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# Rethinking assessment strategies to improve authentic representations of learning: using blogs as a creative assessment alternative to develop professional skills

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## Abstract

This research explores using blogs as an innovative assessment tool to enhance authentic learning and professional skill development in students. Unlike traditional methods, blogs foster active knowledge building and peer interaction, making learning more engaging and aligned with industry contexts. The study involved third-year planning students, in the course *Governance and Planning*, and utilised questionnaires, focus groups, and blog post analyses. Results indicated that blogs promoted reflective practice, facilitated peer review, and improved learning efficiencies. Despite some initial resistance and concerns about academic rigor, students found that blogging enhanced their understanding of course content and professional practices. Teacher support and peer feedback played a crucial role in this process. The literature supports blogs' effectiveness in motivating students and aligning learning activities with real-world applications. However, assumptions about students' familiarity with blogging were challenged, highlighting the need for thorough induction and support. Overall, blog-based assessments proved beneficial in creating authentic learning experiences and preparing students for their future careers. Future research should consider long-term studies on graduate outcomes and further explore peer review mechanisms.

**Keywords:** Blogs, Peer review, Alternative assessment, Professional learning, Authentic assessment

## Introduction

Blogs have been trialled in this research as a means for introducing situation-based authentic learning and assessment activities that achieve learning outcomes aligned to industry contexts. Blogs are distinctive learning and assessment tools which are unique in that they are more than just technology mediated versions of conventional learning environments (Dourish, 2003). They foster active, constructive, knowledge building activities that provide a positive and motivating experience and their use leads to greater levels of perceived learning (Garcia et al., 2019; Wang & Chiou, 2022). Blogs enable and facilitate peer interactions (Yousef et al., 2020), provide opportunities for

communications in a mode aligned to industry conventions, and enable students to produce artefacts using a variety of media formats in order to evidence their learning.

Engaging students in the development and demonstration of skills that equip them to perform successfully in their future work and careers requires rethinking mechanisms to evidence learning. To successfully prepare students for future work-based interactions, learning experiences must address the problems that graduates will encounter in work, the relationships they will need to form, and the situations they will navigate (Le et al., 2023).

This paper presents a research project that was undertaken in response to evidence from previous student survey comments that the content for the course was difficult to engage with and lacked a connectedness to industry perspectives. Changes in the course content and teaching staff created an opportunity to re-think the assessment tasks and learning outcomes. A more experiential approach was adopted to connect students with a real-world application of their discipline knowledge. Experiential approaches involve collaboration, reflection, and assessment (Austin & Rust, 2015) where experiences external to class based activity are integrated with objectives and goals of the discipline to “transform classroom and community learning into a deeper understanding of the world” (Qualters, 2010). This approach is dependent on students’ learned material from the course, and results in assimilation, ability to develop occupational competence, and accommodation in the transaction with changing industry contexts (Harteis & Billett, 2023).

The aim of the blog-based assessment was to provide learners with authentic experiences to connect disciplinary understanding with real world contexts (Gamage, 2022). The blog assessment tasks for the course were structured around personal/individual websites. Each student developed and published a website with blogs that that comprised a diverse folio of written pieces, video posts, photos, essays, and other items aligned with the assessment criteria. The non-teaching co-investigator conducted an induction session for students in blogging software *Blogger version 3* (<https://www.blogger.com/about/?bpli=1>; accessed June 2023) in the first class of the semester. This paper examines whether the alternative blog-based assessment approaches enhanced authentic representations of learning and helped to induct students into disciplinary and professional practices.

### **Literature review**

The introduction of blogs as an alternative learning and assessment approach is supported by diverse research studies that have focused on their role for motivating and engaging students, enhancing learner agency, leveraging social interactions and communications to acquire and apply skills and knowledge, evidencing learning outcomes, as well as aligning to industry practices to create authentic assessment activities (Salam & Farooq, 2020). This literature review adopts a narrative method to provide a background to the research and technologies used, highlight trends, and identify gaps in the literature. It will frame the research undertaken and provide context for analysing the effectiveness of blogs for improving assessment design that enables a closer alignment with disciplinary and professional learnings.

