projects and activities. Charles (all names are pseudonyms), a lecturer in Marketing, told us that the most enjoyable parts of his job are "to be able to engage with really, really bright people, far brighter than me" and that "I work as part of a team of academics. It's nice to be able to work with people who maybe are more experienced, intellectually, down the line so they can guide the way."

Collaboration with others was also an important way in which people acquired the new kinds of writing practices associated with expanding their area of work into new disciplines, engaging with different epistemic cultures (Knorr-Cetina, 1999). David, a statistician, explained the process of starting work in a statistical consultancy service and through working to support social scientists in quantitative aspects of their publication writing eventually "made a second career" in a social science discipline. This is "not just a collaboration where I'm doing the maths, it's a collaboration where I'm contributing to the social science". Anonymous peer reviewers for journals provided another aspect of this collaborative learning. David explained how the demands from reviewers for psychology journals helped him to understand the expectations of APA style around writing up statistics - ironically enough, these are far more stringent than those of the discipline of statistics itself: "statistics papers are quite loose ... statisticians don't bother."

Writing strategies and structures

In addition to developing intellectually, people have talked about the importance of informal learning through working with colleagues in developing strategies around challenging aspects of the writing process. Diane, another Marketing academic, told us, "My PhD supervisor told me, "You can't write. You can't write." So I went. I was really upset and really worried [...] Then I had conversations with Dan [an academic colleague] who has been really important in my intellectual development. Dan thinks like me. He's a messy thinker. He thinks a lot. He can take up a lot of ideas and see connections that other people can't see." Talking with Dan helped Diane reconceptualise her writing process, understanding how the 'messy' stage of thinking was being reflected in her current stage of work, and providing strategies for working with the messiness productively. Dan continued to be an important collaborator and still co-publishes with Diane, who is now a Reader.

Even the more technical aspects of writing were facilitated by informal collaboration with others. Diane told us, "I think I was at the educational period in the UK where they didn't worry about punctuation or grammar. They didn't teach you that. They thought you'd pick it up by osmosis. Doing my PhD, I shared a room with people who hadn't been educated in the UK. So five people who corrected my punctuation and my grammar all the time. That was immensely valuable to me because I didn't have that skillset." She sought out more experienced writers to advise her on structuring her work: "Talking to senior peers who publish more than me about I want to say this, this is all going on in my head and them saying, "Well actually what you're doing is A, B, C." What they were doing was teaching me structure." In this sense, informal learning about writing from peers has been particularly invaluable to Diane.

The vignettes above highlight the value of both formal and informal social relationship in learning associated with writing. Murray (2013) points out that writing is often seen as a solitary activity, yet social relationships around writing can be extremely fruitful. Many academics find writing retreats, which provide peer support for writing, useful (Murray 2013), but the findings from this study indicate that peer relationships of a more occluded and diffuse kind also have an important role to play in facilitating learning the craft of academic writing, including not only its technical aspects, but also strategies for legitimising writing in the face of competing demands, and coping with the emotional and practical aspects of getting it done.

Learning digital platforms

Very few people described having had any formal learning to manage working with new digital platforms. Instead, the process they described was very much an informal process of learning with others. Jen, a linguist, is a good example of this. She talked about the difficulty of writing a blog entry about a recent experience of online learning and teaching: "It would be nice to have some kind of training on that, because that's the genre

I'm not used that much to." But in her reflection on her previous learning about digital platforms, there is very little mention of any kind of formal training. Rather, learning from other people was central: "a colleague of mine, who was very technological, she showed me there was this thing called PowerPoint, and that at first seemed quite complicated and mysterious but of course it became a standard tool"; "I tried Keynote, that a colleague introduced me to, which is very nice and very user-friendly"; "I had to learn how to use Moodle the moment I entered employment". David and Gareth, both mathematicians, described learning more innovative ways of using the LaTeX document preparation system from PhD students.

Getting to grips with digital platforms also involved learning from people outside the academic community, such as friends and family members. Jen explained, "my daughter showed me Prezi, because they learned it at school"; "I follow my colleagues and some associations related to my professional interests on Twitter ... I learnt it from my daughter." Her daughter had written her first tweet and explained the affordances of the platform, and had also demonstrated how to look cross-platform to understand audiences, including figuring out from someone's Facebook likes which professional associations to target on Twitter.

