MOOTING AND TECHNOLOGY: TO WHAT EXTENT DOES USING TECHNOLOGY IMPROVE THE MOOTING EXPERIENCE FOR STUDENTS?

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I INTRODUCTION

Legal educators have shown an increasing interest in using online technology to supplement face-to-face teaching in law. This is particularly evident in the development of legal skills, including mooting.[1] Despite this trend, there has not yet been any substantial research to substantiate the benefits of using online technology to facilitate mooting or to evaluate the advantages and disadvantages of the different technologies that are available. This article reports on the outcomes of a project which investigated the use of technology to facilitate remote mooting. The project involved three stages. First, a literature review was conducted in relation to the benefits to students of participating in mooting and the use of technology in legal education and the courts. Second, students were surveyed in order to ascertain the perceived benefits to students of participating in mooting. Finally, trial moots were conducted at the Queensland University of Technology (QUT) Law School using *Second Life*, *Elluminate* and videoconferencing. The trials were evaluated by a focus group comprising the mooters and audience members and by feedback obtained from the moot judges. This article reports the results of the trial moots and considers the different technologies used in the trials.

Part II examines the benefits to students of participating in mooting and the potential benefits of using online technology to facilitate mooting. Part III describes and evaluates the moot trials and identifies the limitations of using online technology for mooting. Part IV of this makes recommendations as to the most effective ways to use technology to facilitate remote mooting. The article concludes that while each form of technology may have a place in mooting, due to the different strengths of each, careful consideration must be given to the objectives sought to be achieved when deciding which platform is most appropriate.

II TECHNOLOGY AND MOOTING

A Benefits of Mooting

There is a significant amount of literature identifying the benefits to students of participating in mooting;[2] these include the development of practical skills in advocacy,

research and writing, and analytical ability,[3] improvement in self-confidence, development of professional networks and enhanced employability.[4] As the authors have stated previously:

> The benefits of mooting identified by the literature can be summarised as follows:
> - Academic learning is improved because students are actively engaged with the law and have time to analyse the problem and relevant law in depth …
> - Mooting teaches students to 'think like a lawyer', ie to analyse problems logically, applying the facts of a problem to the law and presenting complex legal arguments simply and concisely.
> - Mooting assists students to develop skills in written and oral communication, legal research and advocacy, to gain self-confidence and to build character.
> - Mooting assists students to understand courtroom processes and how to run a case.
> - Involvement in mooting can assist students to obtain a job by networking and resumé building.[5]

While there is general agreement as to the benefits to students of participating in mooting, the literature also points to a number of limitations inherent in the traditional model of mooting.[6] Bobette Wolski identifies a number of concerns with the traditional model which include overemphasis on appellate moots; limited opportunity to argue about the facts; the restriction on students being able to draft their own grounds of appeal; emphasis on oral rather than written submissions; lack of feedback; and lack of opportunity to develop an awareness of ethics and values.[7] The use of technology might address these concerns and increase the opportunities to moot by facilitating internal competitions using different forms of technology.

B Use of Technology to Overcome Impediments to Mooting

While the results of the student surveys conducted during the project confirmed the benefits of mooting as articulated above, some impediments to students participating in mooting were also identified. These impediments included the time involved in mooting, being an off-campus student, being a first-year student and lack of confidence and experience.[8] The project sought to explore whether technology could be used to overcome these impediments.

The primary benefit in using technology to facilitate mooting is that students will be able to participate regardless of their ability to attend on campus. In addition, law schools should use technology in order to ensure their graduates have the necessary technological skills for legal practice and to ensure effective learning environments are created for all students.[9] The literature suggests that technology is an effective and flexible means of providing legal skills training.[10] Further, given the current use of videoconferencing and electronic document management systems in Australian courts, similar technology should be used in mooting to assist students to gain the technological communication skills they will need in practice.

After completion of the first stage of the project (the initial literature review and student surveys), the authors hypothesised that online technology could be used to facilitate mooting in order to overcome the impediments to student participation and to

provide an authentic use of online communication technology in a court setting.[11] Off-campus students, who would not otherwise be able to participate in mooting, would have an opportunity to compete in remote moots facilitated by the use of technology. Further, technology would allow law schools to hold more internal competitions, enabling students who have no experience in mooting to participate and improve their skills prior to becoming involved in external competitions which involve a high time commitment from students. The authors further speculated that technology-based moots, lacking a direct face-to-face or 'public' component, may also be less threatening to inexperienced mooters. It was expected that students, being predominantly Gen Y, would be enthusiastic adopters of technology. Indeed, according to the survey of students conducted in 2009, only eight per cent reported that they were not confident with the use of technology.

