

# Integrating "employability" into the HE curriculum: case studies of online portfolio implementation in the UK

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## Abstract

*In today's global market place employers are seeking high level skills of communication, networking and entrepreneurship in their potential employees. Increasingly, these skills extend to online methods of engagement through social media. The idea of the 'digital native' suggests that students are able to use such tools effectively, having grown up with these technologies, but more recent research suggests otherwise.*

*We argue that a traditional university education does not in itself equip students for the modern workplace, and that effective integration of digital research, communication and creative skills into the curriculum is required. The implementation of what we have labelled a Personal Development Portfolio (PDP) can help to address this. At a time when the very validity of a university education is under the microscope, such initiatives are increasingly important.*

*Our study encompassed two UK universities and investigated the attitudes and capabilities of students with regard to technology-enhanced learning at the start of their course, and then tracked their progress through the academic year. Specifically, students were asked to describe their learning experiences in a personal blog throughout their course to supplement and complement monthly face-to-face meetings with personal tutors.*

*We used mixed methods (quantitative and qualitative) to explore the ways these social technologies could be effectively integrated into university education to encourage development of employability skills. An online questionnaire was completed at the start of the academic year, and in-depth interviews with selected respondents were carried out throughout their programme in order to assess progress.*

*Our findings suggest that the use of blogs encourages peer-to-peer collaboration and also improves the quality of face-to-face time spent with students by tutors, although the degree of commitment displayed to the task was very variable. Students' perspectives on their experience are mainly positive, but concern remains about the variable levels of PDP acceptance by staff, and the absence of a strategic, unified approach is currently restricting effectiveness and wider take up.*

*Future research will examine how universities can implement a more strategic approach to prepare students for life and work in a digital society. This goes beyond consideration of employability in the digital economy, to cover the broader issues of participation, social justice, personal safety, ethical behaviours, and the management of identity and reputation.*

## **Key Words**

Personal Development Portfolio, employability, technology-enhanced learning, social media, education

## **1. Introduction**

In today's global market place employers are seeking higher level skills of communication, networking and entrepreneurial attributes in their potential employees. In these uncertain times, students need to learn to manage portfolio careers with the necessary skills and confidence to embrace their own professional development. Increasingly, these are extending to online methods of engagement such as blogs and other forms of social media as the tools become more widely used. The idea of the "digital native" (Prensky, 2001) suggests that students are able to use technology effectively, having grown up in a digital world, but more recent research suggests that this may actually be a myth (see for example Kennedy et al, 2007 and Jones and Cross, 2009). The poor digital skills of many university staff have also been cited as an inhibitor to change in university education (Browne et al, 2008). Consequently there is a need to raise digital aspirations and skills for students in vocational courses and also to provide appropriate training for tutors within these institutions.

This paper reports on an exploratory study to investigate this problem and its possible solutions in more detail. We begin by reviewing evidence for the changing nature of skills required in the workplace and go on to present the findings of a survey and focus group research with postgraduate students in two UK universities to identify their attitudes towards digital working as experienced in their studies, how their competence develops by developing an online Personal Development Portfolio (PDP) as they progress through the course, and how they plan to incorporate the lessons learned into their career planning or business development beyond university. This data provides insight into the barriers and the enablers for digital competence in today's students, and also suggests ways in which universities can increase the employability of students who will soon be entering the 21<sup>st</sup> Century workforce.

## **2. Employer requirements v student skills**

The CBI and Universities UK (2009) published a report on graduate employability which identified entrepreneurship and enterprise as particularly important attributes that employers looked for in their prospective employees. The report defined these skills as:

*"An ability to demonstrate an innovative approach, creativity, collaboration and risk taking. An individual with these attributes can make a huge difference to any business."*

78 per cent of employers responding to the survey cited an entrepreneurial mindset as important, and 72 per cent said a "positive attitude" mattered. The particular University attended was rated by only 8 per cent of employers, and a graduate's degree results were regarded as important by just 28 per cent.

