

# Using video annotation technology to support a reflective journal

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## Abstract

*The increasing psychological distress experienced by law students in their first year at law school and public speaking anxiety that is experienced by first year students across the higher education sector are two complex problems, which need to be addressed by educators. Integrating reflective practice may assist to minimise these two complex problems. This emerging issues paper reports on the first iteration of a project where a course coordinator used video annotation technology to support a reflective journal in a first year compulsory law course, and seeks advice on how to evaluate the second iteration of the reflective journal.*

## Introduction

This paper adopts a design-based research approach, which is premised on a ‘social constructivist model of learning’ (Parker, Maor & Herrington, 2013, p. 227). Design-based research is similar to action research because it is conducted at the ‘coal face’ and ‘involves an ongoing iterative process to monitor the effectiveness of a specifically designed artefact...involving successive implementations of a learning solution’. (Parker, Maor & Herrington, 2013, p. 227). The artefact relevant to this emerging initiative is a summative (30 per cent) reflective journal in a compulsory first year law course at a regional university with a cohort of 86 law students.

The reflective journal sought to minimise some of the complex problems of psychological distress and public speaking anxiety in first year law students. The reflective journal engaged students in observing criminal proceedings in a real court; simulating the role of an advocate (police prosecutor or defence counsel) in a five minute bail application in the moot court; and reflecting on both of these experiences. The students performed their simulation face-to-face in the moot court. The tutor used video annotation technology to record and annotate the simulations in the real-time; and the students were able to review their simulation online through a video annotated recording made by the tutor. This paper makes a novel contribution to technology enhanced learning by reporting on the integration of video annotated technology to support a reflective journal in first year law.

## Using reflective practice to minimise psychological distress and public speaking anxiety

Legal educators are increasingly concerned with the psychological distress experienced by law students and the ‘precipitous decline in law students’ wellbeing during the first year of university. This suggests that there may be discipline and context specific issues that could impact on and amplify any ‘pre-existing vulnerabilities’ (Huggins, 2012, p. 2). For example psychological distress in law students has been attributed to too much emphasis on the competitive nature of the adversarial system and not enough emphasis on reflective practice (Field, 2014, p. 15).

In addition to these law-specific issues, scholars have documented in the literature that first year students in all disciplines are commonly confronted with the challenges of public speaking and speaking in front of their peers (Nash, Crimmins & Opreescu, 2015, p. 1). Other educational researchers have suggested that instances where a student performs an oral assessment task and experiences social anxiety or public speaking anxiety could create equity issues and reduce the likelihood of academic success (Martin-Lynch, Correia & Cunningham, 2015, p. 4) with a potential for a negative impact on the psychological wellbeing short, medium and long term.

In the context of legal education, one example of an oral assessment task is a moot, which is a simulation commonly known as an advocacy exercise. A moot can assist law students to understand courtroom procedures and the adversarial legal system. A moot focuses on the development of many skills, including ‘problem-solving, legal analysis and reasoning; legal research; written and oral communication; teamwork; time management; and strategy’ (Wolski, 2009, p. 45). All of these skills resonate with the currently endorsed threshold learning outcomes for law (Kift, Israel & Field, 2010, p. 10). A moot bridges the gap between legal education and practice (Butler & Mansted, 2008, p. 288). In addition to the development of skills, a moot enhances student engagement; increases job prospects through building networks and curricula vitas (Yule, McNamara & Thomas, 2010, p. 46).

The literature reports that student perceptions of a moot are varied and include feeling ‘overwhelmed’, ‘terror’, ‘fear’ and ‘stress’ (Wolski, 2009, p. 62). Since 1992, first year law students at the Newcastle Law School have completed a compulsory moot, and the students ‘have consistently expressed concern about performance anxiety’ (Dluzwska, Kirby, Campbell & Lindsay, year, p. 2). Where students experience negative feelings towards moots, they are more likely to engage in surface learning in order to cope with the distress (Wolski, 2009, p. 62).

Reflecting on one’s performance is one of the strategies identified in the literature for minimising psychological distress and public speaking anxiety (Field, 2014, p. 15). The legal profession and other stakeholders interested in the skills of law graduates have endorsed reflective practice as part of threshold learning outcome 6: Self-management (Kift, Israel & Field, 2010, p. 10). Supporting the development of reflective practice is an ‘outcomes-focused educational paradigm’, which ‘is premised on the understanding that defining and assessing outcomes improves student learning experiences and enhances employability skills’ (Huggins, 2015, p. 281). In developing a workable solution to psychological distress and public speaking anxiety, the course coordinator integrated video annotation technology to support reflective practice.

