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Is One Life Enough? Delivering a module in Second Life
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Abstract

The potential of online virtual environments, such as Second Life for delivering remote learning continues to be debated by academics. It would appear to offer particular opportunities to support remote learning in art & design, where there is a particular requirement for live visual interaction.

The School of Art, Design & Printing at the Dublin Institute of Technology (DIT) received funding to develop a module for undergraduate students to test this theory. A five-credit module (under the European Credit Transfer System) received formal approval from the Institute in 2009 and was delivered as a pilot to academic staff who were interested in exploring virtual environments for the purposes of learning and teaching. This was followed by the first delivery of the module to undergraduates in art & design as an elective module in the first semester of the 2009/10 academic year.

A thorough knowledge of virtual environments and social networking communities is increasingly essential for those working in what could be described broadly as the content creation sector. The module encourages participants to explore this area and exploit the opportunity to create and manage their online presence and begin the process of building and maintaining an online personal brand. The paper describes the delivery of the module in these two instances; some of the challenges encountered and includes feedback from students. It also suggests a framework for lecturing in Second Life based on what was successful in this instance and what was not.

Keywords: Virtual Environments, Second Life, art and design
Introduction

The talk opened with a short video narrated by Locks Aichi (Claudia Igbrude) demonstrating the virtual learning environment (VLE) developed in Second Life.

The incentive to develop a module to be delivered in an online virtual world was provided by the annual Learning and Teaching Awards at DIT. Although the funding was not used the structure provided a context and supported the development of relationships between appropriate academic staff. The costs of working in Second Life have been borne by the authors to date but this is more due to the lack of time to engage with the Finance Department in order to submit a claim than any reluctance on the part of the institute to fund the activity.

It was initially thought that a module designed for product design or fine art sculpture students to explore the potential of building in a virtual world would provide a good starting point. But, timetabling and resource allocation restrictions led to a rethink and eventually it seemed that an elective module addressing the broader subject of interactive social media and the development of a personal brand would give more scope to assess the viability of Second Life as a virtual learning environment for art & design. The final shape of the module that was submitted for validation identified Second Life, supported by DIT’s Webcourses online learning system, as the sole point of delivery for a learning experience that introduced students to a range of interactive social media tools such as, Second Life itself, blogging, Facebook, etc.

While the module is targeted broadly at undergraduates across the Schools and Colleges of DIT it is currently being offered to third-year students on a range of four-year art & design degree programmes as part of the elective element.
Students on these programmes are required to accumulate 60 credits per semester, five of which must be via an elective. Each elective module carries five credits.

**Virtual Learning Environments for Art & Design**

One of the key issues for art & design in eLearning has always been the lack of an effective set of tools to support real-time visual interaction. Most successful eLearning material traditionally has been text-based, sometimes with the addition of visual images and sound. But, so far there has been limited success in creating a Virtual Learning Environment that can support the learning paradigm common to art & design, ie, studio-located, project-centred and crit-based.

![Image](image_url)

**Figure 2: Student participants in Second Life with lecturer Acuppa Tae in the foreground.**

The key learning activity in art & design is the ‘crit’, where a group of students, under the guidance of a lecturer, present their work while engaging in a critical peer review. This ‘community activity’ approach to learning, that has underpinned art & design education since it was introduced by the acclaimed Bauhaus School in Germany between the wars, is now widely supported and recognised by those who suggest that ‘the way to maximize learning is to perform, not to talk about it’ in a community context (1). Much work has been done to connect universities via video-conferencing technologies and creating hubs supporting interactive visual environments. For example, an Access Grid developed by The Rogers Centre at Ryerson University in Canada and a set of virtual tools and VLEs developed by the University of Art & Design in Helsinki were evaluated by DIT through a Minerva Interface II funded project in 2006. But, the requirement for considerable investment in specialised hardware and software coupled with the limited ability to recreate the studio environment common to higher level art & design education means these solutions were
always going to have limited appeal. On the other hand, the lifelike environment of Second Life along with its set of building tools and the ability to import content from external sources offers a very real opportunity for virtual learning that is enhanced by its accessibility: Second Life is available free to anyone with a broadband enabled computer.

