

Scaffolding academic literacy in a diverse first-year higher education classroom: evaluating the effectiveness of a blended learning model

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The differing levels of academic preparedness of commencing students and the provision of institutional support with respect to academic and information literacy present universities with a number of challenges. This paper discusses the effectiveness of an innovative and integrated blended learning model to scaffold and embed the teaching and learning of university literacy practices in a first-year Arts unit. The Action Research project ran over the course of two semesters and found increasing collaboration between discipline, Academic Language and Learning as well as Library staff to be key to the success of this multi-layered strategy. Analysis of educators' in-class experiences, student feedback and site traffic data suggests that a collaborative blended learning model effectively enhances the first-year experience for all stakeholders.

Key Words: First Year Experience; embedding academic and information literacy; blended learning; transition pedagogy.

1. Introduction

Massification, internationalisation and the related diversification of the student body have had a significant impact on Higher Education (HE) sectors in the United Kingdom, the United States and Australia (Bassit & Tomlinson, 2012; Wingate & Tribble, 2012; King & James, 2013). In Australia, change was driven by recommendations of the landmark 2008 Review of Australian Higher Education, with its target that by 2020, “40 per cent of 25- to 34-year-olds will have attained at least a bachelor-level qualification” and that 20% of all enrolments will be by low socio-economic status (SES) students (Bradley et al., 2008, p. xiv).

Social inclusion, equity, the needs of a globalised knowledge economy, and a democratic participatory society all feature prominently in debates surrounding tertiary participation rates, particularly of low-SES students (Putnam & Gill, 2011). At the same time, rising participation rates present certain challenges to the tertiary education sector (Putnam & Gill, 2011; King & James, 2013). With its significant financial and reputational implications, but also ethical considerations, student attrition, especially at first-year level, is at the forefront of institutional concerns (Martinez, 2003; Palmer, O'Kane, & Owens, 2009; Kift, Nelson, & Clarke, 2010). Consequently, the First Year Experience (FYE), student engagement, and academic literacies support are areas now being prioritised by HE sectors in the United Kingdom, the United States and Australia to ensure equitable access to and participation in tertiary education (Upcraft, Gardner, & Barefoot, 2004; Tinto & Engstrom, 2008; Bassit & Tomlinson, 2012; Wingate & Tribble, 2012).

Confronted with the imperative of providing diverse students with a high quality first year experience, there have been widespread calls within the HE sector in Australia for a fresh approach to first-year pedagogies. Kift's “transition pedagogy”, for example, is a “whole of institution” model

where “first generation co-curricular and second generation curricular approaches are brought together in a comprehensive, integrated, and coordinated strategy that delivers a seamless FYE across an entire institution” (Kift, 2009, p. 1). It is premised upon “intentional first year curriculum design”, a broader understanding of curriculum that incorporates co-curricular activities and, crucially, collaborative partnerships that break down those “silos of academic, administrative and support areas” (Kift, 2009, pp. 1-2, 9, 13) that frustrate an “integrated and holistic FYE” (Kift, Nelson, & Clarke, 2010, p. 2).

The collaborative partnerships referred to above are particularly critical when it comes to meeting institutional responsibilities for supporting a commencing student cohort with differing levels of academic preparedness (Thomas, 2002; Ashby, 2004; Krause et al., 2005), a factor that impacts on student persistence (Einfalt & Turley, 2009). Cautioning against a deficit model approach, Einfalt and Turley argue that “it is important to expose all students to literacy support, regardless of what point they are at in terms of their skill development” (2009, p. 46). Moving the institutional attention away from the individual student to intentional first-year curriculum design requires stakeholders to acknowledge “context, dialogue, reflection and motivation” as key elements when integrating learning development into the curriculum (Hill & Tinker 2013, p. 3). Learning development and literacy support here include information literacy as well as academic literacies and its effective provision rests upon collaborative partnerships between discipline, Academic Language and Learning (ALL) and Library staff.