Engaging with discipline content and assessment is critical for effective learning to occur and motivation has been shown to have a significantly high correlation with academic performance and is influenced by diverse factors (Kickert et al., 2019). Agency and self-efficacy are primary motivating factors that support engagement (Martin, 2012). Students experience high-quality motivation when they perceive themselves as working autonomously, competently, and can relate to the learning activity. These psychological needs are described by self-determination theory (Ryan & Deci, 2000), which when applied to the classroom, factor in how the teacher motivates students (Jang et al., 2016). The teacher's motivating actions contrast approaches that support autonomy and those where the teacher is controlling (Ahmadi et al., 2023; Reeve, 2009). This impacts student motivation and engagement levels by satisfying or frustrating needs.

Engagement theory (Kearsley & Shneiderman, 1998) describes how students are engaged for effective learning to occur. It includes three parameters: collaboration, project based delivery, and an authentic real world focus. To engage and motivate learners, tasks must provide agency, confer autonomy and be authentic, and represent the same kind of challenges and cognitive structures as the real world (Martin, 2023). Blogs can promote a process of formative skill development over multiple iterations and shift the fundamental responsibility for learning to the learner, and away from the instructor or the institution (Barber et al., 2015). Interestingly, this intrinsic motivation where students are involved in task-based activities and feel they have a high level of control (Lee & Martin, 2017) has been shown to be less important than extrinsic factors where students were concerned about meeting assessment requirements and teacher expectations. However, fostering a shared ownership of the learning environment by leveraging educational technologies confers agency in students. Strategies to ensure this include strong teacher-student relationships (Heilporn et al., 2021; Reeve, 2012) through regular communications and ensuring that assessment is a focus of the curriculum.

Social technologies such as blogs that disrupt established practice (Flavin, 2012) can cause an extra burden on students and be destabilising for academics (Bennett et al., 2017). The burgeoning availability of educational and social technologies has made choices for teachers wanting to adopt new teaching and assessment approaches increasingly complex, however learners believe educational technologies positively impact their approaches to learning (Liu et al., 2020). Yet, student preferences are that these technologies are useful for creating efficiencies in undertaking their studies rather than seeking more collaborative participatory application (Henderson et al., 2017; Salam & Farooq, 2020). Pedagogy must align with technology based learning environments and educational content be prioritised, rather than mapping new technologies onto out of date pedagogical models (Ananga, 2020; Yelland & Tsembras, 2008). This highlights the need for emphasising how technologies can establish student centric authentic experiences and guide or foster, rather than direct, a shared ownership of the learning environment (Qureshi et al., 2023). The divide between formal and informal learning can be challenging for teachers, as many technologies that facilitate learning are used by students outside the classroom (Moyle, 2010), including seeking information from peers and experts through online communities. This can be challenging for academics where the boundaries between amateur and expert advice is ill defined (Abedi, 2023). However, extending

this information sharing to include professional practices and culture, can provide technology enabled authentic representations of learning (Harteis & Billett, 2023).

Introducing new technologies for assessment can provide efficiencies for feedback design and assessment administration, but can also leverage the development of communication skills, interpersonal skills, and reflective practice. Peer and educational influences impact the development of self-sufficiency (Schunk & Mullen, 2012; Zhang et al., 2020) and are important factors for the introduction of alternative assessments. Peer interaction (Qureshi et al., 2023) and the alignment of the blogs with assessment criteria are important aspects of this research design, and the connection to engagement (Martin, 2023) and agency are analysed through the research data. Blogs provide students with an opportunity to observe and document the connections between what they learned and their experiences, which has been shown to improve reflective thinking skills (Ching & Hsu, 2010). Strategies that facilitate successful pedagogical integration of technology into courses and assessment includes lecturer modelling of tools, creation of a learning support community, and providing sustained scaffolded interaction (Cochrane, 2012; Obionwu et al., 2022b). The introduction of an alternative assessment design, like any innovation, requires careful monitoring of students and providing a supportive environment to ensure motivation and engagement is maintained (Martin, 2023).

