

# **Cultivating a Digital Habitat: Developing the E-flective Practitioner by Creating a Virtual Collaborative Learning Environment**

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## **Abstract**

*This paper describes how the online Masters in Photojournalism and Documentary Photography at UAL engages its participants entirely virtually with web 2.0 and social networking approaches, creating a 'learnscape' (Cross, 2004); a series of interactive spaces that act as a 'virtual commons'. This is informed by Wenger's (1998, 2002) ideas of Communities of Practice and 'Digital Habitats' (2009). This creates 'e-flective practitioners', who use social media to debate, discuss and deconstruct their learning with their peers. Our learning design philosophy is based on a 'living curriculum' maintained with the students, so that together we are constantly engaged in developing a virtual collaborative learning environment (CLE) that blends together a variety of different social media platforms, with different temporalities allowing learners to interact in ways that suit them, rather than ways that are dictated to them by a more closed system such as a traditional VLE. The CLE is thus an organic, fluid space, in which peer to peer support and engagement is central, and in which the goals are to collaboratively enhance the group and individual's digital literacies in developing the mindset necessary to curate, critique, create, collaborate and communicate in the 21st century digital world.*

## **Introduction to the MA Photojournalism and Documentary Photography Online**

*Constructivist principles acknowledge that real-life learning is messy and complex. Classrooms which emulate the "fuzziness" of this learning will be more effective in preparing learners for life-long learning.' George Siemens 2004*

The MA Photojournalism and Documentary Photography Online (MAPJD) is a two year, part time course aimed mostly at mature students who are mid-career professionals, and from a wide range of backgrounds and countries. They are typically looking to deepen and extend their practice by gaining the skills and methodological toolbox to operate as professional photographers in an editorial and documentary context. Central to our teaching strategy is the development of critically aware practitioners who are able to combine high levels of technical expertise with compelling aesthetics, underpinned by a strong ethical perspective, and who understand the power of collaboration and co-creation in the digital age. There is a high level of interaction with industry, evidenced especially by extensive use of professionals as visiting tutors and mentors.

Our teaching philosophy is centered on the creation of a collaborative learning space, where individuals can enhance their practice through interaction with their peers by utilising a variety of web 2.0 spaces. Together, these various spaces create our 'learnscape' (Cross, 2004) or 'Digital Habitat' (Wenger 2009), which is constantly evolving and developing. The core pedagogic foundations of this approach lie in Wenger's concept of 'communities of practice' and in Schön's work on developing the 'reflective practitioner'.

One to one and small group tutorials are central to the teaching method, analogous to Schon's (1987) 'coaching' approach. The students progress in a structured way from small, set assignments to their final self directed major project, thus building a repertoire of skills and methodologies. The course is practice based and highly vocational, and founded on a problem based experiential approach to learning. Combining this with the affordances and amplifications of technology enhanced social learning creates what Steve Eskow has called *E E learning*, where experiences are leveraged and expanded by the potential of web 2.0 platforms like blogs and wikis, allowing students to share their reflections on their work in real time with their peers, and becoming

Members of two learning communities: the community of practice, where they gather procedural and process knowledge, and the academic community, where they connect their reflections on these experiences to the disciplines. (Eskow, 2007)

As such, they have the potential to develop into what he describes as 'scholar practitioners', combining real world experiences with deep reflective insights into the role of the practitioner. This creates the potential for what I have

identified as the *'E-reflective Practitioner'*, able to leverage the potential of digital communication to enhance their critical awareness by sharing their thinking with others more easily.

This for us is real 'situated learning', the student practitioner is able to physically live 'in the story', working on their projects in the field but getting continuous real-time support from their peers and mentors. Typical of this is Antrim Caskey, who spent almost the entire two-year programme living in the mountains of West Virginia, working on a campaigning project on the environmental impact of opencast coal mining on the area. This culminated in early 2010 with the publication of a book of her work entitled 'Dragline'. Antrim found the programme was an ideal environment in which to explore her practice in depth, and believes that the course 'provided a warm, welcoming and intelligent virtual classroom that we all became quickly adept at managing and learning within'.