The next stage of the project sought to test these hypotheses and to evaluate different types of technology that may be used to facilitate remote mooting by holding trial moots using three different technologies.

III THE MOOT TRIALS

The trial moots were conducted at the QUT Law School in December 2009. The student mooters were participating in the 2009 International Virtual Moot ('IVM') and the trials in *Second Life* and *Elluminate* were conducted the day before the IVM competition. The IVM itself was used as the basis of the videoconferencing trial. The same mooters and audience members were used for each trial, as was the same moot problem. The same judges were used for the *Second Life* and *Elluminate* trials; however, the judges for the videoconferencing trial were the official judges of the IVM competition. The moot trials were evaluated by the project team's reflections and a focus group. The focus group involved the three mooters who participated in the trials, one mooting student who observed the trials and two student observers who had not previously mooted. The discussion points raised during the focus group were the benefits of participating in mooting, whether those benefits were achieved using the different communication platforms, whether there were any benefits in using technology to facilitate mooting over face-to-face mooting and whether technology helps to overcome the impediments to mooting previously identified. Students were also asked whether they believed QUT should hold internal mooting competitions using technology and whether QUT should moot with other universities using technology.

A Second Life

Second Life is an online virtual environment developed by Linden Labs and launched in 2003. 'Residents' (that is, users participating in the virtual world through the appropriate software) create a virtual presence in the environment through the use of avatars.[12] Software allows residents to create simulated physical environments (such as courtrooms), and for avatars to make relatively simple animated movements and gestures.[13]

Second Life has previously been used by Harvard Law School to provide a virtual

learning environment for law students — firstly, in the unit 'CyberOne: Law in the Court of Public Opinion',[14] and followed by 'Evidience 2000', a course which ended with 'two moot trials, based on real judicial cases, which … took place in the virtual moot court, with students acting as advocates and judges, and SL residents as jurors or witnesses.'[15] Subsequently, Harvard offered a seminar-based unit, 'Trials in *Second Life*', promising a 'workable, educationally useful, entertaining, and perhaps practical dispute resolution format in a new and exceedingly interesting medium'.[16] Harvard's initial use of *Second Life* provided a full immersive simulation experience, with the observation that students' first approach with judicial cases takes place online in a realistic scenario, that enables them to practice what they have learned and move their first steps into a courtroom.'[17]

In the trial, the Harvard Law students were the lawyers and a professor was the judge. *Second Life* citizens were the jurors and the trial was held on Harvard's Berkman Island in *Second Life*. The trial was a mock trial of the real case of Josh Wolf, a video journalist who had been imprisoned for refusing to turn over video footage of an anti-G8 protest in San Francisco recorded in 2005. Wolf himself attended the trial at Harvard, having spent about eight months in custody following the real trial. The Harvard trial resulted in an acquittal, where the real-world trial had seen Wolf convicted and imprisoned.[18] Notably, this was a trial at first instance before a mock jury, rather than the appellate court scenarios which usually serve as the basis for moot court proceedings.

In Australia, the University of Western Sydney has planned pilots for the use of *Second Life* in several areas of legal education, including mooting. The proponents of that trial see the benefits of using *Second Life* for mooting as enabling students to practise submissions in a realistic environment and facilitating inter-university competition moots.[19]

In a previous paper, published prior to the QUT trials taking place, the authors considered the potential benefits and disadvantages of using *Second Life* for mooting. In particular, the authors questioned the ability of students to practise fundamental mooting skills by using avatars in the *Second Life* environment. The advantage of *Second Life* is its ability to create a 'sense of presence' by the use of avatars and representations of objects. However, it was postulated that the loss of non-verbal cues may well inhibit real skill development. The comparatively crude gestures available to avatars in a virtual court in *Second Life* are a poor substitute for the subtleties of human faces and bodies, even those that have been diluted by translation into video signals and two-dimensional representation on a computer monitor.[20] Learning to read such subtleties forms a vital component of the mooting experience and is authentic preparation for the real-life role of an advocate.

The QUT *Second Life* trial was conducted in the QUT virtual courtroom[21] on QUT Island (which is *Second Life* space owned by QUT). The participants in the trial were physically located in the QUT Law Library, with the judges, mooters and audience each situated in separate computer laboratories. The participants were connected to *Second Life* directly through the University's computer network. Each of the participants and audience members were allocated an avatar which had been created for use in QUT mooting. Each avatar was created specifically for a role as either mooter or judge and had a

corresponding appropriate appearance. On entering *Second Life*, students and judges accepted an invitation from IT support staff and were transported directly to the virtual court. Students were explicitly instructed not to change the appearance of their avatar or the password which enabled its use.