The characteristics of academics' networked professional learning

A wide range of digital platforms

It is clear, then, that the capacity to draw on networks and sponsors to develop their learning about writing was crucial for many of our participants. Increasingly, this collaborative work is facilitated by digital platforms. People described using a very diverse range of digital platforms to facilitate writing collaborations. Our initial analysis has so far identified 30 digital writing platforms being used in academic work, from word processing to electronic grading systems to social networking platforms. Different resources are drawn on at different stages of collaborative projects. Ian, a mathematician, explained that in preparing a jointly-written research paper with colleagues from around the world, they might begin with Skype discussions "to discuss generally issues around the research and ideas that have developed", and then use the package LaTeX (a plain text mark-up word processing package used extensively in mathematics and science) to send versions of the paper back and forth. This raised difficulties in keeping track of which version was the most recent, so they began to use a program called Subversion which required them to send a message to a server to work with the most up-to-date version, managing version control around different time zones. He also described using Google Docs and Dropbox to facilitate collaborative writing. This supports Haythornthwaite's (2005) observation that when linked by strong ties, such as those developed by ongoing research relationships and joint writing projects, a range of different kinds of media may be used at different times and for different purposes within the same social network.

Collaboration across time and space

Platforms for online communication enable a new kind of 'space-time compression' (Harvey, 1989) in academic writing in which working with others can take place instantaneously across almost any spatial distance. International collaborations which in pre-digital days would have required extensive logistical planning can now emerge spontaneously. For instance, Diane told us about a European bid, involving 13 universities in 6 European countries, in which she entered the bid process on 20th May and the bid was submitted for the deadline on 11th June. This meant using Skype for initial discussions and then sending versions back and forth using Dropbox. While this opens up new possibilities, it also raises challenges for people which they need to learn to deal with. Related to this compressed or speeded-up pattern of work is a perceived expectation to be constantly available or 'always on', exacerbated by smartphones in particular. Talking about his iPhone Charles told us, "I find myself constantly on the bloody thing ... The last thing I do at night is check my emails. The first thing I do in the morning is check my emails." The ubiquity of these tools means that networked learning and practices are always available to people - and always expected.

Like Ylijoki and Mäntylä (2003), we found that perceived time pressure featured heavily in our interviews with academics. Many took a somewhat conflicted stance towards time, at once enjoying the speed at which collaboration could move forward, and complaining that acceleration led to feelings of loss of control over working hours. This may be the result of attempting to manage the different timescales imposed by different aspects of their role. For example, time for immediately urgent tasks, which were often related to administration or service duties, had to be 'carved out' of time set aside for tasks that were also important but on a longer timescale, such as scholarly writing. It may be that the nature of such writing is messier and more time consuming than allowed for by the temporal rhythms of university management (Ylijoki & Mäntylä, 2003).

Learning is emergent from specific projects

There was some evidence of people engaging in online communities for general purposes of discussion and development. One participant explained the value to her writing of participating in virtual discussion groups, particularly a theory group, in which the online discussions involve responding to advanced questions from PhD students who are "still trying to figure things out, and still very enthusiastic about all that theory stuff". Here we see digital networks being used to bring together enthusiasm and experience, enabling both parties to the interaction to engage in learning processes.

However, most of the examples people shared with us of learning through engaging with online networks began from specific projects. Jen had used Facebook for a European project which required making contact with participants around the world, and had engaged with Twitter only when this was part of running a MOOC. Nevertheless, this initial impetus did lead to more general engagement not linked to the specific project: "I started following a few people because I have realised that you can actually find quite useful things, like when somebody publishes a paper and then you find out about it or workshops or even teaching-related things." Similarly, Juliette explained the usefulness of reading and engaging in discussion forums and blogs in her specialist area, which provide her with the means to "keep in touch with other people in the field, and see certain hot topics and where the field is going".

Don, a historian, told us "I first set up a Facebook account in about 2012 with the explicit purpose of using it to publicise a book that I'd written for a trade readership and I think I started using Twitter at about the same time simply to try and publicise the book and to increase its sales." Twitter was particularly useful for him to publicise a more popular history book he had written, especially when this was mentioned by a political pundit and retweeted extensively. However, he had had to learn how to use Twitter from his wife and from a PhD student for this specific purpose; in general, he felt he did not have time to engage with social networks extensively. Another historian, Rebecca, told us that "I absolutely refuse to involve myself in any social networking". However, she does blog, keeps a research website, and edits a digital magazine for her department. A clear line seems to be drawn, for both her and Don, between using digital platforms for specific professional purposes, which is acceptable, and more diffuse engagements with social media, which is less so.