Employers themselves are increasingly using social networks to screen prospective employees. In response to a recent survey by Career Builder (2009), 45 per cent admitted to the practice. Of those employers conducting online searches of job candidates, 29 per cent used Facebook, 26 per cent used LinkedIn and 21 per cent used MySpace. 11 per cent searched blogs and 7 per cent followed candidates on Twitter. Finding evidence of candidates' poor communication skills might well put an employer off, but on the positive side 18 per cent of employers reported they had found personal content on social networking sites that actually caused them to hire that person. The top examples included:

- The profile provided a good feel for the candidate's personality and fit within the organisation (50 per cent)
- The profile supported a candidate's professional qualifications (39 per cent)
- Evidence of creativity (38 per cent)
- Evidence of good communication skills (35 per cent)
- Evidence that the candidate was "well-rounded" (33 per cent)
- Other people had posted good references about the candidate (19 per cent)
- The candidate had received appropriate awards and accolades (15 per cent)

A recent JISC Report (2009) concluded that universities must adapt their teaching practices to help students deal with the modern business world; namely the degree of competition for employment in a global knowledge economy, increased levels of self-employment and portfolio working, the growth of multi-disciplinary teams focused on specific tasks whose members might be physically located anywhere in the world, life within a networked society, the blurring of boundaries between "real" and "virtual", public and private, and the increasingly ubiquitous use of digital technologies. In particular, the report recommended that universities should change their cultures of learning to place greater value on "literacies of the digital", a process which entails monitoring, supporting and assessing digital competences across the whole learning experience, using tools such as portfolio-building to enable learners record a wide range of achievements and present rich accounts of their learning history to different audiences. Achieving this degree of culture change will not be easy; the authors recommended that staff should be encouraged to innovate in curriculum design and incentivised to do so through appropriate reward structures.

It is clear from this brief review that there is a significant gap between employer expectations of graduate skills and the current university provision of training in these areas. Despite the enthusiasm of writers such as Tapscott (2008), it certainly cannot be assumed that students will magically acquire digital competencies simply because they have grown up with computers and are avid users of Facebook. In fact, recent research has largely discredited Prenski's (2001) "digital native" argument. For example, Kennedy et al (2007) found that the skills and enthusiasm for Web 2.0 tools amongst the "Google generation" were overrated because students focused solely on social use of the tools, were sceptical of the wider relevance of social media and in some cases actually expected more traditional means of interaction in the classroom. Jones and Cross (2009) reported on an ESRC funded research project to investigate students' use of technology. They found a complex picture with some technologies such as blogs, wikis and virtual worlds actually used less by students than might have been expected. The most popular technologies were old favourites such as email, course websites and virtual learning

environments, and there were small but significant minority groups of students inhabiting either end of the spectrum – one of these groups was totally opposed to new technology and the other consisted of very proficient, advanced users.

From this work it is clear that the level of skills exhibited by students can at best be summarised as “mixed” with regard to their effective use of the full range of modern communication technologies. As we have noted above, digital skills are increasingly defined by employers as “basic” competences that every educated person is expected to have. At a time when universities face criticism for declining standards and graduate unemployment is at record levels, producing individuals with the skills and confidence to navigate and manage the online environment becomes more and more important. These students will “stand out from the crowd” by gaining access to new career opportunities, whereas those who do not display such initiative risk being marginalised and left behind.

### **3. The role of technology-enhanced learning in the development of employability skills**

Technology-enhanced learning can be defined as “*information and communication technologies used to support students improve their learning*” (Higher Education Funding Council of England, 2005). It can improve learning and teaching in universities by complementing more traditional approaches, and is increasingly being introduced as a fundamental part of the student learning experience in higher education. Kanuka and Kelland (2008) proposed that technology-enhanced learning holds the following possibilities:

- a platform for ideal speech;
- greater opportunities for interactions;
- greater opportunities to build communities;
- a new kind of learning environment;
- a platform for discussions; and
- a quality learning experience.