The set-up of the virtual court room is captured in the photograph below which is a snap shot from the moot trial.

The key benefit that was expected to be achieved from the use of *Second Life* to facilitate a moot over other platforms was the sense of presence that can be created in *Second Life*.[22] The virtual courtroom created by Professor Des Butler on QUT Island is an impressive representation of a real courtroom. It provides students with a realistic three-dimensional environment in which to conduct the moot, complete with accurate positioning of the bar table, judge's bench and the audience. As a result, the moot in *Second Life* created a certain sense of occasion and, at least for students who had not as yet had the experience of a real moot court, may have served to introduce them to the basic mechanics and dynamics of the court environment. It may also have assisted in the development of students' self-confidence by familiarising them with the environment prior to their being exposed to the more demanding experience of competitive mooting.

Despite the perceived benefits of *Second Life*, the trial identified limitations in its use for mooting. These included technical difficulties, the need for IT support and the limited ability of the platform to allow students to practise advocacy skills.

1 Development of Advocacy Skills

A strong theme that emerged from the focus group was that *Second Life* did not assist students to develop their advocacy skills. In fact, the mooters felt that their advocacy skills were compromised because the judges could not actually see them. Mooters reported that they fell into bad habits such as reading submissions, adopting an inappropriate manner including poor stance, and failing to observe courtroom etiquette. The mooters were unable to use gestures and did not believe that using the avatar to simulate gestures was worthwhile. One mooter commented:

> No, I don't think you can ... And more to the point I was not really looking at the screen in [*Second Life*] anyway when I was speaking. If anything it is just a gimmick, you using the little guy to make a gesture. It is just stupid.

Both the mooters and the audience reported a lack of engagement with the moot in *Second Life*. Mooters were not able engage with the judges because they could not see and therefore respond to the judges' facial expressions or body language.

> Yeah, but I guess you do not feel, well I found I was not as worried on *Second Life* as I was in a real moot because I do not have a judge looking at me. Giving me certain faces, being able to pick up when they disagree with me or they do not like what I am saying, things like that. I would not be as worried if it was in *Second Life*.

As a result of the limited ability to engage with the bench and develop advocacy skills, the students were of the view that the effort required to prepare for a moot would not be worthwhile if the moot were solely conducted in *Second Life*.

2 Technical Difficulties

All of the participants in the moot trial — judges, mooters and audience — were either first-time users of *Second Life* or had only limited experience. Accordingly, they did not know how to use it effectively. Tools such as the voice chat function and movement control are not intuitive and had to be explained.[23] This is consistent with the experiences of other new users of *Second Life*, who report feeling uncomfortable using the program even after having completed the tutorials for new users which are available.[24] Proper orientation in *Second Life* for judges, mooters and the audience is vital to the success of the moot.

To overcome these problems, it is suggested that first-time users should be encouraged to familiarise themselves with *Second Life* and their avatars prior to the moot. While it is likely that students who spend more time in *Second Life* prior to the moot will have a better mooting experience, it is possible that students will resist attempts to embrace *Second Life*. As noted by Diane Murley:

> Very few law students currently use *Second Life*, and many of them will not want to spend the time to learn how to use it once they get to law school.[25]

The time taken to set up the moot in *Second Life* was much longer than anticipated. It took approximately two hours for all the participants to log in and travel to the courtroom on QUT Island. There was also a substantial delay resulting from participants not being able to 'teleport' to the courtroom. While this was eventually resolved, and the moot trial proceeded, the delay could be fatal to a competition where participants were available for only a set period of time. A moot competition held in *Second Life* needs to be set up and tested well in advance, and student participants need to log in well before a competition, in order to ensure that the start time is not delayed.

There was also an issue during the trial with some participants experiencing audio feedback. Mooters reported difficulty with the sound quality in *Second Life* which may have been due to other participants leaving microphones switched on when they were not speaking. One student commented as follows:

> I thought *Second Life* was shocking. The amount of echo that you had yourself and I suppose we also had an echo too because we were all in the same room so you heard the talking, you were getting it then in your ear and then also getting an echo. So if the speakers were all in different rooms that might have been a bit different.

Since this was most likely caused by nothing more than the relative positioning of microphones and speakers, and the adjustments to the microphones' sensitivity and speaker volume, it is likely that the problem could be solved with only limited technical support. However, the issue again highlights the need for significant preparation and testing prior to the competition commencing.

