VIRTUAL MOOT COURT: A PILOT STUDY

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This paper draws on staff reflections and student feedback on the pilot stage of a Second Life Mooting project conducted during Autumn Semester 2010 at the University of Western University ('UWS'). It presents preliminary findings as to the feasibility of more wide-spread uses of Second Life as a platform for mooting. The paper examines positive and negative outcomes of the pilot study and argues that, on balance, further developments in this area should be pursued, notwithstanding the need for more work on some of the drawbacks, including some technical difficulties. The paper also explores the potential for Second Life to be used for moot training, and to host national and international mooting competitions. The potential for cross-institutional, interdisciplinary and even international collaboration with networks presently evolving around the use of Second Life in tertiary education is also discussed.

I. INTRODUCTION AND PROJECT BACKGROUND

Second life is a three-dimensional virtual world. Users each have a stylised avatar through which they interact in a manner similar to real life. Avatars can talk, move about, shop, meet and socialise with other avatars, construct objects and even conduct business.[1] In 2009, the authors of this paper set out to investigate whether second life could be used to support students learning practical and clinical legal skills. We initially determined that the technology has potential for use in this way subject to some possible, but not insurmountable, constraints. We concluded that a pilot study was necessary to test our theories and determine what, if any, further trials we should undertake.[2] Accordingly, a small pilot study on mooting in Second Life was conducted in Autumn 2010 at UWS. Our umbrella Second Life project has a broader scope, evaluating the use of Second Life to teach practical and clinical legal skills, including negotiation and interviewing. This pilot represents the first stage of the larger project, and focuses on mooting in Second Life. Mooting was selected for the pilot for a range of reasons, including the important role mooting plays in training advocates generally,[3] as well as the potential Second Life presents for enhancing that training and providing more opportunities for students to practise. We were also interested in the feasibility of developing mooting competitions in Second Life.

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1 For an introduction see *What is Second Life?* Second Life <http://secondlife.com/whatis/?lang=en-US> at 16 November 2010. Second Life is free to join and use, at the basic level, and can be downloaded from <http://secondlife.com/>.

2 Preliminary research and findings are described in Michelle Sanson, Jennifer Ireland and Paul Rogers, '"Fake it till you make it": Using Second Life to Teach Practical Legal Skills' (2009) 2 *Journal of the Australasian Law Teachers Association* 245.

3 For a detailed analysis of the benefits of mooting for law students see Jennifer Yule, Judith McNamara and Mark Thomas, 'Virtual Mooting: Using Technology to Enhance the Mooting Experience' (2009) 2 *Journal of the Australasian Law Teachers Association* 231, 231–3.

II. NARRATIVE: THE PILOT STUDY — AUTUMN 2010

A. *The Participants*

Our 2010 International Humanitarian Law ('IHL') Moot team, Jared Bennett, Bridget Kennedy and Lucy Liang, volunteered their time to help us with this pilot. All participants had mooted before for assessment and represented UWS at the Australian Law Students' Association Conference in 2010 in the IHL Moot. One had some experience of real life advocacy work in the courts. One had heard of Second Life before, but the other two had not, and none had used it before. One student had intermediate level user skills with video games in general.

B. *Preparations and Conduct of the Pilot — May 2010*

We had not yet constructed our own virtual moot court at the time the pilot took place. However, we had previously met and had been in regular contact with Jay Jay Jegathesan, the creator of the University of Western Australia's ('UWA') Virtual Campus, which includes a Virtual Moot Court.[4] With the endorsement of the Dean of the Faculty of Law (Professor William Ford), Jay Jay allowed us and our students access to the UWA Virtual Moot Court for the purpose of conducting our pilot.