As graduates are increasingly working in interdisciplinary organisational teams with diverse functional areas of responsibility, there is a need for a shift to authentic learning and assessment (McArthur, 2023). Authentic learning aims to align classroom-based activity with industry focused tasks and professional standards. It enables the development of attributes that are valued within industry settings (Le et al., 2023; Wiggins, 1990). There is a preference for student online discussions that enable application of theory to industry situations (Harteis & Billett, 2023; Lee & Martin, 2017), and authentic assessment allows students to practice and complete tasks that simulate work-based activities. This develops employability capabilities, such as planning, communicating, workplace awareness, and interacting with others within discipline contexts (Villarroel et al., 2018). Ashford-Rowe et al. (2014) identified eight critical elements pertaining to the workplace, these include: challenge, performance or product (outcome), transfer of knowledge, metacognition, fidelity, accuracy, discussion and collaboration. These elements were incorporated in the design of the blog assessment activities.

Acquiring skills and knowledge during social interaction with more knowledgeable individuals involves a process of negotiating meaning through mediation, and is a key mechanism in development and learning (Alenezi, 2020). The zone of proximal development (ZPD) (Baker et al., 2020; Vygotsky, 1978) describes the gap between what a learner can achieve on their own, and what they are capable of achieving when assisted by others more experienced. In the context of this research, the ZPD involves a process of developing knowledge in an online environment with teachers, as well as other students mediated through blog based tools. Learner performance has been shown to improve when social processes mediate cognitive development (Bülow, 2022; Puntambekar & Hübscher, 2005) and this research examines collaborative social processes facilitated by blog based technology. The interactions of parameters that impact this development and how this mediates developmental activity can be described as an activity system (see

Research methods for more on this) (Engeström, 2001). Kahu (2013) conceptual holistic framework of student engagement places the student at the centre and examines institutional practice, engagement as an individual psycho-social process, and the role of the socio-political context. This framework connects engagement to activity theory through the examination of institutional parameters that impact on engaging students in achieving outcomes (El-Sabagh, 2021).

### **Research methods**

To evaluate whether blog based assessment improved course learning outcomes and helped to induct students into disciplinary and professional practices through authentic representations of learning, students from the course were invited to participate in the research project. The course, *Governance and Planning*, is a third year compulsory subject in the undergraduate planning degree. Students were informed about the research activity, the time requirements (about one hour) and that the teacher was only aware of which students had volunteered as research participants after their results had been submitted to the University.

Of the 67 students enrolled, 26 agreed to participate in the project. There was no obligation placed on these participants, and thus the sample group was effectively self-selected.

Data collection included a questionnaire, student evaluation survey, focus groups, and analysis of video and text based blog assessment tasks. 15 students responded to the questionnaire, 12 students participated in focus groups (seven in one group and five in the other), and 26 students allowed access to their blog assessment tasks. An additional data set included the university Course Experience Survey (CES), which is sent out to all students at the end of every semester for each course. 24 students responded to this survey, however as the surveys are anonymous this data does not correlate with the responses of project participants.

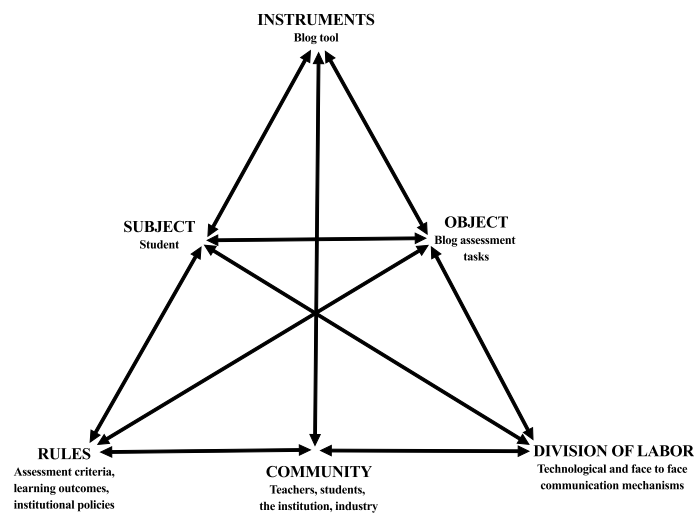
The study was conducted with Human Research Ethics Approval. A significant ethical risk arose regarding the unequal relationship between teacher and student, whereby the principal investigator was responsible for the assessment and feedback of the assessment task in the course. This risk was mitigated by collecting student survey and focus group data after results had been released to students, so their participation in the research did not have a detrimental effect on their assessment results. This risk was also mitigated as the co-investigator who conducted the focus groups was not involved in the delivery and assessment of the course.