3 Technical Support

Partly as a result of the participants' unfamiliarity with *Second Life*, the trial required extensive IT support. During the trial, the judges, mooters and audience, while in three separate rooms, were conveniently located on the same floor of the QUT law library. Accordingly, IT support staff could move easily from room to room to assist the participants. However, in a real competition situation, participants would be geographically distant and the provision of IT support would be difficult. This could be a serious impediment to the use of *Second Life* to conduct a competition where mooters are not located on a university campus where IT support is readily available.

4 Cost and Access Issues

There were no direct costs associated with the *Second Life* trial apart from providing headsets for all participants and the IT support which was absorbed in day-to-day Faculty costs. QUT owns land in *Second Life* (QUT Island) and the virtual court had already been established prior to the moot trial taking place. QUT Island is a shared resource with costs spread across several faculties. The virtual court was created using mostly 'free' items in *Second Life*; any items that required payment were for a nominal amount only. It is estimated that the ongoing cost of the part of QUT Island on which the virtual court is located would be about $150 each year. In sum, the cost of hosting a moot in *Second Life* for a university which has an established space there would be negligible.

While the *Second Life* platform is free for end-users to download, a potential barrier to its use by students accessing it off-campus is the bandwidth required to enable its effective operation.[26] According to Wenkel and Kingsley:

> For the end-user experience to be enjoyable and to a standard suitable for instruction, *Second Life* makes significant demands on available bandwidth. The SimTeach wiki (http://www.simteach.com) describes the bandwidth requirements thus:
>
> > Each computer running *Second Life* will need an average of 80 kbps downstream, spiking at about 400 kbps on initial connect and during teleports. Upstream is much lower, requiring 30 kbps on average.
>
> However, these are basic requirement and do not take into consideration large quantities of avatars in a single space, nor complex and multi-textured builds nor indeed streaming media, all of which can push average usage on a single computer well into double-digit gigabyte downloads per month.[27]

The bandwidth requirement may be a significant barrier to off-campus students participating in moots that use *Second Life* as the communication platform.

5 Other Issues

Michelle Sanson, Jennifer Ireland and Paul Rogers also identify potential legal risks

associated with the use of *Second Life*. The risks are largely due to the existence of

> potentially offensive sexual, political and social materials that exist in *Second Life* and there is a high probability that students using the platform who leave the safety of their institutional setting will come into contact with some of this.[28]

To minimise these risks, it is important that clear guidelines be established for the use of university avatars so that inappropriate conduct and contact with undesirable activities by other users are avoided. These guidelines should include one to the effect that students using university avatars may not leave the university *Second Life* space.

6 Conclusion in Relation to the Use of Second Life

As a result of the trial it is recommended that prior to *Second Life* being used as a platform for the conduct of a mooting competition or for practising moot submissions the following issues be considered:

- Institutions hosting moot competitions within *Second Life* will need to ensure that the facilities are thoroughly tested prior to the competition.
- Appropriate IT support staff should be available to set up the moot and to assist participants during the moot.
- Participants in moots facilitated in *Second Life* will need to spend time familiarising themselves with the program, the relevant avatars and the moot court location prior to the competition.
- Sufficient time should be allowed to set up the moot in *Second Life* prior to the commencement of the competition.
- Guidelines should be established for the use of university avatars which are clearly communicated to students and which do not allow students to leave the university *Second Life* area.
- There is limited capacity for students to practise their advocacy skills when mooting in *Second Life* and students should be cautioned against developing poor habits when practising mooting in *Second Life*.

The authors suggest that, unless and until students become familiar users of *Second Life*, the use of *Second Life* as a platform for competition mooting is not viable. Even if the usability issues are overcome, there are serious concerns as to whether *Second Life* is a useful tool to assist students to develop advocacy skills, particularly with respect to the relative crudity of facial expressions and gestures which the current avatar software allows.

B Elluminate

Elluminate is a proprietary product developed primarily for the educational market, and comprises a suite of tools which allow for the organisation, development and packaging of electronic content for delivery through a virtual classroom (*Elluminate Plan!*); the creation of virtual environments in which instructors/teachers can interact in real-time with off-campus students (*Elluminate Live!*); and the creation of professional-standard recordings/videos of sessions conducted in the *Elluminate* environment (*Elluminate Publish!*). *Elluminate* is available freely to all QUT students and

staff through Blackboard (QUT's learning management system).