Other preparations included creating a set of ten avatars for student use during this project.[5] Another valuable contact we had already made earlier in the project, Crystal Porto,[6] volunteered to 'style' the overall appearance of the avatars and to create appropriate clothing for each of them. During the pilot we used a program called Fraps,[7] a video capture software, to record what are known as 'machinima'[8] in Second Life. From this footage of our activities in Second Life we created a short video on the pilot.[9]

On the evening of the pilot, we met in person in the UWS Moot Court at Parramatta, and began by introducing the students briefly to Second Life and showing them how it worked, as none had used it before. Once our participants were reasonably familiar with the interface and how to operate the avatars and make them speak, two went into the UWA Virtual Moot Court and Paul went onto the bench to act as judge. At this point we had some technical difficulty with one of our computers running too slowly in Second Life to be usable for the trial.[10] A replacement laptop was available but we could not make the sound work in Second Life on it.[11] As a result, only one of our student advocates was able to speak and be heard by the judge at a time. Two of our participants took turns presenting their arguments, as prepared for the IHL moot. However, Crystal was also present at the pilot as an observer, and volunteered to take the role of the other advocate for us. This allowed us to simulate a short moot court scenario with two advocates and a judge present who could all communicate with each other in real time. Crystal's presence also allowed us to involve a remote participant who was not physically present with us at the time. Although unplanned, this was an interesting addition to our pilot.

4 Manager, School of Physics, University of Western Australia. Jay Jay uses the name Jayjay Zifanwe for his avatar in Second Life. For more information on the University of Western Australia Virtual Campus see Raphaella Nightfire, *UWA Leads the Way*' (2010) (CNN iReport) http://ireport.cnn.com/docs/DOC-426490 at 11 November 2010.

5 For further information on these preliminary steps in the project, see Sanson, Ireland and Rogers, above n 2, 252–3.

6 Crystal is a special needs educator who works with autistic children, and is investigating the use of Second Life to increase her students' level of engagement. Crystal lives and works in the United States. Crystal uses the name Crystal Caerntown for her avatar in Second Life.

7 Fraps is a commercial, but relatively inexpensive software, available at <http://www.fraps.com>.

8 Des Butler, '*Air Gondwana*: Teaching Basic Negotiation Skills using Multimedia' (2008) 1 *Journal of the Australasian Law Teachers Association* 213; Andrew J Middleton and Richard Mather, 'Machinima Interventions: Innovative Approaches to Immersive Virtual World Curriculum Integration' (2008) 16(3) *Association for Learning Technology Journal* 207.

9 The video will be available on YouTube shortly.

10 'Netbook' computers usually do not have graphics cards, which was the problem here.

11 The sound card on a more powerful laptop was not operating properly.

III. FEEDBACK FROM PILOT PARTICIPANTS

Although there are only three members of the IHL moot team, our pilot participants provided plenty of detailed and interesting qualitative feedback, both in an informal focus group and also in a survey completed after the pilot.[12] Our pilot results are not statistically significant, in view of the numbers involved, but they have given us a preliminary snapshot of the students' perspective on virtual mooting as well as qualitative input that we found very helpful in determining our next steps for the project. The students' feedback is described below.

A. *Using Second Life*

Bearing in mind that the avatars had already been created for the students before the pilot, none of the participants reported significant difficulty using Second Life for the first time. One even referred to it as 'user friendly', although the other two did report a little difficulty working out how to manoeuvre the avatar at first.

B. *Comparisons between Real Life and Second Life Mooting*

Students reported both positive and negative comparisons between their initial experience of Second Life mooting and their real life mooting experience. Students told us there was no immediate sense of being in a court room and interacting with the judge, such as one would have in a real life moot. As one student put it:

> Second Life cannot be a substitute for advocacy training in person; standing physically before a Judge or Arbiter adds a theatrical element that tests the students abilities that might not be present in a Second Life moot.

However, another found sitting in front of a screen no less 'nerve-wracking' than being in the real moot court, and commented that one actually had a sense of being closer to the bench than in real life. All our participants also commented on the need to operate the program and the avatar in addition to presenting arguments, but none felt it was a terribly serious barrier to the conduct of the moot.