There were 10 required blog topics each assessed to an individual criterion referenced rubric. The 10 blog posts accounted for 90% of the final grade, with the remaining 10% assessed through students' peer reviewing two blog posts each week (see Table 1). Assessment criteria in the rubrics were customised for the format of the blog post, which enabled the pedagogical integration and alignment of the blogging technology into the course and course assessments (see Appendix for full description of each blog post and assessment criteria). Teacher and peer interactions created a supportive learning community and provided sustained scaffolded knowledge development.

The qualitative data comprised of focus group recordings, survey and questionnaire feedback, and blog assessment task responses. This data was analysed using NVivo

**Table 1** Blog post assessments

Blog	Topic	Marks%
1	Introduction	5
2	Reflection of a course topic	5
3	Case study of a local government doing something innovative	15
4	Attend a council meeting	10
5	Reflection of a course topic	5
6	Case study of a local government taking a stand	15
7	Attend a protest of civil society/community meeting	10
8	Reflection of a course topic	5
9	Role of planning	10
10	Final post	10



**Fig. 1** Blog activity system

version 12 software (<https://lumivero.com/products/nvivo>; accessed June 2023) by identifying themes in the transcripts of the data. The themes were created by highlighting the transcript text and creating ‘nodes’. These nodes or meaning labels arose from the focus group and survey questions, while other nodes emerged through the interactions with participants while they reflected on their learning.

An activity theoretical (Engeström, 2001) approach was adopted to analyse the data and uncover the differing understandings, motivations, and aspirations of teachers and students in the design and application of alternative assessment tasks. Engeström (1987) model of Activity Theory (Fig. 1) illustrates how the effectiveness of any learning system is dependent upon the interplay of subjects and objects. The primary focus of activity systems analysis is the top triangle in the model where the production of any activity involves a subject, the object of the activity, the instruments that are used in the activity and the actions and operations that affect the outcome.

Understanding the blog activity system involves analysis of how transformation works in moving the subject (students) closer to the outcome (engagement in the discipline).

Implicit in activity systems are contradictions, and through consideration of these, an understanding of the transformation and development occurring in the activity system can be achieved. Activity systems are continually developing, and these developments involve interactions driven by contradictions. Engeström (2015) defined four types of contradictions.

First level contradictions are internally focused within activity system parameters (Fig. 1). For this research project these are defined by the tensions experienced by students having to undertake non-conventional assessment methods; and teachers having to design and assess these new assessment types.

Second level contradictions occur between activity system parameters. They are defined for this study as the impact of assessment redesign and the mediating effect on the achievement of the outcome. All members in the community are impacted differently. Academics' efforts in achieving a successful outcome can be hampered by institutional support for using new learning technologies, or workload models that do not accommodate trialling new assessment formats. Student responses to curriculum changes that are more authentic can cause tensions where they are unfamiliar with tertiary sector trends and policies, and often these contexts are not communicated well to student cohorts. For both students and teachers there are also the challenges of learning new software and understanding effective use of blogs as assessment tools.

Third level contradictions relate to the move to a more advanced object. For this research, this activity system this could include more sophisticated use of blogs with increased industry alignment. Possible tensions here could include the regulatory expectation that courses must undergo iterative review and refinement, yet assessment innovation can be time consuming and does not always guarantee a successful outcome. In addition trialling innovations are not always appreciated by students who often prefer defined processes (Bovill et al., 2016; Keeney-Kennicutt & Gunersel, 2008). This can result in negative student survey responses, which is problematic for academics who rely on student survey responses for promotions and teaching awards.

The fourth level contradictions occur when tensions arise between different activity systems. For example, in this study these could describe tensions between this activity system where a blogging tool has been chosen by the teaching staff, and the IT roadmap for the university to choose and support specific learning technologies, which may not include the blog software.