The success of this approach to designing a learning community that interweaves practice and theory with the affordances of social learning technologies is exemplified by the learning journey taken by a recent graduate, Silva Ferretti. Her final major project, Grumgush, is an immersive insight into the lives of Albanian immigrants in Italy. Together with these young men, she produced a participatory project that is funny, moving, intellectual, emotional, challenging and entertaining, and presented in an interactive online format using web 2.0 presentation techniques that redefine the potential of visual storytelling. Silva, like many of the participants in the MA, did not have any formal training in photography, nor was she especially adept in digital technologies; she initially trained as an economist and was able to continue her work in the NGO sector throughout the programme, participating in online sessions from Italy, Uganda, Afghanistan and London. She joined the programme in order to learn how to use photography to enhance her reports on projects in the majority world. The transformative learning experience Silva had collaborating and co-creating with her peers and tutors on the course has led her to apply the concepts of technology-enabled communities of practice in her own work. She has now established herself in a new role as a freelance consultant to the NGO sector using visual imagery and web 2.0 technologies; a career trajectory that would have been impossible without the experience of the Masters programme.

## **Don't teach tools, use tools to teach**

*'Knowledge is no longer acquired in a linear manner. We can no longer personally experience and acquire all the learning that we need in order to act. We must derive our competence from forming connections with other people. Blogs and wikis are ideal tools for this and what we see in these tools are examples of networks of growing knowledge and understanding.'* Mason and Rennie, 2008, p11

On the online masters, we work with the participants entirely virtually, by creating a series of overlapping interactive spaces with differing temporalities to create our 'virtual commons'. This replicates the physical face-to-face environment of the academy, with spaces that are akin to classrooms, libraries, cafes and 'water coolers'. These include real-time web conferencing for tutorials and lectures, a social networking space on Ning, and the use of Twitter and blogs to build a learning community.

The learning design philosophy of the course is based on the concept of a 'living curriculum' (Wenger, McDermott & Snyder 2002) maintained in collaboration with the student cohort, with whom changes and modifications are negotiated. We endeavour to use the most suitable available technologies to address the pedagogic issues of the moment, moving to better alternatives as they emerge in a 'Best of Breed' approach to selecting learning tools. This approach acknowledges the concept that the world is in 'perpetual beta' (Boyd, 2008), with a pace of change so fast that learning design needs to be flexible and responsive, whilst recognising that the focus should always be on creating a student-led learning environment (Wenger, McDermott & Snyder 2002). Together with the students, we therefore engage in a collaborative exploration of the affordances of technology, firstly identifying the pedagogic goal(s) we need to achieve, and then experimenting with a solution. In this process, we co-create the learning space, trialing various ideas and solutions to find the ones that work best for the group. This is informed by the finding of a recent JISC funded report, that maintains that rather than being taught as discrete skills, digital literacy should be deeply embedded in course curricula through a range of situated, technology-enhanced learning opportunities, and that literacies emerge through 'authentic, well-designed tasks in meaningful contexts' (LLiDA 2010, p5). We therefore need to design situated and flexible learning opportunities where learners use their own technologies for self-direction, personal reflection, progression and planning. Empowering learners to navigate increasingly complex learning landscapes requires continuous evaluation of their techno-social practices, the practices of professional and

scholarly communities, and how technologies are integrated into curriculum tasks.