Positive comparisons with real life mooting included the potential to practise in the virtual moot court without needing to travel. The students all saw potential for remote or even international mooting through Second Life. Both students who did the mooting commented that they could concentrate more on their speaking and their vocal delivery than in real life. One student described this as being able to slow down the delivery and use more pauses to emphasise certain points. One also thought it seemed 'less formal, less daunting' than a real life moot.

C. *Using Second Life Mooting to Improve Real Life Mooting Skills*

We next asked whether the participants thought Second Life could be used to improve their own mooting, or to practise for competitions. Notwithstanding their existing experience with mooting, all three participants thought it could be used to make improvements, or 'as a training tool'. In addition to offering more opportunities to practise, wherever and whenever they choose, students could also focus on their diction and particularly the speed of delivery, as discussed above.

D. *Second Life for First-Time Mooters?*

We then asked our mooters to consider the position of students earlier in their courses, perhaps facing a moot for the very first time, and to cast their minds back to their own first mooting experiences. Our expectation, explained elsewhere,[13] was that a virtual moot court would

12 NEAF approval is in place for this project.
13 Sanson, Ireland and Rogers, above, n 2.

provide students who had no prior public speaking experience with a place to practise in, perhaps in private at first. Students could get used to speaking out loud, without reading or listening to their own voices as they speak, and we thought this would be useful to first-time mooters. We wanted to know whether the students who had actually had that experience more recently than we had ourselves would agree with this perception. All three agreed. One student also suggested Second Life could be helpful for showing what a moot is like and could be used in orientation or mooting workshops to good effect. All three thought it would be good for introverted students to help build their confidence and start to control any nerves.

E. *Second Life for Mooting Competitions*

Finally, we asked students to comment on the concept of mooting competitions conducted entirely in Second Life, and the potential this might hold for mooting internationally against overseas universities. In relation to the benefits students gain from mooting on the international stage, one student's comment was as follows:

> International mooting is a learning curve that develops the student's ability to adapt to foreign and unknown legal contexts and orient his or her way through the abstraction to find an understanding of the relevant principles. That skill puts him or her above the rest, and international mooting is very much desirable for this reason. The greatest limitation on the law student's opportunities presently (in respect of mooting) is the fact that to compete internationally requires resources. Therefore the opportunities are few and far between. However, the student with experience in cross jurisdictional mooting will be far better off than the student who does not have such experience. If second life can adequately give this opportunity to students, students will be better equipped generally.

Another student commented on the networking opportunities with overseas students and universities that could accompany virtual moot competitions. To the extent that virtual mooting competitions could facilitate international moots, but without the resources usually required, it is our position that this medium can offer real opportunities to our students. As the students' comments, above, suggest, these benefits are not limited to involvement in the actual moot itself.

F. *Overall Merit of Second Life Mooting*

At the end of the survey we asked our participants whether they thought virtual mooting had merit as a concept. All three agreed that it did and one noted that it was 'a bit of fun' too. This was notwithstanding a degree of technical difficulty at the actual time of the pilot. The idea that busy LLB students could have access to something, albeit voluntary, in their degrees that was described as 'fun' was pleasing.

IV. THE UWS VIRTUAL MOOT COURT

Following the pilot, we felt sufficiently satisfied as to the merit of Second Life mooting to go ahead with the construction of our own virtual moot court, as several other law schools have done before us. We commissioned a designer / builder who works within Second Life[14] to create a replica of the UWS Moot Court at Campbelltown, New South Wales, itself modelled on the original Campbelltown Court House, built in 1886.[15] So, like many other virtual campuses and courts, our virtual moot court has a deliberate link with our real world buildings and also with some of the history of our Campbelltown campus and its region.

14 Nyx Breen in Second Life.

15 For the history of the Campbelltown Court House, see *Campbeltown Court House* http://www.campbelltown.nsw.gov.au/upload/gpqqa23649/CampbelltownCourtHouse.pdf at 16 November 2010.