## Results

The evaluation of the experiential assessment is presented through an analysis of the activity systems involved in examining perceptions and communications among participants and identifying contradictions and confluences in the development and use of blog-based assessment tools. Three themes were identified and explored through the analysis, they are: (1) Promoting reflective practice and professional learning, (2) Facilitating peer review and feedback, and (3) Developing learning efficiencies and perceptions of value. The results from the data are presented within the three themes, followed by the results of the CES.

### Promoting reflective practice and professional learning

The blogs resonated with students and promoted ongoing reflection about how the content connected with their future roles in the profession:

*in your resume, or something like that, to show some work that you've done. And I think that would be good because you could show, say that you're applying for a job at a local government, you could say that you've engaged with local government issues.*

*... the weekly post also kept me engaged with the course and I felt that governance was just always on my mind.*

*The alternative assessments really gets you thinking in different way, but more realistic like in the real world.*

*... helped me engage with the content. The requirement of this weeks post is to go to the council meeting and listen to what's happening and then write what you thought about and how the council meeting actually works.*

In particular, reflective practice was a highlight of the blog format, and students commented that having the opportunity to express themselves more frequently was conducive to greater engagement and understanding of the content:

*... by having to talk about something every week I feel like I got a deeper understanding of the course material because I had to keep looking over it and staying up to date so this was a great course and I have learned so much about governance and planning...*

*I like the assignments because I feel like throughout the course I've never been given an opportunity to express myself and my thoughts about the course content in actual assignments.*

*... you'd have to think about what happened each week...and you had to really reflect on it properly.*

*... you engage with the content better... you actually learn what is happening in that area, rather than writing an essay.*

The unfamiliarity of the assessment format created tensions in the execution of the assessments, however the teacher played a mediating role in encouraging authentic disciplinary engagement which is indicated in the following statements:

*The teacher really pushes us to go out of our comfort zone for the assignments which is scary but ultimately good because as students going into the planning profession we should understand how community and council meetings run and are received by the community.*

*I guess the greatest challenge was learning to write concisely with a substantial amount of detail which in hindsight was perhaps good practice for us students as future planning practitioners.*

### Facilitating peer review and feedback

A significant function and format of a blog is the ability to share ideas and receive comments and feedback on blog posts. The comment function of the *Blogger* software



was used as a mechanism for peer review and assessment. In addition to peer review, teachers gave more formal assessment feedback using criterion referenced rubrics on individual posts to students. Students commented on the effectiveness of this feedback, the analysis below focuses on how the feedback mediates transformation to the activity system outcome.

The assessment format was new to students, and it received a variety of responses initially. This included commentary around the informal nature of posting blogs and tensions whether there was academic merit in using blogs for summative assessment tasks and as a means of critical enquiry:

*I personally really enjoyed blogging throughout the semester I thought it was a much more consistently engaging activity than other course assignments. I also thought that the reflection posts were really interesting to write and really made me think about the broader concepts of the course. I also enjoyed reading and commenting on blog posts of my fellow students and it was so great to be able to engage with so many different ideas throughout the semester ... overall the assessment of the blog post was great. It was a great experience peer reviewing other students work to have some insights and what they thought about the readings and lectures and just seeing the way that they write as well at times.*

Peer review and feedback helped align the informal nature of the blog form to an academic context, as well as provide a mechanism to confirming that transformation was taking place.

*Yeah, in the first couple of weeks, I had some people be like, "Oh, you could have used this reference better. Or, you should have referenced this. Or ..." That kind of thing. And I actually thought about that and thought, "Oh hey, I should actually work on the referencing." Whereas, in later weeks, people would just be like, "Yup, great post." And I'm like, "Okay, I'll just keep going how I am."*

There was some criticism of the informal nature of the blogs, and as the quote below indicates there was also a tension in trying to introduce formal academic referencing while promoting reflective expression:

*I didn't really like this weekly blog thing as there was much confusion. Blogs are very casual and I should be able to express things the way I want to. Unfortunately we were restricted to use references which didn't really help in me expressing myself.*

Other students thought the assessment format was fun and engaging, indicating a successful development towards disciplinary learning, and this was leveraged through peer review and sharing personal reflections:

*I really enjoyed exploring these new concepts in the form of the blog because it's something I've never done before so it made the assignments feel a bit more fun and bit more interesting but the best part about this assessment format was being able to view my peers work and see how other people in my course felt about particular concepts or topics and innovations.*

The teachers played a significant mediating role in ensuring the feedback furthered the transformation towards the outcome. The teachers' feedback about effectively using peer review through the blog assessment tool and aligning it with the criteria enabled students to engage more deeply in peer discipline learning as well as promoting student feedback literacy (Carless & Boud, 2018):

*One more thing I wanted to say, I really like that at the end of the lectures, we got given feedback on generally what was good about the blogs and what a lot of people did poorly, because I found that my feedback didn't really help me that much. It was never really clear to me how I could improve based on what they said. That kind of let me know, okay, this is what everyone else did and that's what worked. So I should try and do that.*

### **Developing learning efficiencies and perceptions of value**

The impacts on changing assessment types can be significant, and as represented in the activity system, it involves interactions of many parameters, which subsequently affect the motivations for teachers to trial alternative assessment types. The question for many teachers is whether the outcome is worth the effort? Perceived value of the introduction of the blog- based assessments are highly subjective, however the analysis of the data does indicate that perhaps it is worth the pain and their introduction facilitated student learning (Deng & Yuen, 2012).

The tensions and contradictions within the activity system impacted some student participants, resulting in confusion, and for teacher participants an increased workload. These tensions are examined through analysis of the following student interview data to ascertain whether transformation is being blocked or mediated towards the outcome that discipline engagement is enhanced and is furthering student professional learning.

The frequency of weekly reflective blogs facilitated ongoing engagement with the content, and although there were comments from some students that this did not allow for in depth analysis, there was evidence that this enabled greater understanding of industry complexities, greater engagement with the content, and improving students' ability to communicate ideas concisely:

*... blogging as an assessment did take some weight off my shoulders because it was different from the standard format of a two thousand word essay the combination of course material and real-life experience like visiting a council meeting or a community meeting certainly helped me grasp the complexities that arise from different forms of governance.*

*... my growth and understanding of planning was a bit of fun in frustration while it is without a doubt easier to do 10 smaller assignments than three large assignments. I struggled with the word count some weeks I had to rephrase and rethink my ideas multiple times start writing up the blogs to be able to effectively get my points across while staying within the word count.*

Teacher and student interactions were a highlight of the blog format and community mediated learning through the peer review mechanisms of the blog software facilitated increased engagement with the discipline:

*I personally really enjoyed blogging throughout the semester. I thought it was a much more consistently engaging activity than other course assignments. I also thought that the reflection posts were really interesting to write and really made me think about the broader concepts of the course. I also enjoyed reading and commenting on blog posts of my fellow students and it was so great to be able to engage with so many different ideas throughout the semester.*

*I really enjoyed exploring these new concepts in the form of the blog because it's something I've never done before so it made the assignments feel a bit more fun and bit more interesting, but the best part about this assessment format was being able to view my peers work and see how other people in my course felt about particular concepts or topics and innovations.*

The community mediated learning was also evident in the transformation of teacher student interactions to assessment outcomes as indicated in the following comment:

*I feel like I had a connection with the teacher. Just writing about stuff that she said, like, not direct quotes, but ideas that she presented in the course. Sort of like trickle into my blog.*

Analysis of the data also indicated effective learning through assessment and efficiencies in the blog assessment format, which resonated with students. This included contradictions where students perceived that time spent on traditional essay-based assessments were more conducive to deeper learning:

*I think not necessarily doing the blog, but I think just the weekly engagement of... yeah. Just the weekly engagement constantly. I feel like I've done the least amount of work. I've done a lot of work, but I feel like I've done the least amount of effort for this subject, but I've got the most out of it.*

*... blogging throughout the semester was really enjoyable made me pay a lot more attention than other subjects with the usual three assessment tasks facing the blog-post of weekly contact made me a lot more engaged in the weekly topics overall.*

*... overall I've really enjoyed blogging for the scores. I think it's really lifted the weight off our shoulders in terms of the workload that we have to do and I found a reflective pieces really there's just a really good learning tool especially because this whole course is so content heavy there's just a lot of stuff to talk about and doing blog posts helps to really tie everything together bit by bit along with the other classes I feel like they really integrate well together.*