The *Elluminate* trial was conducted with all participants physically located on the QUT campus. The mooters and audience were each situated in separate computer laboratories in the law library and the judges were in their offices in the Law School. As with the *Second Life* trial, all participants were connected to *Elluminate* directly through the University's computer network. Each participant was issued with a headset and received an invitation to attend the moot through the QUT Mooting Blackboard site. The invitation contained a web link as well as instructions about how to set up the computer requirements to join the *Elluminate* session. Unfortunately, webcams were not available for the trial and the moot relied on audio alone.

While it was not expected that the *Elluminate* moot would create the same sense of occasion and presence as that in *Second Life*, it was expected that *Elluminate* would be an easier technology to use, and would be more accessible due to the lower bandwidth requirements. These expectations were borne out by the trial; however, the same concerns in relation to the development of advocacy skills were raised as for the *Second Life* trial.

1 Development of Advocacy Skills

Students reported similar concerns with using *Elluminate* as they did for *Second Life* in relation to the development of their advocacy skills. Because they could not be seen by the judges, they fell into the habit of reading submissions and not observing court etiquette. They were also not able to make use of eye contact and body language. Students were concerned that these bad habits would be detrimental to their subsequent mooting performance:

> On *Second Life* and *Elluminate* I know I was just reading my submissions, I was not making submissions to the court or trying to engage anyone with those advocacy skills or elements. I was just reading what I had written.

This limitation may be able to be overcome at least to some extent in *Elluminate* by the participants using a webcam so that mooters and judges can be seen by each other.

2 Technical Difficulties

No particular technical difficulties were encountered in using *Elluminate* during the trial. According to the evidence from the focus groups, the mooters enjoyed *Elluminate* more than *Second Life* and they found *Elluminate* easier to operate. This may have been due to the fact that the participants accessed *Elluminate* through a platform they had used before (the Blackboard site). The judges had experience in using *Elluminate* and felt comfortable using it for the trial.

Elluminate was quick and easy to set up through the QUT Blackboard site. All participants logged in to the *Elluminate* session without any technical assistance and it is expected that students located off-campus would be able to access the *Elluminate* session without difficulty. The audio quality during the trial was good and the mooters and judges could communicate easily with each other.

3 Technical Support

IT support was available for the *Elluminate* trial; however, it was not necessary for the participants to seek IT assistance.

4 Cost and Access Issues

There were no direct costs associated with the *Elluminate* trial apart from providing headsets for all the participants. Access to *Elluminate* is available to all QUT students and staff through Blackboard.

Elluminate can work with internet connections as low as 28.8kb.[29] One of the desirable features of *Elluminate* is that it can accommodate participants using disparate communications systems (for example, high speed ADSL2 and slower broadband connections). *Elluminate* also has the capacity to integrate large numbers of simultaneous users via webcam, thus allowing for a more subtle reproduction of facial expression and gesture than is available in *Second Life*. Webcams cost approximately $40 each.

5 Other Issues

Compared to *Second Life*, *Elluminate* is a safe communication platform and the legal risks associated with its use by students would be negligible.

6 Conclusion in Relation to the Use of Elluminate

While mooters had similar concerns with the use of *Elluminate* as they did for *Second Life*, they expressed a preference for *Elluminate* and felt that, with the addition of the webcam facility, *Elluminate* could be used to assist with the development of advocacy skills where face-to-face mooting is not an option. *Elluminate* also has the advantages that it is easier to use than *Second Life* and requires less bandwidth, which would make it more appealing to students who are not located on campus.

C Videoconferencing

The videoconferencing trial was conducted as part of the students' participation in the IVM competition. The mooters and audience were all situated in QUT's electronic moot court and the moots were against students located at other universities within Australia, also connected by videoconferencing technology. The technology used at QUT was an IP-based Video Conferencing Polycom unit.

The use of videoconferencing for mooting is well-established, with the IVM having been conducted since 2006. Videoconferencing technology is also consistent with technology used by the courts,[30] and accordingly is able to provide the most realistic experience for mooters. It was expected that videoconferencing would be the most advantageous of the technologies trialled in the development of advocacy skills but that the draw-back would be the cost and technical support required. The results of the trials were consistent with these expectations. However, mooters still expressed some reservations about the development of their advocacy skills during the videoconferenced moot.