Figure 1: UWS Virtual Moot Court in session

Figure 2: Detail showing gowns and wigs[16]

V. ANALYSIS: POSITIVES AND NEGATIVES

A. *Drawbacks and Problems*

We previously identified a range of problems we thought could occur when using Second Life to teach practical legal skills.[17] These included training and equipment needs, initial IT support and cost, as well as equity, privacy and other legal issues, such as the need to avoid defamation and intellectual property infringement. The very real potential for technical problems, such as we experienced ourselves on the night of the pilot, was of particular concern to us. Apart from those technical difficulties, no significant problems of any of these types occurred during the pilot.[18] However, as the pilot took place in a private, controlled area of Second Life, the potential for such problems should not be dismissed, and may need further investigation in future, larger trials.

The technical problems we experienced obviously point to the importance of ensuring all equipment has been thoroughly tested and has adequate capacity and browser software to run Second Life at a suitable speed.[19] For the pilot we worked without dedicated IT support, using our usual computers[20] and broadband connections, but we would certainly recommend arranging dedicated IT support and testing, particularly for any formal use of Second Life. Further, despite our own testing since the pilot, we are still experiencing intermittent, and for that reason, unpredictable, problems with the sound in Second Life.[21] Obviously the sound, and being able to make the avatar speak, is of central importance to any use of Second Life for mooting, and we would welcome greater reliability in the sound overall. For these reasons, our earlier view that Second Life should only be used in a voluntary, extra-curricular context and should not be built into any formal assessment regime,[22] was amply borne out by the pilot study. However, we do not think this entirely obviates its value as an informal medium for students to practise in.

The pilot brought a few new shortcomings to our attention. During the pilot, we realised there could be problems confirming the identity of each mooter in the absence of any real-life image. For Salmon and Hawkridge, establishing identity is one of the most significant challenges of using virtual learning environments: '[f]or both academics and their students, establishing

16 Created by Raphaella Nightfire (in Second Life) from the University of Western Australia.

17 Sanson, Ireland and Rogers, above n 2.

18 Costs for the pilot were negligible. Second Life is free, as is the Emerald browser described below, and we used our usual UWS or personal computers, without modification. Microphones, headsets and/or speakers would be a small additional cost for computers without these peripherals.

19 We used Emerald browser, which we consider to be the best browser at present. On technical difficulties in Second Life more generally see Steven Warburton, 'Second Life in Higher Education: Assessing the Potential for and the Barriers to Deploying Virtual Worlds in Learning and Teaching' (2009) 40(3) *British Journal of Educational Technology* 414, 418 (describing 'one of the most negative in-world effects, that of 'lag' — where heavy loads caused by too many objects in a single location slow the experience to one which can feel jerky, unstable and frustrating').

20 Running either Windows XP or Vista: we did not discern an appreciable difference in speed between these operating systems.

21 Warburton describes similar difficulties for other users: above n 19, 422.

22 Sanson, Ireland and Rogers, above n 2, 254.

identity is a key stage in developing trust between them. In virtual worlds the usual means in the real world of doing so are scarcely available.'[23] One suggestion is using Skype to identify students at the start of the moot (perhaps as part of appearances) and, as the voice heard through Second Life is the speakers' own voice, there is minimal chance of substitution once the moot is underway. The further potential for mooters to get help from others who may be present would be an issue for assessable tasks, although conferral is sometimes allowed within the rules of competition moots.