Contrary to this, were comments from teaching staff about the workload associated with providing adequate feedback (Henderson et al., 2019), or the large number of individual posts. This created some tensions with students perceiving they were not getting adequate teacher feedback, and the peer reviews did not provide the expert response expected from students:

*I don't think I would be comfortable with someone, a student, grading my work and being... would they be responsible for the mark? Or just reviewing it? And sometimes it took a while to get feedback. We had three backed up that we hadn't got feedback on.*

### Student survey results

A Course Experience Survey (CES) was undertaken at the end of the semester. There were 24 respondents, as the university surveys are anonymous the data does not correlate with the responses of project participants. The two scores in the survey include 6 questions that constitute the Good Teaching Score (GTS) and one question that determines the Overall Satisfaction Index (OSI). For the *Governance and Planning* course the GTS score was 67.3% compared to 46.9% in the previous year, and the OSI was 60.9% compared to 45.8% in the previous year.

### Discussion

This paper evaluated whether blog-based assessment improved learning outcomes for the course and helped to induct students into disciplinary and professional practices and cultures through productive and authentic representations of learning. Alternative assessment tasks were trialled in the course to improve motivation for students to acquire discipline knowledge and increase levels of engagement with the course content through students sharing their learnings with peers via blog mediated activity. Alignment of blog-based activity to industry focused tasks helped to create authentic representations of learning and assessment (Kruck & Teer, 2009). The online interactions between students, teachers, and peers were focused on developing learner agency to construct knowledge through real world inputs that rely on the interpretation and reflection of discipline teaching. This approach supports simulated work-based activities and the application of theory to industry situations, which is preferred by students (Lee & Martin, 2017).

Introducing this innovation caused tensions including students needing to develop a writing style that is appropriate for the blog format and reviewing and receiving peer submissions. There were concerns from students that there would be a devaluing of academic writing skills given the informal writing style of blogs, while others saw the benefit in blog-based assessments. The course coordinator relayed that in the context of the whole program there were other courses that relied heavily on more formal academic writing skills, so students would still develop these skills. This was important, because students' perceptions towards blogging as a useful and collaborative academic activity relies on the teacher promoting the learning and assessment design as an authentic and relevant alternative (Garcia et al., 2019).

These contradictions are represented in other research studies that have shown students to find technology useful for creating efficiencies in managing their studies (Henderson et al., 2017). In addition, the informality of blog writing has been argued to a way to increase the diversity of industry related topics addressed by students, and perhaps academic essay assessment formats are not necessarily optimal for engaging with and learning industry based content and processes (Pinya & Rosselló, 2016).

Teachers are an integral component of the 'community' in the activity system. Teachers provide guidance in discipline-based discussions and play a significant role in moving the subject closer to the outcome (see Fig. 1). Motivation impacts academic performance (Kickert et al., 2019), and engagement is supported by agency and self-efficacy (Martin, 2012). The teacher's role in motivating students (Jang et al., 2016) is

represented through a constructivist learning approach and ZPD (Vygotsky (1978), where the interactions between teacher and student describes the gap between what a learner can achieve on their own and what they achieve when supported by those more experienced. The teacher's role as support and assessor are part of second level contradictions in the activity system, and the reflections by the teacher on how implementing innovations can create a more advanced activity system represent third level contradictions.

The decision to trial blogs as an alternative assessment strategy was based on previous feedback through CES about the course content being somewhat unengaging and dry. The design of the alternative blog based assessment created an opportunity for sustained scaffolded interactions across the whole 'community' to create engagement (Obionwu et al., 2022a). The contributions of guidance from social partners (Billett, 2015, pp. 104–105) builds students' skills to critically appraise and challenge the status quo of discipline knowledge in industry. These social partners include classmates who help to reduce the sense of isolation. Often students feel they get better feedback from peers than teachers (Zhang et al., 2024) and that reading other students' blogs helped in understanding course concepts (Ellison & Wu, 2008).