Much of the thinking around learning communities has been influenced by observing the ‘virtual communities’ that develop in MMOGs (massively multiplayer online games) such as World of Warcraft. Writing specifically on this topic Galarneau (2) points to Seely Brown’s suggestion that these provide an entirely new kind of social learning experience:

“Understanding the social practices and constructivist ecologies being created around open source and massively multiplayer games will provide a glimpse into new kinds of innovation ecologies and some of the ways that meaning is created for these kids – ages 10 to 40. Perhaps our generation focused on information, but these kids focus on meaning – how does information take on meaning?” (3)

An environment like Second Life also provides the opportunity for learners to engage in peripheral activities that support a deeper engagement and results in greater understanding and retention. Lave and Wenger suggest that ‘other kinds of communities and the forms of legitimate peripheral participation therein’ hold the key to understanding learning (1). As a result of this inherent tension, the problem of studying social learning phenomena in engineered environments, like schools, is huge, if not an empirical impossibility.

The module emerges

As we began to develop the module it became clear that we would need to gain some experience of teaching in Second Life before taking on too great a challenge. We also set out some criteria by which to evaluate the suitability of the space as a learning environment:

1. Can the project leaders develop sufficient familiarity with Second Life as a VLE to deliver the learning effectively?
2. Can the student participants develop sufficient familiarity with Second Life to work effectively on the project?
3. Is the project brief appropriate for this research and sufficiently comparable to a project that might be delivered on a similar BA programme?
4. Has the effectiveness of Second Life to provide an appropriate learning opportunity been adequately tested?
5. Did the crit and assessment take place in a manner comparable to that of a similar BA programme?

This quickly led us to the conclusion that a simple elective module that could be taken by a wide range of students might provide the best opportunity for
evaluation. It should be flexibility and built around content that might appeal to learners outside the art & design field. This would allow us to pilot the module in a controlled manner with a group that could provide informed feedback. So, we designed the module to enable students appreciate how online virtual environments and networking communities function and explore the potential for developing and disseminating original content.

Figure 3: Locks Aichi (Claudia Igbrude) outside the virtual classroom used to deliver the module in Second Life.

**Learning outcomes**

The following learning outcomes were developed for the module. On successful completion of this module students will be able to:

1. Access online virtual environments and networking communities to carry out specific activities;
2. Create and manage their presence in virtual spaces;
3. Establish and maintain virtual relationships;
4. Explain how the regulations and conventions operating in online virtual environments and networking communities support the creation and management of content;
5. Describe the potential outcomes from creating content;
6. Apply this knowledge to create and exploit original content for online virtual environments and networking communities.

The module now runs over 12 weeks with hour-long weekly class meetings in Second Life: there are no real-life interactions. Support material such as class schedule, summaries of each class, reading material, lecture notes and presentations are made available to students on Webourses. The content for class meetings incorporates problem-solving exercises, exploration exercises, content creation exercises and students are required to document their experiences in a personal blog. Examination is by continuous assessment that comprises solo and group projects involving the creation of work, interaction
with others, developing and maintaining relationships – all leading to the emergence of a personal brand.

**Teaching in Second Life**

In addition to testing the viability of the module itself it was necessary to assess the suitability of a variety of teaching approaches so the module was piloted in the January semester of 2009 with volunteer academic staff from the Learning and Teaching Technology Centre (LTTC) at DIT, Nottingham Trent University, the Graduate School of Creative Arts & Media in Dublin and the University of Ulster. Classes were written up in a blog by the authors to provide a complete record for future analysis (4). The blog was also used as a support space for the module and became the main communication channel outside of class. In order to ensure focus on the content of the module the lecturers indicated to participants that technical support around Second Life would not be provided during class time.

Figure 4: For the pilot delivery of the module classes were summarised in a blog.