Our experience of introducing new platforms is that we do it gradually, and do not force everyone on the course to adopt a new technology in the beginning, but rather allow the 'early adopters' to explore the platform and help work out how best to use it. However, we do not simply try out every new tool that emerges, we only explore something new if we can collectively identify a need for it in terms of a pedagogic function or requirement that is missing or could be improved. A notable example of this is our use of Google Wave as a tool for project planning and brainstorming. Initially we had felt that introducing Wave would have been too much for the students to take on board as it was such a new technology, but several of the group began to explore it themselves and then suggested that we experiment with it as a potential solution to the provision of peer feedback on projects. One of the key activities that the students engage in on the course is initiating, researching, developing and then executing a practice project. As part of this, they have to brainstorm their ideas to 'test them out' with others, including their tutors and their peers. We do this typically in live group tutorial sessions, and by using their blogs and discussion forums on the Ning site. However, between the active, live energy of the tutorial and the passive, reflective thinking of the forums and blogs, there seemed to be something missing, a space where ideas could be posted and responded to quickly, a space somewhere between synchronous and asynchronous. There was also a real need for something to fill the gap between the tutorial sessions especially during the non-teaching weeks on the course. Having identified this need for a new collaborative space, we didn't at that point actually have a platform that would facilitate this. We therefore embarked together on a trial of Google Wave to explore whether it could solve this problem. Overall, Wave has proven to be an extremely useful vehicle to enhance communication, collaboration, engagement and interaction.

We explored using Wave as a 'brainstorming' space to receive critical feedback, advice and support. One idea that has been particularly successful is a weekly 'Wave day' where students and staff regularly check in, responding to each others comments, making Wave an almost real time experience and creating powerful feedback loops. The level of critical engagement with each other's work has been very high; with exchanges often reaching a level of intensity and interaction that is rare in a face-to-face tutorial. Most of this interaction has been peer-to-peer; whilst the presence of a tutor has sometimes been seen necessary to validate the concepts, mostly it is each other's advice and commentary that is acted upon. This process of what Boud calls the 'calibration of judgment' (2009) is an essential part of becoming a practitioner; the ability to decide whether a project or idea is good without the validation of an academic staff member is vital. In this experiment with Wave, although my presence as a tutor was seen as significant, and my interjections valued, the peer to peer support that obtained was as important in shaping and forming participants project ideas to an extent rare in a face to face group tutorial environment. Additionally, as Roger Saljo notes the 'conversation as document' form of wave is a common trait of many emerging web 2.0 platforms; by providing a rich array of data and a trace of the collective memory of a group they make it possible to 'document and distribute not just information but also the traces of human thought processes in the form of increasingly sophisticated procedures' (2009). Being able to follow the process of learning as well as the product gives us unparalleled insights into the actual learning taking place.

At the heart of the programme is live interactive web conferencing through which we run lectures, seminars, tutorials and other sessions in real time. We use the Wimba platform, which allows us to interact with the cohort and visiting faculty, using images, presentations, web pages, live text, audio and video seamlessly in one browser window, combining the energy and involvement of face-to-face teaching with the flexibility of location afforded by a virtual environment. Attendance at these sessions is high; typically over 75% of the cohort, and every session is archived and available as an mp4 video file to view again. The students have their own 'room' available 24/7 to use for meetings, discussion and collaboration. We also currently use the Ning social networking platform for collaboration and communication, which has discussion forums, member pages, an online calendar, and hosts photographs, videos and other course materials. Twitter is used on the course as a 'water cooler' channel of communication, where participants post links, questions, comments and events using a common hashtag so that everyone in the group can subscribe. Blogs are used as reflective learning journals, and provide valuable feedback to the course team on 'how learners learn' by detailing the process of learning. The course uses a wiki to run collaborative research projects and other group projects such as project managing the final website showcase for the cohort.

Not every participant uses every space, indeed feedback has demonstrated that for some students a certain tool is rated very highly and seen as indispensable, whilst for others the same tool is seen as virtually irrelevant. This

supports the concept that a variety of spaces with varying temporalities and interactions are needed in a virtual environment. Different platforms have different orientations, as Wenger (2009) et al note, some are more suited to informal, collaborative learning whilst others orient more towards individual, formal learning. Stahl notes that

Different technologies can provide different kinds of support for the construction and maintenance of shared conceptions. .... Designers cannot predict many ways that these spaces will be used without observing actual groups of interacting students trying to work out their tasks situated within specific environments (2008, P6)