There was an assumption that the predominately under 30-year-old demographic of students would be familiar with posting blogs. This assumption was based on the prevalence of media focus on the popularity of blogging and that the frequency of daily blog posts globally is currently over 6 million, with 600 million websites recognised as blogs (Chakarov, 2023). When questioned how many students had blogged before only two out of the class of about 67 responded in the affirmative. Self-efficacy has a psychosocial influence on students' engagement in learning, and peer and teacher support that fosters success in assessment activities has a positive impact on confidence (Farrell & Brunton, 2020). This was articulated by students in their comments about teacher feedback on their blog posts, and a supportive approach helped in the development of self efficacy. This support included an induction that involved stepping students through setting up and using the blog software. Due to students' unfamiliarity with the platform and the process for constructing posts, online feedback and support provided by both the teaching staff and co-investigator facilitated engagement.

As social media technologies are increasingly used as a component of the educational technology toolkit, questions about the preparedness of academics to shift their assessment design to capitalise on these technologies needs to be explored (Mimirinis, 2019). Strategies and practices also need to be defined to enhance course and program learning outcomes without impacting negatively on academic workload or institutional risk. Capitalising on social media in higher education is a significant shift to the traditional university learning environment. The increased openness and transparency provides opportunities for improving the relevance and connectedness of courses. However, this also creates risks with regards to student privacy and academic integrity. As the shift in assessment moves into different spaces, we need to consider the framing of the development of students' academic literacy and research skills, and how to provide guidelines that can adopt blogs, or other social media, and still maintain higher education standards.

## Conclusion

The aim of this paper was to examine whether the alternative blog-based assessment approaches enhanced authentic representations of learning and helped to induct students into disciplinary and professional practices. The adoption of blogs as alternative assessment method did increase engagement with the content, enhance student learning and dialogue about the profession, and facilitate peer learning. Interactions between students, industry, and teachers exposed differing perspectives, that were highlighted within the activity system. Mediating factors such as teacher support and encouragement for trialling the new assessment format led to transformation and development of the activity system outcome.

The project examined how peer feedback and blogging impacted student knowledge and skill development and considered how to best implement these technologies to enhance disciplinary and professional practices. The results indicated the importance of providing guidance and support for students when implementing alternative assessment processes that involve new technologies. It was also evident that making assumptions about familiarity with and use of technology by student cohorts should be avoided. Much is made of generational differences both in social media and research (Dimock, 2019), however such generalisations can impact negatively on ensuring all students engage with alternative assessment forms and develop new skills in using technology.

Considerations for further investigation could include longitudinal studies examining whether there was positive feedback from employers about graduates' industry and professional understandings, and graduates sense of agency and self efficacy when applying for work or making industry connections. This research could also extend to analyses of mediating factors in the activity system that resolve the contradictions over time, such as designing efficiencies in feedback mechanisms and technology solutions, and integration of peer review strategies.

Limitations of the study include the small cohort size (26 students), however the richness of the transcripts from different sources- surveys, video blogs, focus groups, and questionnaires meant that the commentary provided a diverse array of data that enabled insightful analysis of the blog activity system. The authors also acknowledge that selecting 26 students through voluntary selection methods out of a cohort of 67 could result in differences in research artefacts between subjects and the rest of the cohort (Tseng, 2021) due to factors such as individual student availability. However this would be minimal given the research artefacts are assessment tasks that all students (both participant and non participant groups) completed as a course requirement, and the teacher was only aware of which students had volunteered as research subjects after results had been submitted to the University.

## Supplementary Information

The online version contains supplementary material available at <https://doi.org/10.1186/s41239-024-00483-0>.

Additional file 1.

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Each author made substantial contributions to the design of the work; analysis of data; and have drafted the work and approved the submitted version. Both authors agree to be personally accountable for the author's own contributions

and to ensure that questions related to the accuracy or integrity of any part of the work, even ones in which the author was not personally involved, are appropriately investigated, resolved, and the resolution documented in the literature.

#### Author contributions

AD and MO collaborated equally on the data collection, analysis and the writing of the paper.

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#### Availability of data and materials

The datasets generated and/or analysed during the current study are not publicly available due to the ethics applications specifically stating that "data will not be preserved for possible future use in another project either by yourself or another researcher."

#### Declarations

##### Competing interests

The authors declare that they have no competing interests.

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