Following the successful delivery of the pilot the module was given its first outing to an undergraduate group in September 2009. On this occasion Webcourses was used as the primary support tool outside class.
Without doubt, it has taken some getting used to teaching in this environment. Anyone who has engaged in a video-conference or even tried their hand at podcasting will recognise the difficulties. The lack of familiarity with the environment takes us out of our comfort zone. This is aggravated by the fact that this technology is in its infancy and is therefore somewhat unreliable and prone to breaking down unexpectedly. Even when one is familiar with Second Life as an environment it takes a whole new approach to teaching there. The use of avatars and voice in a visual space means the experience is vastly superior to the traditional text-based chatroom but, it almost as far away again from teaching in a real-life classroom. Avatars don’t have facial expressions, their lips don’t move in sync with their speech, and you can never really be sure who is behind an avatar. It may be your student one week, his friend another week or she may have her entire family looking over her shoulder at the screen.

The pilot deliberately used a range of approaches to delivering the material from the formal lecture to directed discussion informed by previous reading taking in on the way student presentations, location visits, guided tours and guest lectures. All of these worked to a greater or lesser degree but we did find specific methods seemed to result in greater engagement by the students. Before looking at this in more detail I would like to address the design and layout of the learning environment.

![Image](image_url)

*Figure 5: The informal seminar proved to be the most successful approach to encouraging discussion.*

The most successful approach, perhaps not surprisingly, seems to be the informal facilitated discussion. This took place in the seminar room with us sitting around in a circle. Everyone could see each other and the sense of community seemed easier to establish. In order to ensure a meaningful discussion students were given reading material a week before the class. Clearly, if the students did not engage with the reading in advance we ended up with rather low-level exchanges of uniformed opinion rather than any meaningful
discussion. This was addressed by extending the class by a half-hour to facilitate reading if it had not been done in advance.

**The importance of metaphor**

You will have noticed from the short movie shown at the beginning of this talk that the learning environment we designed in Second Life is a familiar one. It consists of a formal lecture theatre space with a screen for PowerPoint presentations, a more informal seminar room and a flexible project room. The kinds of chairs and tables you would expect to find in such spaces are also there. Perhaps it surprised you. After all, avatars should not get tired on their feet, they don’t need to sit down. Why give a PowerPoint presentation in a virtual world? Surely, this is the place to leave convention behind and try a different approach?

Very early on we discovered the importance of the metaphor. Students needed to feel at home in the space but they also needed to have the space visually identified and have the various activities signposted with familiar motifs. So, although logic suggests avatars don’t require chairs the real people behind them do. Perhaps the identification with our avatars results in us feeling tired if they are on their feet for too long. Of greater importance, however, is the tendency for avatars to wander around the room if they are not seated. This can be distracting for the teacher but it also tends to allow the students’ attention to wander and results in disjointed discussion. This is exacerbated by the unreliability of voice in Second Life and can result in time wasted confirming that the student behind the avatar is still in contact.

![Figure 6: Visiting lecturer presents to the class using a PowerPoint-style slide show.](image-url)
Challenges of teaching in Second Life

Initially, the technical challenges are the one’s to overcome: learning to navigate in Second Life while giving a talk or facilitating a discussion takes some practice. We found noticeable differences between what you might call digital natives and migrants. For instance, the migrants who took the pilot tended to be concerned about how to ‘work’ Second Life. They frequently asked for help in navigating the environment and were clearly uncomfortable during the orientation phase. This led to distractions from the module content as they required support. The digital natives, as most of the undergraduates could be termed due not to their familiarity with Second Life but an innate comfort with digital technology, in contrast, rarely asked for help in getting around. They seem satisfied to learn on the fly and are not in the least uneasy about engaging with the content immediately.

Voice in Second Life is notoriously unreliable and can drop any time due to overloaded connections, bugs in the system and a plethora of other unfathomable reasons. Once again, we digital migrants had great difficulty with this in the beginning. Eventually we learnt to move seamlessly between voice and text without interrupting the discussion but the natives seem much more at ease with this fluidly moving between the two.

Just as in real-life attendance can be an issue. Attending Second Life is not like going into a real class. Conversely, we also found that the students turned up to class during the holiday period for the same reason. They didn't seem to quite associate the Second Life class with real classes.