A major issue however, is the tendency of universities to adopt ad hoc e-tools rather than take a strategic and integrated approach (Ellis et al., 2009). The authors noted how patchy adoption has left students with mixed feelings, as they did not value activities like reviewing other students’ submissions or online interactions with teachers. Ebner and Maurer (2009) assessed students through a series of blogging exercises and noted a novelty factor - it was the first time students had read each other’s work and it was placed in a public space (unlike traditional assignments that are only ever read by the marker). The authors found that blogging and microblogging forced students to engage over a longer period than cramming a traditional assignment shortly before its deadline, and the content of the blog posts was more reflective. It seems that as well as changing universities’ perceptions of the appropriate focus of 21<sup>st</sup> Century learning, students’ perceptions of this issue also need to change.

The e-portfolio is one example of the new learning opportunities presented to universities. According to Oliver et al (2009), an e-portfolio provides a personal space where learners can collect the digital artefacts that present evidence of their experiences and achievements to articulate their actual learning outcomes. The

process of developing the portfolio allows learners to move beyond *what* they have learned to consider *how* they have learned and to understand the connections inherent in the creative process of learning. Universities such as Curtin in Western Australia with its “Triple-i Curriculum” are way ahead of the UK in the integration of online portfolios into their courses. Curtin’s “life-wide learning” approach aims to produce highly-employable global citizens with expertise beyond their primary discipline. This means that all their courses emphasise graduate employability, intercultural and international awareness to foster global citizenship, and inter-disciplinarity in educational choices. “Life-wide” learning recognises that life experience and extracurricular activities can differentiate students from others who have completed similar degrees. Students are encouraged to participate in university life outside the classroom, reflect on what they contribute to these communities, and what they have learned as a result of their participation. Over the longer term, the “life-long” component of learning will also be fostered as the community membership is extended to alumni as well as to prospective students. Our own preliminary trials of e-portfolios within UK universities will be discussed in the next section.

To summarise the arguments made so far, we have identified a significant gap between the skills required by employers and the way in which universities currently prepare students for employment. Employers in today’s global market place are seeking high level skills of communication and networking in their potential employees, such as competence in online methods of engagement, and they themselves are using social media to gather information on job candidates. Consequently, students with poor online communication skills are likely to be put at a disadvantage. Previous research has shown that today’s students are amenable to the increased use of technology for educational purposes, but the extent of their skills is currently very variable (Jones and Cross, 2009). It has been recommended that universities rethink their learning environment to improve digital literacy, among both staff and students (JISC, 2009). We suggest that (following the example set by Curtin University) modern applications of technology-enhanced learning such as e-portfolios can facilitate a higher level of student participation, creativity and engagement that meets the needs of employers in today’s global knowledge-based economy. We will now go on to explain how we undertook the empirical research to examine the validity of this recommendation.

#### **4. Methodology**

Our study sought to investigate students’ perceptions and attitudes in two case study university settings towards a technology-enhanced learning environment and its role in their personal and career development. An online survey was emailed to all new postgraduate students followed by a number of in-depth interviews and focus groups with both students and staff to provide a more detailed exploration of the important issues derived from the survey. Adopting this mixed methods approach enabled both general and in-depth exploration of the issues in question, where neither method alone can provide complete understanding (Sale et al., 2002). The online nature of the survey can offer a higher response speed than more traditional research methods (Dommeyer and Moriarty, 2000), reduce the administration burden, return data in electronic format to be downloaded directly into the data analysis program, reduce the cost (Wilson and Laskey, 2003), and remove interviewer bias (Selm and Jankowski, 2006). In mixed methods research the role of qualitative methods is to

interpret, clarify, illuminate, describe and validate quantitative findings (Johnson et al., 2007). Analysis was carried out using manual thematic analyses and sorting of key words and phrases.