### **Using video annotation technology to support a reflective journal**

Video recordings give students the opportunity to re-live, review and reflect on an experience they have been part of (Lewis, Moore & Nang, 2015, pp. 1 and 3). This has been labelled as a ‘second think’ (Charteris & Smardon, 2013, p. 168) and enables students to develop their reflective practice (Lewis, Moore & Nang, 2015, p. 3). Importantly, because video can be seen as a passive channel (Colasante, 2011, p. 68), debriefing and engagement in reflective practice are critical in order to gain the most learning value out of a video enhanced assessment task (Beidatsch & Broomhall, 2010, pp. 17-18).

Further enhancements can be achieved through the addition of video annotation. For example an educator may annotate a video recording of a student simulation in real time. Video annotation technology offers an innovative blended learning experience (Douglas, Lang & Colasante, 2014, p. 1), supports student learning in higher education and promotes reflective practice (Colasante, 2011, p. 68). There is very limited literature canvassing the ‘learning effectiveness of annotation tools’ (Colasante, 2011, p. 68). In a preservice teaching context, three key benefits of providing feedback on videos have been identified, that is, ‘enable visualisation, facilitate reflection and improve performance’ (Colasante, 2011, p. 69). In particular, students valued being able to review their recording and receive feedback from others (Colasante, 2011, pp. 79 & 83). This positive orientation from the students can reduce distress by creating a safe and supportive learning environment that is conducive to reflection (Lewis, Moore & Nang, 2015, p. 2). To further create a safe environment the course coordinator developed a blended learning simulation agreement that gave the participants the opportunity to offer their informed consent and to better understand the requirements and conditions of the learning environment. It is important to note that only the student and the teaching staff were able to access the video annotated recording of the simulation as recommended in the literature (Colasante, 2011, p. 79).

### **Reflecting on the first iteration of the reflective journal**

The course coordinator’s efforts to evaluate the first iteration of the reflective journal were unsuccessful. An ethics clearance was approved to evaluate the effectiveness of the reflective journal by collecting data through a short Blackboard+ survey, focus groups and de-identified student reflective journals. The short Blackboard+ survey included the following questions, which were answered on a likert scale:

1. Reflecting on the criminal procedures in a real court was a useful learning experience.
2. Reflecting on my simulation of counsel in the USC Moot Court was a useful learning experience.
3. The reflective practice resources provided by the course coordinator helped me to complete the Reflective Journal assessment task.
4. The Reflective Journal assessment task improved my understanding of reflective practice.
5. Overall, the Reflective Journal assessment task was helpful.

Unfortunately, the response rate on the short Blackboard+ survey was too low to draw any meaningful conclusions. None of the students expressed interest in participating in a focus group and only one student uploaded their de-identified reflective journal. Plausibly, the timing of the data collection, that is, after the final results for the course were released and over the festive season, was the main factor underpinning the low response rate. In accordance with the design-research approach, in the second iteration of the reflective journal, the data collection methods will be conducted during the semester and soon after the submission of the reflective journal.

In the second iteration of the reflective journal, the third question on the short Blackboard+ survey will be modified to evaluate whether the video annotated recording, as distinct from other reflective practice resources, such as a reflective practice skills sheet, helped students to engage in reflective practice. In the course coordinator’s experience in the first iteration of the reflective journal, the law students seldom referred to their video annotated recording in their

reflective journal. So while in theory, the video annotated recording should support students to review their simulation and complete the reflective journal that may not have been the case in practice. Further, tracking the data on how often students accessed their video annotated recording may provide evidence on whether the students reviewed their video annotated recording to support their reflective practice.

In addition to supporting students to engage in reflective practice, another aim of integrating video annotation technology into the course was to build the capacity of the tutors. The tutors were provided with hands-on training on how to video record a face-to-face simulation and how to insert annotations on the video recording in real time. In addition, a concise, user-friendly instruction booklet was prepared to support the tutors on how to use the video annotation technology.

One of the challenges confronting the tutors was being able to quickly provide meaningful annotations on the video recordings in real time. On some occasions, the time taken to type the annotation meant that the annotation did not appear in the relevant part of the video recording. One strategy for overcoming this challenge is to develop a bank of short and useful annotations that the tutors can add to the video recordings. The more meaningful the annotations, the more likely a student will review their video annotated recording to complete their reflective journal.