However, we must be careful to avoid a sense of confusion and chaos in the approach of 'small parts, loosely joined' that suits web 2.0 learning so well, as Mason and Rennie warn

The course management system needs to function as an interlinked system for the benefit of the learner, not a cluster of individually useful but stand alone technology applications that are bolted together according to some personal philosophy, preference or whim of the tutor. (2008, p38)

Increasingly, therefore, a key role as an educator emerging is what Wenger et al characterise as a technology steward, familiar with the affordances of technology, and also the underlying pedagogical principles that promote learning. He defines this as someone with enough experience of the workings of a community to understand its technology needs, and enough experience with technology to take leadership in addressing those needs. Stewardship typically includes selecting and configuring technology, as well as supporting its use in the practice of the community. (2006)

Key to this process is engaging regularly with the users, so we carry out surveys of the students perceptions of the various platforms we use, and hold frequent online sessions where the cohort are able to discuss the learnscape with the team and an e learning specialist from the university, and adapt and evolve it as necessary. The success of this approach is demonstrated by one student's comment

While we might complain sometimes about how many new tools we have on the go and the confusion it creates, I'm really starting to see the benefits of all of this experimentation.

As much as possible then, in trying to establish a community of practice with the students, we have used the introduction of new features to the course to enhance collaborative spaces rather than imposing a top down vision of how things must be. Some elements have worked better than others, some have met with resistance from the students, some have been abandoned and others are still to be explored, but Wenger's idea of 'design for evolution' (Wenger, McDermott & Snyder, 2002 p15) now underpins our thinking. As he emphasises, course development must be flexible to accommodate the needs of the students, not a fixed, monolithic structure that cannot be modified,

Rather than designing finished structures, it uses design as a catalyst for community growth and development. This approach intermingles design and implementation, making design a recurring aspect of the life of the community, not a precursor to its existence – a part of the community itself, not an outside-inside activity (Wenger, McDermott & Snyder, 2002, p64).

## **Collaborative design of a living curriculum**

*'Our experience of space is becoming a dynamic mix of physical and virtual relationships, of synchronous and asynchronous connections, where our togetherness is fleeting at the same time as it is becoming 'always on''. A range of different experiences of space and time becomes an integral part of our digital habitat'. Etienne Wenger (2009, p175)*

In developing the programme, we have emulated Schön's concept of a 'Practicum' (1983) as an intermediate space between the worlds of work and study, and fostered a community of practice that mirrors the larger professional community of photojournalism practice. Mapping and modeling this larger community prepares our students for entry into the profession, providing a 'sandbox' in which the students can develop their professional practice in a controlled environment. As he elaborates:

The practicum is a virtual world, relatively free of the pressures, distractions, and risks of the real one, to which, nevertheless it refers. It stands in the intermediate space between the practice world, the 'lay world' of ordinary life, and the esoteric world of the academy (Schon, 1987 p37)

Our intention is that students learn through growing into a practice based collaborative learning community, which then enables them to be part of the wider community of practice of photojournalists. The combination of practice based, experiential learning is underpinned by theoretical and contextual studies that locate the practitioner within a community of practice, and locate that community within a broader socio-cultural milieu of the media. For us, legitimate peripheral participation (Wenger and Lave, 1991) includes:

- Being around those with more expertise
- Story telling that enables the exchange of soft knowledge
- Learning from doing peripheral activities
- Being present during major activity
- Absorbing, then learning, to use the discourse
- Developing attitudes that transform identity
- Building professional identity through multiple, and different forms of, relationships within the community of practice
- Learning the communities of practice ways of behaving and the values on which this is based.
- Developing and maintaining community of practice knowledge

Our thinking in course design and implementation is based on readings of Wenger (1998, 202, 2009), Schon (1983, 1987), Laurillard's 'Conversational Framework' approach (2006, p 84) and on an exploration of the literature around Computer Supported Collaborative Learning. In this we have been particularly influenced by Jay Cross's concept of a 'learnscape' (2004), an 'informal learning ecology' which he defines as a platform where knowledge workers collaborate, solve problems, converse, share ideas, brainstorm, learn, relate to others, talk, explain, communicate, conceptualize, tell stories, help one another, teach, serve customers, keep up to date, meet one another, forge partnerships, build communities, and distribute information. (Cross, 2008)