## 5. The Case Studies

Our first case study explores the approach to professional development in the MA Media and Creative Enterprise at Birmingham City University. The programme develops the networking and entrepreneurial capabilities of postgraduate students as a means of preparing students for work in the creative industry sector which includes many freelance and self employed artists, creative and cultural workers. The classic description of the cultural, creative and media industries is that of a few very large companies and a mass of small firms and freelancers. The MA places an emphasis on experiential learning and engaging with the “life world” of such workers taking on board the entrepreneurial nature of work in the sector and the need to prepare students to take responsibility for their own continued professional development. The focus is upon understanding the specifics of creative, cultural and media work by bringing current practice into the classroom and simulating the industry context in a safe and supportive environment.

The creative sector is characterised as highly networked and sustained through collaborations, innovation and the use of technology. Consequently, students were invited to make use of social media including Twitter, Facebook, blogs, YouTube and Flickr to share their ideas, practise articulating what their projects were about, engage with users and other audiences, and give each other peer feedback. Specific opportunities to encourage this work are embedded and explored in different contexts. In particular, a guest speaker session enabled students to reflect on the issue of professional skills and the changing nature of the workplace.

Reflecting current developments in the creative industries sector, the guest speaker event utilised social media such as Twitter, live blogging and short interviews which were added to the media enterprise blog ([www.mediaenterprise.co.uk](http://www.mediaenterprise.co.uk)) and a Flickr account. The session was set up to replicate recent local creative industry events which use a range of media to communicate prior to, during and after the actual event. It also engages individuals who cannot attend but are able to ask questions via Twitter during the Q & A, as the following student quote illustrates:

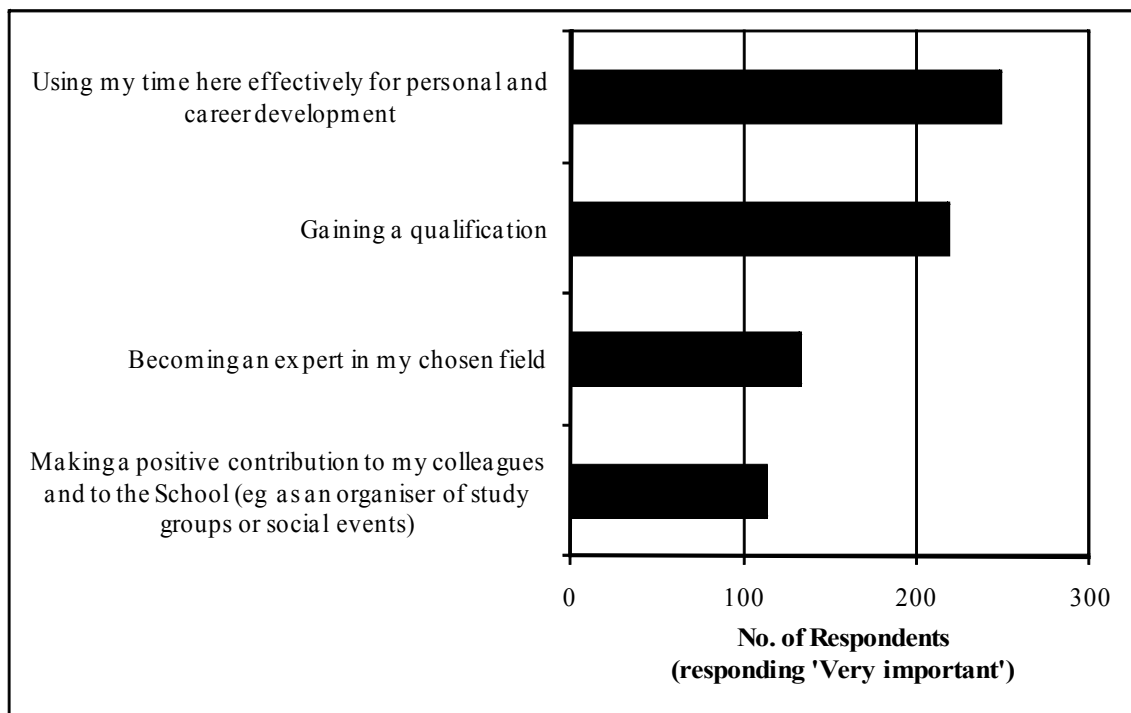
*“... the experience of seeing the developments on Twitter was both exciting and very much informative. What was interesting from my perspective was that there were student colleagues as well as lecturers in the room that were all interested in making sure that the outside world that was watching were not missing out on all the brilliant lines that stroke a chord with them.”*