The requirement for a reasonably up to date pc with good graphics and sound cards in addition to a broadband internet connection can be a disincentive and excludes those who don’t have access.

Providing access over the college network can be difficult due to the security issues. Second Life uses ports that are generally closed and there can be an institutional reluctance to engage with the process of addressing this.

During the delivery of the pilot it would have been easy to spend too much time on the technical issues around SL itself. The participants experienced some difficulty familiarising themselves with Second Life and regularly sought support during class time.

What changed after the pilot?

During the pilot delivery of the module much of the interaction was one-directional. Classes consisted of more formal traditional delivery of a lecture rather than discussion. This proved to be less effective than it might be in a real classroom situation. Due to the limited range of movement afforded by the
avatar it quickly becomes tedious listening to a lecture. The more informal discussion was more successful in keeping the students’ attention.

The workload on students for assessment was onerous in the pilot. It is not necessary to attempt to assess every learning outcome with a separate assignment. Following the pilot the assignments were reduced to two elements.

The reading material set in advance to inform the class discussion was not being read so the class time was extended and students asked to read the material during class.

**Survey of students**

A survey of the first cohort of undergraduate students has just been completed and suggests that the module aims may not be sufficiently specific. Some of the students did not understand fully what was expected of them.

Students were also concerned that discipline in the class was not as strong as it should be. They were concerned that some participants did not attend regularly making group work more difficult.

Despite the reduction in workload from the pilot there were complaints about the amount of work to be completed. This may be emerging from an expectation that class in Second Life is about playing a game and therefore does not require academic effort.

Participants also complained about the requirement to spend time in Second life outside of class time.

![Figure 7: Participants involved in a practical exercise during class.](image-url)
Recommendations

Converting an existing module for delivery in Second Life is not recommended. The challenges described in this talk indicate that in addition to giving particular consideration to the content it is necessary to think carefully about the delivery method.

It is important to become familiar with the Second Life environment before attempting to teach there. For example, learning to work between text and speech, and sending links to reading material during the class, requires practice.

Because the technology is in the early stage of development it is not fully reliable therefore it is essential to have a backup plan in the event of technical breakdown.

Content must be interactive, discussions work better than lectures.

Develop appropriate class etiquette: eg, during a presentation students might be asked to submit questions to a moderator via text.

Due to the technical difficulties a class in Second Life often requires more flexibility than a traditional class.

It is advisable not to allow technical issues to be addressed in class. They are best addressed outside class, eg, on discussion boards.

Two tutors are needed to pick up on issues in class, one acts as a moderator to ensure points aren't lost because it is easy to miss a text while you are talking.

It is best to limit the participant numbers to between 10 to 12 in the beginning.

Innovations

The module has resulted in four key innovations outlined here.

Innovation one

Recreating the physical space making it accessible to remote learners:
Supporting the crit.
Supporting online discursive conversation.
Visual cues create a sense of a real classroom space as opposed to a chatroom (direct quote from a student).
All helps to make virtual reality a more formal learning environment.
Voice adds to this but is not essential.
The class can be accessed from anywhere (eg, one student was able to participate while on holiday in New Zealand).

**Innovation two**
Second Life gave access to a range of guest and visiting lecturers who otherwise would not have been available to the class.

**Innovation three**

*Provide an alternative learning environment for those not comfortable with the more traditional class:*
Coming into Second Life gives some people the space they need to feel comfortable engaging with others.
One participant who was not contributing in the traditional class found herself very comfortable in the online environment and frequently led discussion.

**Innovation four**

*Supported by using social media tools familiar to students, facebook etc:*
Integrates various social media platforms such as Facebook, Twitter, LinkedIn.
Encourages ability of students to think reflectively and critically.
Students appear to be more relaxed and willing to contribute – it can be a less censorial environment (why?)
Crossing boundaries... still accepted as a learning environment: boundaries are not gone, just different.
Develops an understanding of cyber-responsibility and how to be independent.
Learning to use tools socially, personally and professionally: cyber-awareness.

*Figure 8: Students can arrive in class in a range of unexpected forms.*
Notes


(5) http://secondlife.com/ [visited on 17 May 2010]