## **Conclusion**

This paper reports on the first iteration of a reflective journal, which was supported by video annotation technology. The course coordinator in the second iteration of this reflective journal needs to evaluate whether a video annotated recording is effective in supporting students to develop reflective practice, and enhancing student wellbeing by minimising the complex problems of psychological distress and public speaking anxiety.

In theory, video annotated recordings of simulations can be utilised to support students in their reflective practice by allowing as much review time as necessary for various learning styles and capabilities. Such uses of simulation and technology enhanced learning can result in equity by creating the conditions for learners at all levels ‘to construct, create and communicate their learning . . . , which is consistent with a social constructivist learning approach, such as authentic learning’ (Parker, Maor & Herrington, 2013, p. 230). In this way students become active participants in the learning process before, during and after the assessment task, creating a continuum of learning that facilitates deep reflection and self-management of learning.

Further research in the field of technology enhanced learning could empower students to annotate their own video recorded simulations, thereby supporting social constructivist learning and checking their reflection with the teaching staff. Additionally, further research could explore whether students experience anxiety or technophobia from using emerging technologies.

## **Questions**

1. What questions would you ask in a student survey to evaluate the effectiveness of the second iteration of the reflective journal?
2. What types of evidence could be used to prove that the video annotation technology was effective in supporting students engage in reflective practice?

3. When applying video annotation technology to a student simulation, do you think a tutor should ask the student to sign a consent form?
4. What terms do you think should be included in the consent form?

## References

- Beidatsch, C., & Broomhall, S. (2010). Is this the past? The place of role-play exercises in undergraduate history teaching. *Journal of University Teaching & Learning Practice* 7(1), 1-18.
- Charteris, J., & Smardon, D. (2013). Second look – second think: A fresh look at video to support dialogic feedback in peer coaching. *Professional Development in Education* 39(2) 168-185.
- Colasante, M. (2011). Using video annotation to reflect on and evaluate physical education pre-service teaching practice. *Australasian Journal of Educational Technology*, 27(1), 66-88.
- Dluzewska, T., Kirby, D., Campbell, S., & Lindsay, K. (2012). *A moot point? : Self-management in law school, Newcastle Law School*: University of Newcastle.
- Douglas, K., Lang, J., & Colasante, M. (2014). The challenges of blended learning using a media annotation tool, *Journal of University Teaching and Learning Practice* 11(2), Article 7, 1-21.
- Field, R. (2014). *Promoting law student well-being through the curriculum. Final Report of: Stimulating strategic change in legal education to address high levels of psychological distress in law students*. ALTC Teaching Fellowship: Office for Learning and Teaching.
- Huggins, A. (2012). *Harnessing assessment to cultivate law students' connections with the intrinsic rewards of legal education and practice*. Paper presented at the International First Year in High Education Conference, Brisbane, 26<sup>th</sup> - 29<sup>th</sup> June, 2012.
- Huggins, A. (2015). Incremental and inevitable: Contextualising the threshold learning outcomes for law. *University of New South Wales Law Journal*, 38(1), 264-287.
- Kift, S., Israel, M., & Field, R. (2010). *Learning and Teaching Academic Standards Project: Bachelor of Laws Learning & Teaching Academic Standards Statement December 2010*, Australian Learning & Teaching Council. Retrieved from [http://www.altc.edu.au/system/files/altc\\_standards\\_LAW\\_110211.pdf](http://www.altc.edu.au/system/files/altc_standards_LAW_110211.pdf)
- Lewis, A., Moore, C., & Nang, C. (2015). Using video of student-client interactions to engage students in reflection and peer review, *Journal of University Teaching and Learning Practice* 12(4), Article 7, 1-18.
- Martin-Lynch, P., Correia, H., & Cunningham, C. (2015). Public speaking anxiety: The S.A.D. implications for students, transition, achievement, success and retention. In *STARS conference paper*, 1-10.
- Nash, G., Crimmins, G., & Opreescu, F. (2015). If first year students are afraid of public speaking assessments what can teachers do to alleviate such anxiety? *Assessment & Evaluation in Higher Education*, (ahead of print)
- Parker, J., Maor, D., & Herrington, J. (2013). Authentic online learning: Aligning learner needs, pedagogy and technology. *Issues in Educational Research*, 23(2), 227-241.
- Wolski, B. (2009). Beyond mooting: Designing an advocacy, ethics and values matrix for the law school curriculum, *Legal Education Review* 19(1&2), 41.
- Yule, J., McNamara, J., & Thomas, M. (2010). Mooting and technology: To what extent does using technology improve the mooting experience for students? *Legal Education Review*, 20(1&2), 45-58.