<http://www.mediaenterprise.co.uk/2009/11/19/how-i-attended-a-lecture-through-twitter/>

Speakers were carefully chosen to further develop the theme of networking and its importance in their own careers. Each speaker gave a realistic picture of the ups and downs of their work, of the importance they placed on formal and informal networks (including social media networks) and demonstrations of entrepreneurial skills and behaviour. A clear indication of the level of interest from the students was the sheer amount of noise, range of discussions and general responses immediately after the

event. Blog posts and interviews over the next few days were also evidence of the students' engagement with the process. By contributing to the blog, students were engaging in a public space, articulating their ideas and commenting on other blog posts thereby contributing to cultural discourse. They built their confidence and ability to express ideas, views and pertinent issues within their practice. Students were also involved in creating and attending offline networking events and, as far as possible, immersed in a culture associated with creative industries practice. In our second case study from the School of Management at the University of Southampton, an element of technology-enhanced learning has been introduced into the management of the student / personal tutor relationship. Specifically, students were asked to utilise university-hosted personal blogs to supplement and complement their monthly face-to-face meetings with personal tutors throughout their course, as an interim step towards the introduction of a more integrated Personal Development Portfolio (PDP) next year. This initiative sought to facilitate deeper communication between lecturer and student, as well as encourage student reflection on their progress and planning for their own personal and career development. Students were also asked to complete an online survey at the start of their course about their technical skills and their attitudes to learning, key results from which are highlighted below.

**Figure 1** What are your main motivations for study?



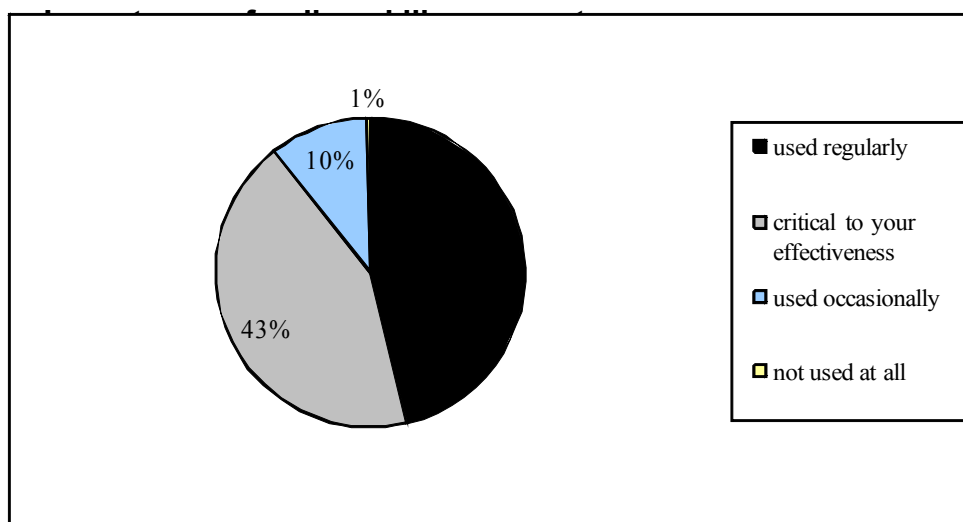
When asked about their ownership of personal technologies, the majority of respondents (94 per cent, n=256) claimed laptop ownership. As respondents were permitted to enter multiple responses, all respondents claimed mobile phone ownership, with 52 per cent (n=141) stating that they possessed a mobile phone with advanced (i.e. Internet-related) features. Only 21 per cent (n=56) of respondents own a personal computer (PC) rather than a laptop.