This paper reports on a successful early intervention programme aimed at supporting commencing students which at its core achieved the optimisation and integration of pedagogical approaches by blending the traditional face-to-face ‘large lecture plus small tutorial model’ with online teaching and learning activities.

2. Academic literacies and blended learning

Academic literacies scholarship holds that university practices are built on traditional, often monocultural, expert models of knowledge that are more easily acquirable by students from more privileged socio-economic backgrounds (Delpit, 1988; Armstrong & Cairnduff, 2012; Devlin, 2013). Since academic culture cannot be learnt by mere exposure to the discourses of disciplines (Lea & Street, 1998; 2006), scholars have called for curricular interventions that make explicit the established literacy practices required for acquisition and development of discipline-based knowledge and writing in higher education (Haggis, 2006; Gee, 2012; Nallaya & Kehrwald, 2013). Central to the position and focus of this paper are the recognition of writing and literacy practices as socially situated ways in which power and identity are inscribed, and a commitment to transformative education, rather than reproduction of practices that privilege some over others (Lillis et al., 2015). Research has shown that generic and add-on language and academic skills programs are not successful in teaching diverse students because practices differ across disciplines, incorporating discipline-specific value systems (Lea, 2004).

The rapid development and accessibility of communication technologies in recent times has led to their application in educational settings through the combination of face-to-face and online modes of instruction. Research has demonstrated the capacity of such blended learning approaches to enhance student engagement (Garrison & Vaughan, 2011; De George-Walker et al., 2010), provide more flexibility in timetabling and teaching spaces, as well as strengthen teachers’ pedagogical choices (Osguthorpe & Graham, 2003). However, the rationale for pushing educational technologies can lead to tensions between university governance and faculty as benefits may be seen more in terms of reaching more students rather than developing online pedagogies that better serve current students (Garrison & Vaughan, 2011, p. 7). To avoid adding technological demands onto students’ already full syllabus or teachers’ heavy workloads, Montgomery et al. (2015, p. 657) argue that “a well-defined university digital policy is critical for effective implementation at the undergraduate level”. Insufficient technical support, inadequate staff training, a lack of instructional guidance for students during online learning activities, or technical problems during online delivery of content can curtail potential positive impacts on student learning (Montrieux et al., 2015). Research has shown that, while digital learning communication tools afford students new opportunities to engage and interact, students can become disengaged from

the university community as digital learning environments are not perceived as engaging by all students. Owston, York, and Murtha (2013) demonstrate that blended learning may appeal more to high achieving students and could be less suitable for commencing students who may be lacking in terms of the requisite independent study and self-regulation skills (Hannafin & Hannafin, 2010, p. 12; Montrieux et al., 2015, p. 171).

3. Background to the project

The project originated when the Library at a university in Melbourne, Australia, established an 'online research and communication skills' project team to investigate blended learning pedagogies to effectively and sustainably embed academic and information literacy in the first-year Arts curriculum. This meant a significant improvement to the various initiatives that had been trialled over past years, which included less specialised ALL lecturers delivering one-off lectures as well as adjunct and in-tutorial workshops. The working party, composed of the present authors representing discipline (lecturer/unit coordinator), Academic Language and Learning (ALL) and Library staff, was tasked with the development of an innovative and sequenced blended learning model integrating synchronous online activities with face-to-face lecture and tutorial formats in a credit-bearing first-year Arts unit. The discipline lecturer was an academic development practitioner with discipline expertise in political sciences, the Academic Language and Learning practitioner was an applied linguist with expertise and teaching experience in a range of Arts subjects, and the Library staff member came with expertise in supporting Arts subjects.

As a core foundational unit in the first year of the Bachelor of Arts, Bachelor of Law/Arts, Bachelor of Music, Bachelor of Creative Arts Industries and Bachelor of Education (Early Childhood/Primary Education) degrees, this transdisciplinary foundation unit had a dual focus: first, to introduce first-year students to university culture and ways of knowing with content structured around the theme of 'identity in contemporary Australia'; and, second, to provide explicit academic and information literacies teaching to students new to tertiary study and with diverse linguistic and cultural knowledge backgrounds. The tutors teaching in this unit came from a range of Arts and Education backgrounds: some were experienced teachers in early childhood education, history, music or psychology, while others were current PhD students in those disciplines. In offering this intervention, we paid deliberate attention to the critical input of these target discipline experts in the design, teaching and evaluation of the unit (Luckett & Humna, 2014, p. 184).