1 Technical Difficulties

Despite the moot being able to take advantage of video-conferencing facilities available at the participating universities, the quality of the video was not always as high as would be optimal. The video screen used by QUT was reasonably large (a 32-inch video screen); however, in some moots the picture was small as a result of the positioning of the camera at the other university. As a result, there were issues with students not being able to see the other teams and judges in detail. In addition, the audio was not of a consistent quality. In some cases, judges could barely be heard, which led to frustration on the part of the participants. This was in part due to the technology used but was also partly due to individual voices. It should be noted that the development of an appropriate voice for videoconferencing is a skill which should be developed by mooters who, as future advocates, may be required to use videoconferencing in court and for other communications.

2 Technical Support

Extensive IT support was required to set up the videoconferencing trial and it is not expected that students who were not located at a university campus would be able to participate in a moot conducted using videoconferencing technology. Accordingly, while videoconferencing might be appropriate for external moot competitions, it is not likely to be a means to facilitate internal mooting for off-campus students.

3 Development of Advocacy Skills

The mooters reported in the focus group that videoconferencing was the technology that best facilitated the development of their advocacy skills. However, the experience of being in a face-to-face moot was still not replicated. One student commented:

> I guess the manner was there. You had to be proper. Bet [sic] even then like the benefits of mooting are achieved to an extent but from what I have done when there is a proper bench sitting there, it is totally different. Because [you] need that connection and you cannot establish that connection through such a small TV especially … It just does not feel right.

Students found the moots where the bench was sitting in a courtroom rather than at a normal table and where the video was close were the most valuable. This may have been in part due to better facilities existing in moot courts that were specifically set up for e-mooting.

Against the concerns raised by students in relation to advocacy skills is the need for students to be able to use technology effectively for advocacy purposes. As previously noted by the authors, technology is being increasingly used in courts across Australian jurisdictions.[31] The use of videoconferencing is well-established in Australian courts and students need to become familiar with electronic document management systems and develop the ability to advocate effectively using videoconferencing. Some of the mooters participating in the QUT trial recognised this need, commenting:

> I do not think it [videoconferencing] necessarily hindered the advocacy; I think maybe advocates need to change their advocacy style to suit the technology. Just because you are not standing up and you do not have the benefit of movement and gestures and all those other things that go into your arguments, you need to focus on what you are saying.

It was said before; you need to learn how to use your voice better. That is a main one.

Once it is accepted that the ability to present arguments effectively using technology is a skill that law students require, and provided the technology used provides adequate video and audio, the argument that the use of technology is detrimental to the development of advocacy skills is negated. It may be necessary to explain to students the different skills required when using videoconferencing and to coach them appropriately.

4 Cost and Access Issues

The cost of the videoconferencing trial was the cost of the videoconferencing link and the IT support. There were no direct costs, as the hardware had already been purchased. The IT support required approximately two to three hours in configuring and testing the equipment.

5 Other Issues

As with *Elluminate*, videoconferencing is a safe communication platform and the legal risks are negligible.

6 Conclusion in Relation to the Use of Videoconferencing

While mooters expressed concerns about the use of video-conferencing to facilitate mooting, it is better for the development of advocacy skills and court etiquette than *Second Life* or *Elluminate* (at least where video is not used). In fact, it is argued that it is valuable for students to develop the ability to moot using videoconferencing as this is a skill that may be required in practice given the growing use of technology by Australian courts. The mooting experience will most closely replicate the real world where the participants are located in a moot court which has facilities that are comparable to those used in courts. Optimally, moots using videoconferencing should use high-quality audio and video systems and the camera should capture a close-up picture of the participants so that their faces can be clearly seen. These are likely to be available at institutions that have purpose built e-moot facilities and, where these facilities are available, full advantage should be taken of them for the purposes of competitions that rely on videoconferencing technology.

It is suggested that moot coaches should acknowledge the difference between mooting face-to-face and mooting via videoconferencing and assist students to develop appropriate skills relying on the use of voice. All participants should participate in a voice test prior to the moot to ensure that their voices can be heard and to enable them to practise projecting appropriately.

D Overall Evaluation of the Use of Technology

The focus group identified several possible benefits of using technology to facilitate moots, including decreased costs in terms of travelling and accommodation, accessibility by off-campus students, and the provision of a less intimidating environment for inexperienced mooters to gain confidence and experience. Despite these benefits, the students were evenly divided on whether QUT should host an internal competition using

one of the three technologies. While acknowledging the cost benefit in using technology over paying for travel, mooters strongly preferred the face-to-face option for external competitions because of the networking potential and the failure of the technology used in the trials to truly replicate the courtroom experience. There was a sentiment of 'missing out' on the total mooting experience. It would seem that the perception that Generation Y wants to use *Second Life*, and the prediction that it would be popular with students, may be misconceived.[32]

Given the importance of students learning to use communication platforms that are used in real courts, the authors suggest that law schools should strive to overcome student resistance to technology by explaining its benefits and ensuring that the best possible use is made of the technology that is available.