We also had concerns about aspects of authenticity of the task. From our perspective as judges, and compared with our experiences judging real life moots, the avatar's lack of facial expression or movement while speaking made the exercise seem somewhat artificial. Also, like the students, we found ourselves focusing much more attention on the spoken aspects of their performance. A greater focus on the content of arguments, without factors such as demeanour and the general requirements of etiquette to consider may be beneficial in some contexts, such as while developing and practising arguments for competitions. However, demeanour and etiquette are also very important aspects of mooting and advocacy, and difficulty assessing those aspects is a significant barrier to the use of Second Life for competitions or for assessment. On the issue of authenticity in virtual learning environments generally, Herrington, Reeves and Oliver argue that exact physical reality is not strictly necessary, as the learning value comes from the authenticity of the 'task itself'.[24] Barton, McKellar and Maharg also argue that an exact 'replication of aspects of reality' does not generate authenticity by itself.[25] However, in relation to virtual mooting specifically, Yule, McNamara and Thomas report concerns about the loss of 'nonverbal cues' and the 'crude gestures' available to the avatars.[26] It may be that these shortcomings can be addressed in future versions of Second Life, or in purpose-built virtual learning environments that are specifically designed for learning and teaching,[27] but we agree that, at present, they are a significant drawback. However, our overall position is that this drawback does not entirely outweigh the benefits described below, particularly that of being able to practise without travelling.

Shortcomings in authenticity of the exercise as preparation for real-world advocacy must also be acknowledged. Yule, McNamara and Thomas point out that '[v]ideoconferencing facilities are now in widespread use in Australian courts in procedural and substantive settings ranging from preliminary proceedings through to appeals'.[28] Koo argues that legal education should incorporate more of the technologies students will encounter when they go into practice.[29] While we are not suggesting Second Life could be used in the courts, we suggest that student use of virtual moot courts can provide exposure to, and a degree of comfort with, the use of technology in the courtroom setting and to remote advocacy as a general concept. While we acknowledge that videoconferencing has greater authenticity in terms of matching the real world court system,[30] our suggestion is that virtual mooting can still serve different, although related, purposes, particularly facilitating remote practice.

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23 Gilly Salmon and David Hawkridge, 'Editorial: Out of this World' (2009) 40(3) *British Journal of Educational Technology* 401, 408.

24 Jan Herrington, Thomas C Reeves and Ron Oliver, 'Immersive Learning Technologies: Realism and Online Authentic Learning' (2007) 19(1) *Journal of Computing in Higher Education* 80.

25 Karen Barton, Patricia McKellar and Paul Maharg, 'Authentic Fictions: Simulation, Professionalism and Legal Learning' (2007) 14(1) *Clinical Law Review* 143, 146–8.

26 Yule, McNamara and Thomas, above n 3, 242.

27 Daniel Livingstone, Jeremy Kemp and Edmund Edgar, 'From Multi-User Virtual Environment to 3D Virtual Learning Environment' (2008) 16(3) *Association for Learning Technology Journal* 139 (describing the development of 'Sloodle' which combines Moodle with Second Life to produce a dedicated virtual learning environment, as distinct from using the virtual world alone, which was not designed primarily as a learning environment).

28 Yule, McNamara and Thomas, above n 3, 235.

29 Gene Koo, *New Skills, New Learning: Legal Education and the Promise of Technology* (2007) *Berkman Center for Internet and Society at Harvard University* <http://ssrn.com/abstract=976646> at 16 November 2010. See also Yule, McNamara and Thomas, above n 3, 241 and Joel Butler and Rachel Mansted, 'The Student as Apprentice: Bridging the Gap between Education, Skills and Practice' (2008) 1 *Journal of the Australasian Law Teachers Association* 287.

30 Real-world relevance, in which 'activities match as nearly as possible the real-world tasks of professionals', is the first of ten characteristics of authentic learning identified by Jan Herrington et al, 'Designing Authentic Activities in Web-Based Courses' (2004) 16(1) *Journal of Computing in Higher Education* 3, 11–13.

B. *Benefits*

Feedback from the pilot confirmed our expectations[31] that students would benefit from having access to a simulated moot court in which to practise rather than practising 'in front of a mirror or long suffering family and friends', as one of our participants explained it. Interestingly, although certainly not surprisingly, two participants independently used the term 'nerve wracking' with reference to real life mooting, particularly the first experience in a court room. Although it goes without saying that this must be the experience of most students, it serves to emphasise again that providing some opportunity to practise in a simulation of a real court could only be of benefit, whether students are practising for assessment or for competitions.[32] Coupled with this, the opportunity to practise what one student referred to as the 'interactive dynamic' of mooting, such as by practising together with another student or group of students, was considered to be of value. At UWS, opportunities to practise advocacy are particularly important as bail applications and moots form part of compulsory assessment in core subjects,[33] as well as several of our electives. Not all UWS mooters are seeking to compete or represent the University — many want to practise only for the purpose of upcoming assessments.

