

## Abstract

The effective use of social and participative media is seen as a key requirement in 21st Century academic practice and professional development. This case study describes a collaborative, student-led initiative that, identifying a gap in existing doctoral training provision, engaged in delivering a series of interactive sessions to PhD students and early career researchers at the University of Nottingham. With an emphasis less on the technologies and more on their social, participatory and collaborative affordances, the sessions were designed and presented by two PhD students to raise awareness of social media and provide an opportunity for discussion and shared practice. Hosted and supported by one of the University Graduate Centres, the sessions were supplemented by an online resource. In this paper, we summarise the initiative with key observations, perspectives and feedback from the session organisers and attendees, and reflect on our experiences and feedback from presenting at the Future Learningscapes conference. In doing so, we discuss the role of social media in doctoral practice, and the implications within doctoral training and professional development contexts.

## The Training Initiative

In a collaborative student-led initiative, hosted and supported by the Jubilee Graduate Centre, University of Nottingham, two second-year PhD students from the School of Education designed and presented a short series of sessions in social and participatory media in academic practice to doctoral and early career researchers in early 2010.

Whilst the authors were aware of isolated uses of social media in a number of Faculties within the University (such as student blogs, social networking and group wikis), no formal training or mechanisms for sharing good practice were evident. And whilst the Graduate School ran a number of loosely related sessions such as web-based research methods, the authors identified a 'gap' in the postgraduate training programme.

The Jubilee Graduate Centre is one of five Graduate Centres in the University, and one of two campus-based. In supporting and hosting the sessions, some of its core objectives in promoting student-led initiatives were realised. The presenters saw the sessions as providing an excellent opportunity to participate in peer-support activities, and gain valuable teaching experience as part of their own professional development, whilst recognising that the sessions might also inform aspects of their closely related individual theses.

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Using a framework of interrelated key concepts, processes, technologies, tools and platforms (Fig. 1), the programme consisted of three 2-hour lunchtime sessions within a four-week period:

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- Session One: Introduction to social media, underlying concepts, values and technologies
- Session Two: Blogging, Twitter, tagging and social bookmarking, resource sharing
- Session Three: Social networking and collaboration, aggregation and syndication, Personal Learning Environments

With an emphasis less on the technologies, and more on the social, participatory and collaborative properties of the tools, the presenters explored how social media can support and promote learning, research practices and professional development. Session design was aligned with appropriate theoretical concepts and social learning models – such as communities of practice, network theories, and digital literacies – and engaged in wider aspects of doctoral learning experiences, such as issues of academic integrity, professional identities, and project management.

We drew on guidelines on research student skills and experiences training as defined in the Joint Statement of the UK Research Councils' Training Requirements for Research Students, namely:

- Research Management: identifying appropriate resources and acquiring data effectively
- Personal Effectiveness: demonstrating creativity, innovation and initiative, able to identify own training needs, motivation, use of sources of support
- Communication Skills: articulation of ideas and arguments to wide ranging audience, supporting the learning of others
- Networking and Team Working: developing co-operative networks and relationships
- Career Management: taking ownership of career and improving employability, awareness of transferable nature of research skills

Whilst the presenters initially considered an IT-based workshop environment, it was necessary to adapt the sessions to fit with the requirements of the Graduate Centre facilities, by developing a traditional seminar programme integrating presentations and short informal discussions and activities. With limited opportunities to demonstrate specific tools, the sessions were supported by a bespoke online resource hosted on the Jubilee Graduate Centre website. This consisted of annotated links to key social media discussed in the sessions and a critical selection of tutorials, guides and articles related to social media and academic practice.

The sessions were promoted through an e-mail circulated to all PhD students and early career researchers in the University, and a poster distributed to a number of physical locations across the campus. An online survey and an invitation to use the 'microblogging' site Twitter were submitted to attendees prior to the sessions to help evaluate interests and experiences in using social media and expectations of the sessions. All attendees completed standard Graduate School feedback forms at the end of each session. Attendees, limited to 20 people per session, were predominantly PhD students and several early career researchers from a number of Schools and Faculties. Whilst a core contingent attended all three sessions, most attended either one or two of the sessions.

## **Social Media and Doctoral Practice**

Research communities are becoming increasingly accessible through the web. Institutional, faculty and research department platforms can provide PhD students with the opportunities to create an online presence and a professional profile, whilst dedicated sites such as academia (<http://www.academia.edu/>) enable greater social interaction and sharing of content.

Social media describes a range of web-based tools - such as blogs, wikis and social network and bookmarking sites – that support communicative,

participatory and collaborative practices and content sharing; core values that are seen as complementary to social learning pedagogies and practice. Yet despite increasing interest and evidence in how these technologies can be used effectively within an educational context, there is a significant gap between their potential and the reality of adoption rates and widespread use (Conole, 2010; Selwyn, 2010).