VI Conclusion

Although *Second Life* has attraction as an innovative technology that may entice techno-savvy students, the QUT trials suggest that it is not an effective platform for mooting; does not appeal to most students; and may, if deployed as a primary mode of mooting, be detrimental to the development of advocacy skills. Not only does *Second Life* prevent mooters from engaging with the bench through subtleties of facial expression and body language, it is not authentic in that it is not a technology that is used by or is likely to be used by courts. Since courts in Australia currently use videoconferencing, remote mooting should replicate this practice as closely as possible.

Notwithstanding these shortcomings, *Second Life* may have some limited use for introductory moots for students who have no experience of mooting or courts. The virtual courtroom would enable them to get a preliminary feel of a courtroom, see the layout and understand the dynamics of a moot in a relatively non-competitive and non-threatening environment, where learning about the basic aspects of mooting is more important than winning. Some of the technical issues discussed above would also be less serious in a non-competitive environment.

Students would be able to obtain such experience and so overcome at least some of their concerns — notably a lack of self-confidence — which have been identified as inhibiting student participation in mooting, before embarking on more demanding face-to-face moots or a moot using videoconferencing. As the technology develops in *Second Life*, it may, of course, be that some of the weaknesses of the current technology — particularly, the crude simulation of human non-verbal communications — may improve to the point where its limitations are less problematic. It is likely, however, that in the foreseeable future, its use will remain restricted to an introductory role in exploring the mechanics of the moot courtroom for students who would otherwise be unable to access the real environment.

The trials have demonstrated that videoconferencing is the ideal platform for remote mooting. However, the best use needs to be made of existing videoconferencing technology to ensure an authentic and worthwhile experience for students. Many Australian law schools have electronic moot court facilities,[33] which can be used to hold external competitions in which students can develop effective remote advocacy skills. The

use of videoconferencing also has the advantage of involving less cost to universities and being accessible to students who do not have the resources to travel.

Although videoconferencing is the ideal platform for remote mooting, it has the significant drawback that students located off-campus are unlikely to be able access videoconferencing equipment. The only opportunity for conducting moots using videoconferencing is in external competitions between universities, such as the IVM competition, which uses the facilities on the participating universities' campuses; or the Family Law and the AAT moot competitions which use the real courtroom facilities. Given the limitations of videoconferencing, it is suggested that *Elluminate* (with webcam) should be used for internal competitions and practices to enable off-campus and inexperienced students to participate in order to gain experience and confidence before participating in external competitions. Provided that the webcam feature is used, the *Elluminate* platform can provide an authentic experience and allow students to develop effective remote advocacy skills that are required in the real world.

All the technology options canvassed in this paper can have a place in mooting, provided that they are used in a way that acknowledges their different advantages and disadvantages. Not all the benefits of mooting which were previously identified in the literature and student surveys are achievable through the use of technology. It is important to consider carefully the purpose to be achieved by holding a particular moot and to use the appropriate technology to achieve that purpose. Videoconferencing is likely to be an appropriate platform for external mooting competitions where facilities are provided by participating universities; *Elluminate* can readily be used for internal competitions and practices involving off-campus students; and *Second Life* may be a safe place for students to learn some of the most basic aspects of court layout and procedure and develop self-confidence, provided that the inherent dangers of the platform are addressed. It is important that students understand that the use of technology is a vital real-world skill that they are likely to be required to use in practice.

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[1] 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.

[2] 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; Sanson, Ireland and Rogers, above n 1; Bobette Wolski, 'Beyond Mooting: Designing an Advocacy, Ethics and Values Matrix for the Law School Curriculum' (2009) 19 *Legal Education Review* 41; 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.

[3] John Snape and Gary Watt, *How to Moot: A Student Guide to Mooting* (2004); Terry Gygar and Anthony Cassimatis, *Mooting Manual* (1997); Andrew Lynch, 'Packing Them in the Aisles: Making Use of Moots as Part of Course Delivery' (1999) 10 *Legal Education Review* 83.

[4] David Pope and Dan Hill, *Mooting and Advocacy Skills* (2007); Michael Hernandez, 'In Defense of Moot Court: A Response to "In Praise of Moot Court — Not!"' (1998) 17 *Review of Litigation* 69; John Gaubatz, 'Moot Court in the Modern Law School' (1981) 31 *Journal of Legal Education* 87.