We were particularly interested in the feedback about Second Life allowing students to focus more attention on their vocal performance than they could in a real life moot. Those who have worked with first time or less experienced mooters will know that they often need to speak more slowly, pause more often, and that their clarity or diction frequently needs improvement.[34] The potential for students to improve this aspect, perhaps even before their first moot, was something we had not anticipated as a benefit of a virtual moot court. Further, although our participants did not raise this directly themselves, we think it follows from their observations that Second Life could also be used as a training tool for students to get used to presenting their arguments without reading from a script — a really important step for new mooters in improving their overall performance.[35]

The benefit of being able to moot, or to practise mooting, without having to travel came through very strongly in the pilot feedback, and we consider this to be one of the real strengths of virtual mooting.[36] Surveys conducted at Queensland University of Technology also point to location as a significant impediment to participation in competition moots.[37] When one considers the possibility of competing against overseas universities without having to travel, something that is impossible in real life, the potential benefits are even clearer. However, it is also important to consider whether Second Life has advantages over alternatives such as teleconferencing, Skype or other similar technologies.[38] We prefer Second Life to videoconferencing because it is low cost to the student, and can be used from anywhere, including from home, without needing complex and expensive videoconferencing equipment. We acknowledge that Elluminate has a similar degree of portability and can also be recorded,[39] but it is not free,[40] and it requires a moderator which may make it less suitable for informal practice.[41] Group videoconferences have recently become available in Skype and we will also be investigating that as an alternative platform for virtual mooting in future stages of this project.

We expect our virtual moot court will be used primarily by students for informal moot practices, possibly as part of a moot club presently being established by the UWS Law Students'

31 Sanson, Ireland and Rogers, above n 2, 252.
32 See Yule, McNamara and Thomas, above n 3, 240.
33 Criminal Law and Property Law.
34 Christopher Kee, *The Art of Argument* (2006) 79–81.
35 Ibid, 84–5. See also Butler and Mansted, above n 29, 294.
36 On the use of computer-based simulations to facilitate remote communications see Koo, above n 29, 20.
37 Yule, McNamara and Thomas, above n 3, 240.
38 Ibid.
39 See *Elluminate Live! Recordings Quick Reference Guide* Elluminate Inc <http://www.elluminate.com/downloads/support/docs/8.0/Elluminate_Live_V8_Recordings_Quick_Reference_Guide.pdf> at 16 November 2010.
40 Pricing appears to vary according to the number of users and the package. Second Life, by comparison, is free for non-premium users.
41 Yule, McNamara and Thomas, above n 3, 242. For an evaluation of Elluminate see Shauna Schullo et al, 'Selecting a Virtual Classroom System: Elluminate Live vs Macromedia Breeze (Adobe Acrobat Connect Professional)' (2007) 3(4) *MERLOT Journal of Online Learning and Teaching* 331.

Association. The UWS Virtual Moot Court will be available to these and other students to practise in if they cannot meet in person, without requiring staff involvement. As our primary objective is to support independent practice for internal assessment as well as for competition mooting, we consider Second Life to be the best fit with the uses we will be making of virtual mooting at UWS at present.