Table 1 shows that respondents are relatively experienced users of basic Microsoft Office products and watchers of online videos (mean=2.74), users of instant messaging (mean=2.68), and user social network sites (mean=2.52). Respondents are also users (albeit novice) of blogs and wikis. However, they exhibit little or no experience around the more active components of online activity, such as contributing product ratings (mean=1.83), using Twitter (mean=1.57), creating and publishing online video (mean=1.51), and groupware (mean=1.32).

**Table 1 Familiarity with technology**

<b>Answer Options (1 = No experience, 2 = Novice user, 3 = Experienced user)</b>	<b>Mean</b>
Basic Microsoft Office products (Word, Excel, Powerpoint)	2.74
Watching online video	2.74
Skype or Instant Messaging	2.68
Social networking (e.g. Facebook, Orkut)	2.52
Reading blogs	2.35
Commenting on blogs	2.13
Using Wikis	2.01
Contributing product ratings or reviews (e.g. of books on Amazon)	1.83
Online Bookmarking (e.g. delicious)	1.66
Online collaborative games	1.58
Using Twitter (e.g. for information gathering or networking)	1.57
Creating and publishing online video	1.51
Second Life	1.33
Groupware (e.g. Ning, Basecamp)	1.32

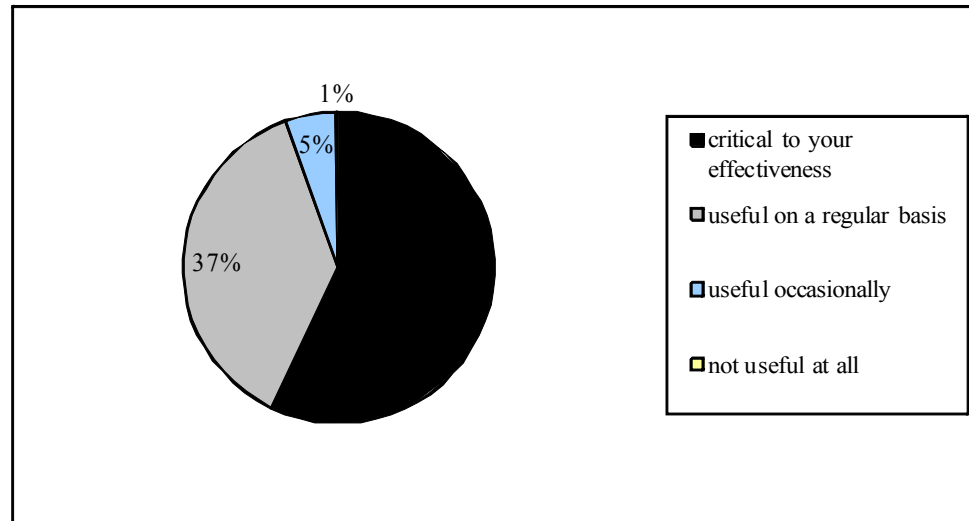
**Figure 2**





47 per cent (n=126) stated that they use online skills regularly in their programme, and 43 per cent (n=118) stated that online skills are critical to effectiveness. The trend of increasing importance is exemplified in Figure 3 by the finding that 58 per cent (n=126) of respondents state that online skills will be critical to effectiveness in their future careers.

**Figure 3 Importance of online skills - future**



## 6. Discussion and Conclusion

Generally the feedback on both initiatives has been very positive, both in the focus group discussions and through the online evaluation survey. However, a non traditional approach to teaching can be confusing and frustrating, particularly for international students, for whom this approach is culturally difficult to appreciate and relate to. In many cases the expectations of international students are very different and their own creative industries do not operate the same freelance and portfolio career which is so dominant in the UK (in China for example, there is only the state media and Chinese students are more focused on management skills than entrepreneurship). The emphasis on personal values is uncomfortable for some students who do not expect to be able to put themselves at the heart of their learning. However, from the staff perspective at BCU, some highly proactive approaches were observed. Students demonstrated entrepreneurial behaviour by engaging with relevant organisations, setting up events to test the market and by developing their networking capacity within a short period of time. In some cases this has led to students gaining some local press coverage and engaging in further developments with the project or business idea beyond the life of the module concerned. The personal journey enabled students to explore the “life world” of the cultural and creative entrepreneur including the importance of discourse with audiences and the use of technology. Students experienced a taste of the distinctive language, work ethic and culture associated with the sector (Rae, 2007).