Ian is aware that social media is being used as a way of publicising research, but feels that this is less relevant in his own field of pure mathematics: "or mathematicians, hardly anybody can understand what our research is about. You're not going to get that much benefit from actually talking about your research, whereas somebody who studies, I don't know, Alzheimer's disease or something, it's obviously got quite a big... You're likely to have a lot of people interested in what they're doing." In his department, the departmental Twitter account is seen as having much more of an administrative role: "It's mainly messages for students about, I don't know, arrangements for exams and stuff." He is aware that some departments strongly encourage people to have a social media profile, but sees his own discipline as something of an outlier in this regard, saying, "I would have thought we'd be one of the last departments to have that, not because of any, sort of, innate rebelliousness of mathematicians, but just because we're very used to working on our own. It's a very small community of researchers." However, he is aware that across the university there is more pressure, often experienced via a sense that, "you're not really doing your job properly unless you use Twitter to publicise it."

Challenges and risks of digital platforms

People also identified dangers associated with learning online in the visible way afforded by many digital platforms. Ian described a social network called MathOverflow which enables discussion of mathematical questions, but "the trouble with that is that mathematicians are inherently, sort of, cagey. It's so easy to look stupid if you say something that you ought to have known." The advantages of collaborating with others need to be weighed against the competition which is equally part of the academic professional community. Charles shared similar concerns. Speaking about Twitter he shared a quote he attributed to Abraham Lincoln: "It's better to remain silent and for everybody to assume that you're a fool than to open your mouth and confirm the fact"; "I think that the tweeting, it's a bit like you don't want to be known as the James Blunt of academia, where it's just too easy just to tweet about bloody anything." However, external pressures did push him into more public engagement at times, for strategic reasons: "Some days you have to push it, like promotions committee". And as time went on he was considering engaging with Twitter more, "purely because of the extent of the ability and the reach that you have".

Charles also associated a negative moral evaluation with the self-publicity he saw as inherent to Twitter: "I think it probably goes back to how I've been brought up rather than any academic strain. It's nice for you to say

nothing and for people to be pleasantly surprised or unsurprised, rather than telling everybody I do this and I do that and I do the next thing." Similarly, Gareth has neither a Facebook nor a Twitter account: "I don't understand the logic of any of that at a personal level or even, necessarily, at a work level. ... I think I've rather let my output speak for themselves rather than anything else, in terms of it at a work level." In a sense, both Gareth and Charles are suggesting that excellent work should be good enough not to 'need' the additional publicity generated by engaging in social media, and therefore they are unwilling to invest in learning how to use these platforms.

There are also issues around which venues for publication are valued. David had traditionally been keen to engage with different publics, publishing his work in journals relating to the particular field in which the research had been carried out – publicising research on crime in policing journals, for instance. However, he felt that the dominant practices were now shifting to publishing on blogs or in online media comment sections, which would entail deciding to make work public before it was peer reviewed and published. While he found this an interesting shift, and found a lot of interesting work on blogs and other online grey literature, he was wary of moving to publishing more in this way, in large part because he recognised that this was not valued by the university in the same way as publications in high impact journals.

Networked learning in academics' professional lives

We are still midway through this project and have more to learn about academics' writing practices and the learning processes associated with these. However, it has become clear that there are indeed, as Weller (2011) claims, changes in the nature of scholarship, supported and facilitated by networking using a range of digital platforms and devices, and that academics engage in continual processes of professional learning to navigate these changes. The processes described by our participants show that neither 'unstructured' learning through engagement in social networks like Twitter, nor formal training, played an important role for most of our participants in this professional learning. Instead, learning emerged for the most part through collaboration with others on specific projects, facilitated by digital networking.

These findings complicate the picture somewhat regarding the notion of communities of practice and apprenticeship models of learning in academia (Lave & Wenger, 1991; Berkenkotter, Huckin & Ackerman, 1995). For example, Gourlay (2011) found that new lecturers' learning experiences were characterised by a sense of confusion and isolation, and concluded the existence of a "community" via which academics can learn new practices should not be taken for granted. The findings from this project, however, suggest that digital networking facilitates communities of academic practice in which learning of many kinds takes place - about intellectual disciplines, about how to make fruitful use of digital resources, about writing strategies, and about the craft of academic writing.

However, this work has also identified tensions around engaging with digital networks. Digital networks were viewed by some of our participants as having inherent value because they were seen as embodying academic values such as collegiality and sharing knowledge and resources. Others saw these networks in more instrumental terms, engaging with them only in cases where a direct benefit was perceived, such as when they facilitated learning linked to specific projects, or fulfilled a perceived institutional expectation that scholarly work be widely disseminated and publicized. At times, though, such networks were seen as, at best, a time-consuming distraction from their real work, and at worst, self-aggrandising and potentially risky to their reputation. The place of digitally networked learning in academic life remains, for now, a contested one.

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