C. *Opportunities for Cross-Disciplinary, Cross-Institutional and International Collaboration*

The reader will probably have noticed the number of people whose help we have acknowledged in this paper. We have made excellent contacts with people both in Australia and overseas who we met in Second Life and almost certainly would not have met in the real world. Most are from other universities, and many work in other disciplines, but their help with vital aspects of our project has been uniformly generous. This was an aspect of the project that we did not fully anticipate at the outset, but it has become an especially positive feature for each of us. For those who remember the early days of the internet (1.0),[42] there is a similar 'pioneering' feel about the use of Second Life in education,[43] and a ready willingness to collaborate across institutions as well as across disciplines. As we proceed, we expect to continue widening our circle of contacts in this evolving area[44] and we consider this to be a significant benefit of the project.

VI. THE FUTURE … WHERE TO FROM HERE?

A. *Larger Scale Trial*

As the initial pilot produced what we consider to be positive overall feedback from the participants, we will continue to explore the potential for virtual mooting in Second Life through a further trial, involving larger numbers of participants with different levels of exposure to both mooting and Second Life.[45] In particular we will involve more students at the start of their degrees, ideally with no prior exposure to mooting, to assess how useful, or otherwise, they find the virtual moot court to practise in ahead of their first moot. The pilot participants' comments about being able to give more attention to their speech, particularly their tone, pace and diction, disclosed a real benefit of Second Life that we had not previously anticipated and which we will be exploring further in our larger trial. We will also test the outcomes of the pilot to see whether they are confirmed by other students with similar levels of mooting experience to those who participated in the pilot.

As discussed above, technical problems with Second Life cannot be discounted at this point. This is another aspect we will be examining closely in our next trial, to establish whether these problems can be controlled sufficiently to allow use of the technology for more formal assessment or other purposes. One solution in fairly common use is to have Skype running in the background while using Second Life, with Skype providing the sound. At the time of the pilot, Skype did not support group video conferencing, only sound was available for more than two callers. Using Skype in combination with Second Life gave the sense of a real-time moot, with added sound reliability, that would not have been possible using either Skype or Second Life alone. However, with the release of group video conversations in Skype, as mentioned

42 See, for example, Stacy Kluge and Liz Riley, 'Teaching in Virtual Worlds: Opportunities and Challenges' (2008) 5 *Issues in Informing Science and Information Technology* 127, 134 <http://proceedings.informingscience.org/InSITE2008/IISITv5p127-135Kluge459.pdf> at 25 July 2010.

43 See, for example, John Bransford and Drue Gawel, 'Thoughts on Second Life and Learning' (Foreword to Proceedings of the First Second Life Education Workshop, Second Life Community Convention, Fort Mason Centre, San Francisco, CA, August 18th – 20th, 2006,).

44 On the growth of interest in virtual learning environments in higher education around the globe, particularly in the UK and the US, see Salmon and Hawkridge, above n 23, 402–8.

45 Yule, McNamara and Thomas, above n 3, 240 make a similar recommendation, although indicating that the project at QUT will focus on comparing Elluminate with Second Life.

above, we will now give further consideration to the use we make of Skype in the next stages of this project.[46]

B. *Construction of a Courtroom Simulation*

The area in which virtual reality has arguably been used most effectively, outside gaming, is in the creation of simulations for various interactive training scenarios. Virtual simulations are in use in the United States space program and the military, as well as a host of medical, engineering and architectural uses[47] and also in legal education.[48] Maharg and Owen describe a fascinating simulation of a virtual Scottish town, called Ardcalloch, in which students in the Glasgow Graduate School of Law operate a virtual law firm as part of their professional legal education.[49] On a more modest scale, we plan to develop a simulated version of a simple courtroom interchange with the Bench, perhaps part of a typical bail application, or even just making appearances, with a 'bot' as the judge. Shortened from 'robot', bots can be programmed with artificial intelligence ('AI') and could potentially be set up to ask mooters a range of set questions. This would allow students to practise and to familiarise themselves with the inside of a court room before attempting a real moot, but without requiring staff to act as judge. As Koo points out, this is an area where technology can solve problems with existing 'in person' simulations, such as moots, which can be difficult to arrange and expensive in view of the staff/student ratios they involve.[50] Warburton identifies simulation as one of the most important affordances Second Life brings to higher education, allowing 'reproduction of contexts that can be too costly to reproduce in real life, with the advantages that some physical constraints can be overcome'.[51] A simple courtroom simulation of the type described above should also reap several of the other benefits identified by Koo and by Warburton, particularly those of ensuring a reliable, real-life experience[52] that is both consistent and scalable.[53]