The students’ use of social media was not specifically measured in a formal way, but it has increasingly become an expected part of the process of communicating, sharing and discussing issues as a means of producing the expected learning outcomes of this study programme. For students to meet the assessment criteria,

they increasingly need to refer to a broad range of information, to debate, test and discuss problems or ideas in public spaces, and then synthesise this diverse range of information for their projects. According to one student:

*“It gives you the opportunity to really reflect on your work and on your capabilities and not just do a ‘mechanical’ work. Somehow it should become a habit for us to better reflect on our work.”*

The plan is to further integrate these approaches and embed them across the whole range of post graduate courses, making use of available social media popular across the creative industries sector rather than work within academic systems such as Moodle. The focus is on looking ahead to develop a student’s online profile as a professional person, rather than simply using an online system retrospectively for submission and grading of coursework produced in a traditional format.

The University of Southampton PDP initiative has so far proved to be a useful facilitator of the personal tutor system. Specifically, the use of blogs as support tools improved the quality of subsequent face-to-face time spent with students, because they regularly updated their blogs in the time between meetings. This allowed tutors to form a clearer picture of how each student was progressing individually. However, the adoption of blogging as a learning tool was relatively ad hoc, with some students (and indeed staff) taking the process more seriously than others. Only about 25 percent of the students were clearly comfortable working in an online environment, and certainly very few could be described as “digital natives”. As the following quotes exemplify, students used their blogs to feedback on a range of issues:

*“I have started to use Twitter, because it was highly recommended by lots of professors. I follow interesting companies, search for any announcements. But I’m not sure if I use it properly – I just note my thoughts!”*

*“I would prefer more online activity!”*

*“I believe that online communication skills and reputation building will be very important for the future careers of our generation. Being able to exploit the many advantages that technology offers in the workplace such as distance working and collaboration, collecting information and exploiting the potential of knowledge possessed by other people in our network will be highly demanded skills.”*

*“As long as there is some face-to-face interaction with the lecturer, I believe that online discussions may be a more effective way of teaching.”*

*“It was really complicated to structure the report due to the fact that the questions which were given in the assignment were about the same things, but asked from different perspectives.”*

Such comments provide useful feedback for lecturers and helps facilitate Biggs’ (1996) notion of constructive alignment, which emphasises the importance of matching lecturers’ expectations with learning activities and assessment tasks. Thus these blogs may have gone some way towards fostering a new kind of learning environment and improving the quality of student reflection and learning. However, room for improvement is clearly evident from the survey results, which illustrated that although students were comfortable with more passive online activities (e.g.

watching video and reading blogs), they tended to be less comfortable with the more active elements required by the PDP (e.g. using Twitter, commenting on blogs, and publishing their own online content).

Today's economy requires much more than graduates who simply act as sponges for information. Interactive and real-time learning is vital in an economy that is increasingly global, where information is the most valuable asset, and effective collaboration is a tool which is increasingly valued by employers (Krause and Coates, 2008). Technology-enhanced learning has, in both the cases described here, facilitated a more responsive, student-centred approach, which can only serve to produce more employable students (Biggs and Tang, 2007; Tani, 2008). However, relatively few students truly engaged and we still have some way to go in developing a critical mass of graduates who can effectively create, synthesise and share information, thereby adding economic value to their employers.