Wenger's new work on Digital Habitats explores this idea as essential to the cultivation of ecology of learning. He defines digital habitats as not just a configuration of technologies, but a dynamic, mutually defining relationship that depends on the learning of the community. It reflects the practices that the members have developed to take advantage of the technology available and thus experience this technology as a 'place' for community. A digital habitat is first and foremost an experience of place enabled by technology. (2009, p 39)

Cross uses a similar metaphor to Wenger (2002) when he describes how a learnscape is analogous to an organic living entity, and the role of the educationalist should be that of a cultivator, or a 'learnscape'. Central to this organic approach for me is to create as many spaces as possible for dialogue, creating a 'virtual commons' across a range of temporalities from synchronous to asynchronous. This acknowledges that different learners need different experiences and that just as in the physical world universities have a range of spaces ranging from formal to informal for supporting learning, so does a virtual course. This also requires that we think of the course as what Sharpe and Oliver call a 'living curriculum' (2007, p46). They note that central to this approach is that the course should 'develop iteratively over a number of years' in an 'ongoing, transformative engagement' (2007, p49). Mc William echoes this approach, emphasising that the more we think of learning as collaborative and student focused, the more we have to acknowledge that courses cannot be set in stone from the outset,

If pedagogy might be rethought as the co-creation of value, then curriculum cannot be 'fully formed' and set in place in advance of pedagogical activity.....From fixed and immutable, curriculum needs to be conceptualised as *content for meddling with*. (p7, 2005)

She goes on to argue that this reconceptualises the role of the teacher, positioning them as learners along with the students

co-creating value would see the teacher and student *mutually involved in assembling and disassembling* cultural products. In colloquial terms, this would frame the teacher as neither sage on the stage nor guide on the side but *meddler in the middle*. The teacher is *in there doing and failing* alongside students, rather than moving like Florence Nightingale from desk to desk or chat room to chat room, watching over her flock, encouraging and monitoring (p7, 2005)

Central to this approach is the notion that we are all learners; in the fast changing world of digital media, we are all, including me, my staff, visiting professional tutors and the students, trying to understand and evaluate the new landscape of practice. We therefore endeavour to create a non-hierarchical space where we all work together to comprehend the complex world that we engage with. The course team's extensive professional experience and wide range of industry contacts enables us to bring extremely high level figures from the professional world into the practicum, allowing for rich and challenging discussions for both the students and the visiting professionals alike. We see ourselves, the tutors and the participants on the programme as equals, with everybody bringing important and significant abilities, skills and knowledge to the shared experience of learning together. This community extends beyond graduation as the alumni remain members of the social network and continue to interact with the new students as well as their own cohorts. Evidence of the success of the programme is the near-100% retention rate, and the high proportion of students (nine out of 14 in the first year of the online programme) graduating with distinctions, a ratio that is higher than their peers on the full time face-to-face mode of the course.

## **Creating a personal learning environment (PLE)**

*'The starting point of connectivism is the individual. Personal knowledge is comprised of a network, which feeds into organizations and institutions, which in turn feed back into the network, and then continue to provide learning to individual. This cycle of knowledge development (personal to network to organization) allows learners to remain current in their field through the connections they have formed.'* George Siemens, 2004

One area that we spend a lot of time thinking through is the extent to which the course should attempt to engage the students in digital competencies and literacies outside of the core vocational content of photojournalism and documentary photography. We firmly believe that we should be producing 'e-reflective practitioners, what JISC identifies as 'capable, self-aware learners with the capacity to participate in learning using technologies and approaches of their own choosing' (LLiDA, 2010 p9). As we increasingly move toward an environment of instant and infinite information, it becomes less important for students to know, memorize, or recall information, and more important for them to be able to find, sort, analyze, share, discuss, critique, and create information. They need to move from being simply *knowledgeable* to being *knowledge-able*. (Wesch, 2008)