Within a doctoral context, social media and related web 2.0 practices have potentially profound implications on academic practice and scholarship, providing new forms of academic discourse, research dissemination, peer review and collaboration, and opportunities to access research networks and communities within, across and outside of departmental and institutional boundaries through open content, knowledge and research practices (Ingraham, 2005; RIN, 2010).

Yet currently, the majority of doctoral students do not use social media, and related online research environments and portfolios in their studies (British Library/JISC, 2009), and whilst it is quite common for doctoral and post-doctoral researchers to use web 2.0 services occasionally, it tends to be experimental, localised and dispersed (RIN, 2010). Consistent, frequent and intensive use is rare, which Conole (2010) suggests can be attributed to a complex range of interrelated cultural, institutional and technological factors.

Doctoral students represent an extremely heterogeneous group; multi-disciplinary, with a wide range of ages, experiences and skills and a diverse set of research foci. This heterogeneity generally precludes generational or cultural distinctions in how they adopt and use the social web for their academic practice (British Library / JISC, 2009). Generational factors, often characterised by 'digital natives and immigrants' (Prensky, 2001) have become increasingly challenged in recent years (for example, Bennett, Maton et al., 2008), though others argue that older generation students, who acquired their information-seeking and -organisation skills in the pre-internet age - commonly dubbed the net generation or Generation Y - are actually at an advantage when adopting web-based sources and tools due to their experiences in traditional scholarship (Nicholas, Clark, et al., 2009). Studies indicate that disciplinary cultures may influence how new forms of technology are adopted. Key differences in how researchers communicate their work and their findings in different subjects disciplines or institutional settings may have a strong influence on how they adopt - or don't adopt - social media (RIN, 2010).

Postgraduate study typically combines formally structured and informal community-based learning (Brooks & Fyffe, 2004). Increased independence and responsibility of postgraduate study requires students negotiating shifts in academic authority. Chang, Kennedy et al. (2008) identify the concerns over academic integrity in Web 2.0 activities, highlighting the tensions that can arise between students' desire to engage in 'student-based pedagogies' and their dependability on traditionally authoritative sources. Scholarly discourse is culturally embedded within the traditions associated within well-established channels of research dissemination dominated by the duopoly of peer-reviewed journal articles, and conference papers, posters and presentations (British Library / JISC, 2009). The pre-eminence of these types of reification means they remain the core currency with which academic status is recognised. As RIN (2010: 8) indicate, "for most researchers, the established channels of information exchange work well; and, critically, they are entrenched within the systems for evaluating and rewarding researchers for their work." Their report stresses that researchers actively using web 2.0 tools and services do not necessarily see them as comparable to, or substitutes for, other academic practices, but as having their own distinctive roles for specific purposes. They emphasise "researchers

themselves are the most important enablers and communicators of emerging best practice” and the report concludes by suggesting:

*“It is important that they should consider the full range of available tools and services as an intrinsic part of the research and scholarly communication process, and seek to learn from each other about new developments and practices that prove beneficial. Where web 2.0 tools and services have proved useful, the researchers involved can play a valuable role in exchanging information, thereby increasing awareness of the range of available tools and services (generic and discipline specific) and their utility for particular activities and settings. Better sharing of experience about how new offerings might be usefully and effectively deployed may be key to encouraging uptake and learning about effective use.”*

(RIN, 2010; 53)

## **Observations**

As a student-led training initiative, rather than a research project, no formal data collection was undertaken during the sessions. However, key observations can be drawn from reflections of the authors, material from the discussion activities, and the pre-session surveys and feedback forms. In addition, it was useful to conduct a follow-up survey of all attendees to examine adoption and changes in use in their social media practices since the sessions.

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Generally, attendees associated social media with non-academic activities and use was typically limited to Facebook (predominantly as a social, non-academic network) and Wikipedia (as a reference site rather than collaborative editing site). Discussions indicated a strong respect for, and reliance on, established forms of research practice, discourse and dissemination. Whilst many attendees saw social media primarily as useful communicative tools, others were interested in their potential for networking or how they may help develop academic and professional profiles.

By focusing on activities such as getting published and presenting at conferences, we presented the potentially transformative and disruptive effects of adopting and using social media by exploring how, and in what ways, using social media can both challenge and augment traditional and established academic practices. We gave the simple example of how a student presenting at a conference can upload their PowerPoint presentation to a site like Slideshare to reach a potentially wider audience. As she becomes more engaged in using social media, she can link to or embed this on a webpage or blog post to enable further and more in-depth discussion and feedback within a more contextualised online environment.