C. *Virtual Moot Court Competition*

Our pilot study indicated that it would be possible to conduct a moot competition in Second Life with other institutions, real-world time differences notwithstanding.[54] We demonstrated that the technology could do what we wanted it to do (assuming all machines were working properly at the time); that students could use Second Life without significant difficulty, and that it worked over distances.[55] Our next trial will accordingly be geared towards identifying requirements and devising suitable arrangements for UWS, ideally in collaboration with other institutions, to host an informal, trial version of a Virtual Moot Competition in Second Life in the later part of 2011. We would be very interested to hear from other Law Schools who might be interested in collaborating with us in such a trial.[56] UWS has also recently adopted

46 Beta version released 13 May 2010, with a premium version due later in 2010: see *The Big Blog* Skype <http://blogs.skype.com/en/2010/05/group_video_calling.html> at 16 November 2010.

47 Herrington, Reeves and Oliver, above n 24, 82–4.

48 Des Butler, above n 8.

49 Paul Maharg and Martin Owen, 'Simulations, Learning and the Metaverse: Changing Cultures in Legal Education' (2007) (1) *Journal of Information Law and Technology* <http://www2.warwick.ac.uk/fac/soc/law/elj/jilt/2007_1/maharg_owen> at 16 November 2010. See also Barton, McKellar and Maharg, above n 25, 160–85.

50 Koo, above n 29, 16, 21.

51 Warburton, above n 19, 421.

52 On authentic learning see Herrington et al, above n 30.

53 Koo, above n 29, 21.

54 In order to help us with our pilot, Crystal was in-world at 4 am US time. Each of the authors has found attending conferences in-world usually requires us to be in-world in the very early hours to synchronise with US time. For an international moot, scheduling would need significant attention to make it work at least reasonably well for all concerned.

55 We have used Second Life to connect internationally, with Crystal in our pilot, to attend conferences, and Jennifer used her avatar to present at the 2010 ALTA conference in Auckland New Zealand, from Australia.

56 We can also be contacted in Second Life: Jennifer uses the name Charlotte Wandsworth, Michelle uses the name Lex Farshore and Paul uses the name PaulRogers Actor for their avatars.

the International Virtual Moot Competition from Murdoch University[57] and our next trial of Second Life mooting will include an evaluation of whether that competition could be hosted in Second Life in the future.

VII. CONCLUSION

As Second Life, and its use in education, is arguably still in its first generation, it seems at least likely that the technology may improve in the future, as has been the case with the internet in general. While our pilot indicates there is potential for Second Life as a platform for virtual mooting, the interface, and particularly the sound, would need to be much more reliable, more realistic and more user-friendly before we could commit to using it for any compulsory assessment or to conduct formal competitions. We therefore advise against relying on Second Life for any form of compulsory assessment, at least until there are improvements in the reliability and useability of the platform. However, this does not mean it cannot be used to good effect for training and practice in mooting and advocacy, and we conclude from our pilot study that this is a use of Second Life we should investigate further. We will therefore conduct a larger scale trial, with a focus on use of the virtual moot court for practice and, potentially, on developing simulations to aid such practice. When, and if, suitable improvements are made to the platform, Second Life could also provide opportunities for students to compete in new types of mooting competitions, particularly involving international participation. The opportunity for us to collaborate with other disciplines and other institutions as we continue to evaluate this and alternative technologies for use in virtual mooting only adds to these benefits.

57 With many thanks to Associate Professor Kate Lewins and Dr Ken Shao from Murdoch University for hosting the IVM previously, and for their generous help during the transfer of the moot. See also Yule, McNamara and Thomas, above n 3, 237.