In a traditional University environment, technology-enhanced learning strategies are still rare. As noted above, the variable level of commitment from teaching staff was not helpful in encouraging more students to actively engage with the online reflective learning process. Previous research has found that such ad hoc adoption can leave students confused (e.g. Ellis et al 2009; Kanuka and Kelland, 2008), but our experience suggests that experimentation is a necessary first step in moving us up the learning curve towards the development of a full e-portfolio based learning strategy across the School, as small successes can be drawn upon to encourage "buy in" by more staff and students. The next stage of our research will examine this implementation aspect in more detail, and also consider how universities can prepare students for a digital society that goes beyond consideration of employability in the digital economy, to cover the broader issues of participation, social justice, personal safety, ethical behaviours, managing identity and reputation.

## References

- Biggs, J. (1996) Enhancing Teaching through Constructive Alignment. *Higher Education*, 32: 347-364
- Biggs, J. and Tang, C. (2007) *Teaching for Quality Learning at University*. Berkshire, UK: Open University Press
- Browne, T., Hewitt, R., Jenkins, M., & Walker, R. (2008) *Survey of technology enhanced learning for higher education in the UK*. Oxford, UK: UCISA.
- CBI and Universities UK Report (2009) Future Fit: preparing graduates for the world of work, [www.cbi.org.uk](http://www.cbi.org.uk)
- Dommeier, C. J. and Moriarty, E. (2000) Comparing two forms of an e-mail survey: embedded vs attached, *International Journal of Market Research*, 42: 1, 39-50.
- Ebner, M. and Maurer, H. (2009) Can Weblogs and Microblogs Change Traditional Scientific Writing? *Future Internet* 1: 1, 47-58.

Ellis, R. A., Ginns, P. and Piggott, L. (2009) E-Learning in Higher Education: Some Key Aspects and their Relationship to Approaches to Study. *Higher Education Research & Development*, 28: 3, 303-318

JISC Report (2009) Higher Education in a Web 2 World, March

Johnson, R. et al (2007) Towards a Definition of Mixed Methods Research, *Journal of Mixed Methods Research*, 1: 2, 112-133

Jones, C. and Cross, S. (2009) Is there a Net generation coming to university? In: ALT-C 2009 "In dreams begins responsibility": Choice, evidence and change, 8-10 September, Manchester, UK

Kanuka, H. and Kelland, J. (2008) Has E-Learning Delivered on its Promises? Expert Opinion on the Impact of E-Learning in Higher Education, *Canadian Journal of Higher Education*, 38: 1, 45-65

Kennedy, G., Dalgarno, B., Gray, K., Judd, T., Waycott, J., Bennett, S., Maton, K., Krause, K.L., Bishop, A., Chang, R. and Churchward A. (2007) The net generation are not big users of Web 2.0 technologies: Preliminary findings, In *ICT: Providing choices for learners and learning*. Available at:

<http://www.ascilite.org.au/conferences/singapore07/procs/kennedy.pdf>.

Krause, K. and Coates, H. (2008) Students' Engagement in First Year University. *Assessment and Evaluation in Higher Education*, 33: 6, 675-686

Oliver, B. et al (2009) Curtin's iPortfolio: Facilitating Student Achievement of Graduate Attributes Within and Beyond the Formal Curriculum. In *Learning Communities: International Journal of Learning in Social Contexts*, 2

Prensky, M. (2001) Digital Natives, Digital Immigrants, Do They Really Think Differently? *On the Horizon*, MCB University Press, 9: 6

Rae, D. (2007) *Entrepreneurship: From Opportunity to Action* Palgrave Macmillan

Sale, J. et al (2002) Revisiting the Quantitative-Qualitative Debate: Implications for Mixed-Methods Research *Quality and Quantity*, 36: 1, 43-53

Selm, M. and Jankowski, N. W. (2006) 'Conducting Online Surveys', *Quality and Quantity*, 40: 3, 435-457

Tani, M. (2008) Raising the In-Class Participation of Asian Students through a Writing Tool. *Higher Education Research & Development*, 27: 4, 345-356

Tapscott, D. (2008) *Grown up Digital*, New York: McGraw-Hill.

Wilson, A. and Laskey, N. (2003) Internet based marketing research: A serious alternative to traditional research methods? *Marketing Intelligence and Planning*, 21: 2, 79-84