It was important to identify these different types of engagement, and reflect on how they might influence the complexities of social media adoption and use of social media. Practices such as social bookmarking and the use of bibliography/citation tools (Delicious, Mendeley etc.) created particular interest amongst some attendees perhaps because they facilitate tasks that are closely related to academic processes and tools they already employ. Others responded positively to the affordances of document sharing and collaborative platforms such as wikis in their potential for developing joint papers and coordinating group tasks.

However, attendees recognised that building up a network on Twitter, or committing to a blog often requires a more significant level of personal commitment, and is often dependent on the potential value of the communities and networks a student can engage with in an effective and sustainable way. Whilst some may have access to significant numbers of peers and experts actively engaged in using these social media, in other fields, where such numbers are significantly diminished, there may be less of an incentive.

There were indications that disciplinary cultures may also influence attitudes to how specific types of social media can be adopted and used. PhD students from Arts and Humanities and the social sciences may engage more in reflective practice and wider network-seeking evident in tools such as blogging and social networking, whereas those from the pure, applied and medical sciences, where there is traditionally a more structured and supported enculturation into the research community, may be drawn to more collaborative and project-based tools such as wikis.

Whilst attendees were generally enthusiastic about the principles of open research, this was largely limited to the sharing of resources, and general discussion of methodologies, tools and concepts, and excluded sharing information directly linked with their own theses, ideas and work in progress, or anything that may compromise supervisor or participant confidentiality. One of the presenters described an incident concerning a request from one of his followers on Twitter, in which he had posted a link to an article he was desperate to read but unable to access, as his university wasn't subscribed to that particular journal. The presenter accessed the article through his university account, and uploaded it to GoogleDocs for the follower to access. The response from attendees was mixed. Whilst most appreciated the usefulness and potential reciprocity in such social media interactions, there was concern that certain academic protocols had been broken.

The apparent time-intensiveness of using social media was a particular concern of some attendees. We emphasised the need to develop strategies as web 2.0 practices are adopted. These may be technology enabled, such as employing a RSS feed reader once the student engages in following a critical number of blogs or websites, but we also stressed the need to develop time-management and reflective approaches to ensure efficiency and sustainability.

We explored the interconnectedness of social media (through social and collaborative practices and underlying technologies such as tagging and RSS), though complex aspects of tool integration, and the concept of Personal Learning Environments (PLE) were seen as reliant on a maturity of social media adoption that was beyond the level of most attendees.

## **Current and Future Developments**

The presenters have subsequently run a similar training programme at the Engineering Graduate Centre, modifying the format to that of a single, six-hour session. At the time of writing, sessions have been arranged for the Arts Graduate Centre in the forthcoming academic year, as well as a repeat run of the sessions at the Jubilee Graduate Centre. The authors have also participated in the JISC Digital Literacies Materials Pilot programme, and the sessions have been selected as a best practice example on the Learning Literacies for the Digital Age (LLiDA) website.

Whilst the sessions are seen as being effective at raising awareness of social media, an integrated approach to facilitating further support is seen as desirable in providing the necessary opportunities for developing sustainable models for shared practice. The presenters are currently exploring opportunities within the University for further development of the programme, such as IT workshops, seminars, and online community development.

## **Conclusions (Implications for Policy and Practice)**

The sessions demonstrated a successful integration of a student-led initiative within a formal Graduate training provision. The initiative underlined the importance of engaging PhD students in their own learning and training needs, in both sharing expertise with peers and in contributing to their own professional development. In doing so, it demonstrated to other Postgraduate researchers how they might utilise their own areas of expertise to develop further student-led initiatives.

The sessions attracted generally positive feedback from attendees, and indicated opportunities for discussion were highly valued sharing good practices were highly valued by the students. A number of attendees suggested they would have preferred longer sessions with more opportunities for interactive activities and discussion. This was taken into account when designing the Engineering Graduate Centre session.

On reflection, the presenters identified a number of key training issues, such as developing the most appropriate approaches to engaging with multi-disciplinary audiences, and addressing inequalities in skills, competencies and experiences. Though discipline-specific practices and concerns over technical abilities were evident, these were seen as constructive in enabling individual students to draw on their own skills and disciplinary perspectives and share their experiences with fellow attendees.

In summary, it should not be assumed that PhD students and early career researchers are either familiar or competent with many types of social media. A focus on activities associated with traditional and established academic practice – such as getting published and presenting at conferences – was useful in demonstrating how social media can both challenge and augment these activities. Particular emphasis was placed on the process of finding suitable communities and networks appropriate to individual learner needs, and the need to develop self-organizational and reflective approaches to ensure sustainability. Recognising that social media trends and affordances of specific tools and platforms are subject to constant change, we adopted a holistic, ecological perspective to social media, emphasising the need for academic and professional community/network development rather than competences in specific technologies.

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