[5] Yule, McNamara and Thomas, above n 2, 232.

[6] Alex Kozinski, 'In Praise of Moot Court — Not!' (1997) 97 *Columbia Law Review* 178.

[7] Wolski, above n 2, 47–59.

[8] Yule, McNamara and Thomas, above n 2, 240.

[9] Yule, McNamara and Thomas, above n 2, 237; Bernadette Richards, 'Alice Comes to Law School: The Internet as a Teaching Tool' (2003) 14(1) *Legal Education Review* 115, 116; Dan Hunter 'Legal Teaching and Learning over the Web' (2000) 2 *University of Technology Sydney Law Review* 124; John Goldring, 'Coping with the Virtual Campus: Some Hints and Opportunities for Legal Education?' (1995) 6 *Legal Education Review* 91, 96.

[10] Des Butler, '*Air Gondwanda*: Teaching Basic Negotiation Skills Using Multimedia' (2008) 1 *Journal of the Australasian Law Teachers Association* 14.

[11] Yule, McNamara and Thomas, above n 2, 237.

[12] 'Avatar' is a general term used in computing to refer to any representation of a person within a computing environment — ranging from the simplest usage as a username, through crude two-dimensional models or icons used in earlier computing environments, to the more realistic (although stilted and stylised) three-dimensional representations in *Second Life*. Ironically, the term avatar derives from the Sanskrit for a concept similar to 'incarnation' — usually of a deity in human form.

[13] A more detailed description of and general introduction to *Second Life* is available at Wikipedia, *Second Life* (6 December 2010) <http://en.wikipedia.org/wiki/Second_life>.

[14] See Roberta Savera, *Communications in an Immersive Digital Environment: Teaching and Learning in Second Life*, Imparafacile, 70 nn 36–7 <http://www.imparafacile.it/sl/tesi/tesi-sl-roberta_savera.pdf>.

[15] Ibid 67.

[16] The unit description, in full, reads:

> In this seminar we will do mock trials in *Second Life*. We will follow and further develop a format initially developed in my Evidence class. Students in the seminar will be the lawyers. Students will articulate core theory of each side of each case in opening and closing argument; will present and examine witnesses; will engage the strategic and entrepreneurial aspects of developing a workable, educationally useful, entertaining, and perhaps practical dispute resolution format in a new and exceedingly interesting medium. Witnesses and jurors will be drawn from Becca Nesson's Extension School class in Virtual Worlds and from the at-large body of participants in *Second Life*. Students will write papers in conjunction with the seminar.

[17] Savera, above n 14, 71.

[18] See Benjamin Duranske, *Real Josh Wolf Attends Harvard Law School's 'Josh Wolf Mock Trial' in Second Life* (30 April 2007) Virtually Blind <http://virtuallyblind.com/2007/04/30/josh-wolf-mock-trial-wrapup/>.

[19] Sanson, Ireland and Rogers, above n 1.

[20] The transmission of audio signals — either alone or as part of an audio-visual data stream — involves the filtering of the frequencies which are transmitted. This filtering generally excludes higher frequencies, and may involve the loss of some cues to the emotional state of the speaker which are carried in that frequency range: see Frederika De Wilde, 'Courtroom Technology in Australian Courts: An Exploration into Its Availability, Use and Acceptance' (2006) 26 *Queensland Lawyer* 303, 316.

[21] The QUT virtual court room had been previously created by Professor Des Butler.

[22] Savera, above n 14, 13.

[23] A fuller discussion of the difficulties likely to be encountered by *Second Life* users can be found in Charles Wankel and Jan Kingsley, *Higher Education in Virtual Worlds: Teaching and Learning in Second Life* (Emerald Group Publishing, 2009).

[24] See, eg, Diane Murley, 'What *Second Life* Taught Me about Learning' (2008) 100 *Law Library Journal* 787, 789.

[25] Ibid 788.

[26] Bandwidth in the context of computer communications refers to the capacity for a communications channel to transmit data (typically as the 'maximum throughput' or data communication resources of a system) — and hence its ability to send visual or sound communications across a computer network.

[27] Wankel and Kingsley, above n 23, 20.

[28] Ibid 23.

[29] See also *White Papers: Elluminate* (2010) Elluminate <http://www.elluminate.com/Resources/White_Papers/?id=95/>.

[30] Yule, McNamara and Thomas, above n 2, 235.

[31] Ibid 234; De Wilde, above n 20, 303.

[32] Sanson, Ireland and Rogers, above n 1, 253.

[33] Yule, McNamara and Thomas, above n 2, 235.