We believe that a graduate should be capable of 'learning to learn'; to identify, access, organise, evaluate, interpret, analyse, synthesise and apply. In addition, they should have developed communication and collaboration skills including teamwork, networking, media literacy and critical reading, creative production and ICT/digital/computer literacy. We should aim to equip them with a set of competencies and understandings that they can then build on and adapt as they continue to interact with the world and build up their personal learning network (PLN) and personal learning environment (PLE). A PLE approach suggests that digital learning should be seen as a flow, using whatever resource is available today to learn, as something else will be along tomorrow, and that wherever possible, activities should utilise tools that learners will be able to use beyond graduation. At the start of their academic career a student may benefit from structured institutional support such as a VLE, but as they progress they should be able to fashion their own set of tools to manage their digital learning; what Stephen Downes (2008) has called a personal learning centre (PLC).

Howard Rheingold defines literacies as 'skills plus community', and identifies five key literacies as *attention*, *participation*, *cooperation*, *critical consumption* (or what he calls 'crap detection'), and *network awareness* (2008). Together they generate what he calls a 'culture of collaborative inquiry'. Essentially we should be helping graduates to develop the capacity to direct their own learning and to critically engage with digital media, and to learn how to learn without a teacher. To do this they need to develop 'trust networks' to find and validate the information they seek. As George Siemens argues, 'know-how and know-what is being supplemented with know-where' (2004); a PLN helps to find the 'where'. We suggest that a graduate should be able to critically engage with 5 core

competencies of *curate, critique, create, collaborate* and *communicate* to create their own Personal Learning Environment (PLE), and that the development of these abilities should be developed through embedded, authentic learning experiences that are relevant to their own practices. In doing so, we seek to help them develop their own PLN and PLE, both of which are portable into their lives as learners post graduation. Steve Wheeler maintains that 'the PLE is *'all about me'* - it's what each of us personally creates around us as a means to support our lifelong learning.' (2010), whilst Stephen Downes characterises it as learning in a community, and posits that in contrast to the traditional VLE which is static, declarative and authority based, the PLE is dynamic, tacit, non declarative and constructed by learners themselves. By exposing our cohort to a variety of different online potentialities embedded in their practice they can explore them and identify which work best for them to support their research, practice and learning.

## **Conclusion: the power of collaborative, community based learning**

*What makes managing knowledge a challenge is that it is not an object that can be owned, stored and moved around like a piece of equipment or a document. It resides in the skills, understanding and relationships of its members as well as in the tools, documents and processes that embody aspects of this knowledge.* (Wenger, McDermott & Snyder, 2002 p11)

In conclusion then, for me the major insight of the development of the course has been the necessity of equipping our graduates with a set of relationships both to themselves, their peers and to a wider social context that can guide them in their burgeoning careers, and how a technologically supported community of practice model can enhance this. Again, Wenger et al provide an excellent summation of our current philosophy in this regard

It is still important to remember that some of their greatest value lies in intangible outcomes, such as the relationships they build among people, the sense of belonging they create, the spirit of inquiry they generate, and the professional confidence and identity they confer to their members. (Wenger, McDermott & Snyder, 2002 p15)

The major challenge for the future for us is how to maintain a course development process that is innovative and forward thinking whilst retaining academic credibility and without alienating the students with an overload of technology; our process of course evaluation is now focusing on how to obtain this balance. We will leave the last words to one of our current cohort, writing on his course blog

facebook, twitter, ...diigo, had never even heard of it  
12 months living in the Angolan bush with extremely limited internet, combined with a hate of pointless facebook messages, and blogs, really did leave me disillusioned and behind in regards to social networking.  
However, I really have been converted to social media on the internet in the last few weeks and the level of intelligent conversation going on.  
Its exciting, and most importantly, is damn powerful.  
A great arena for exposing documentary work.  
I stand corrected, twitters.

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