Given the transdisciplinary nature of the unit, embedding learning development presented several challenges, such as trying to engage hundreds of students from five to six different disciplines with the unit's theme as a vehicle for teaching academic literacies. The challenge was not to generalise the 'rules of the game' across the first-year students' target disciplines, but to keep them discipline specific (Luckett & Humna, 2014, p. 185). This was addressed by the careful selection of the tutors who came with the discipline teaching expertise required for tailoring the weekly literacies activities around their students' majors. Other challenges included the limited resources provided by the university in terms of technical support for staff developing the blended units or limited communicability between the LMS and LibGuides, as described in section 5.1. Finally, the question of how to best draw on the expertise of the ALL lecturer needed to be addressed. While she had the responsibility for creating, designing and maintaining the online literacies modules, we also wanted her to interact with the students and tutors in class. This was deemed necessary not only to ensure the successful blending of the online and face-to-face content, but also to assure students and discipline tutors that the attention to literacies development did not mean a distraction from the teaching of content (Chanock et al., 2012, p. 4).

The unit was offered across two campuses, with students required to attend a weekly one-hour lecture and a two-hour tutorial. It had an enrolment of 450 students in semester one, but a significantly smaller cohort of 108 commencing students in semester two. As is the case across the university, student diversity is a key characteristic, with a considerable representation of low-SES, non-English speaking background (NESB) and first-generation or "first in family" students (Milne, 2008; Messinis, Sheehan, & Miholicic, 2008).

Academic literacies practices covered ranged from academic integrity to modelling explicit strategies for critical reading and academic writing. To address the fact that such practices can exhibit disciplinary variations (Chanock et al., 2012; Nallaya & Kehrwald, 2013; Lockett & Humna, 2014), all practices were illustrated with unit-aligned materials (see Section 5.1).

4. Research questions and methodology

Our approach to blended pedagogies was guided by the following research questions:

- How can we design a sustainable blended learning model to scaffold the development of academic and information literacy among a diverse and largely non-traditional student cohort at a time when resources are limited?
- Can a blended learning approach provide a more flexible timing and pace of learning, thus complementing the traditional lecture plus tutorial format?
- Can the use of blended learning activities energise classroom discussion and encourage more active ways of learning and engagement with academic and information literacy practices?
- Can collaboration between discipline, ALL and library staff contribute to a richer first-year teaching and learning experience?

Action Research, and more specifically Practitioner Action Research, provided a suitable methodology to examine the identified problems as the research was undertaken by us, a group of practitioners, collaboratively planning, enacting and reflecting on our classroom interventions from the ‘inside’ of the site to improve practices, our understanding of these practices, and ultimately the institution and society in which these practices were carried out (Herr & Anderson, 2005). As practitioner researchers, we did not separate ourselves from the social reality of the first-year university setting which we were investigating. This inherent bias was addressed through rigorous processes of inquiry and knowledge generation in the action research cycles, namely planning, enacting, observing and reflecting.

While critically reflective practitioner research can generate in-depth knowledge and experiences that few other social science research strategies can offer (Levin, 2012), we needed to address and make explicit our own set of beliefs, practices, and professional identities with their inherent power differentials as discipline, ALL and library staff. Equally important to consider was the site in which we operated, namely a public institution with its political, financial and educational concerns and constraints. We acknowledged that – while our different roles and responsibilities within the university placed competing demands on us and meant unequal access to the norms and values of the students’ target disciplines – each of us could make unique contributions to optimising our multilayered pedagogical approach. For example, the discipline lecturer brought deep content knowledge, first-year teaching experience, as well as student advisory expertise around course and degree structure and requirements; the library staff came with discipline specific expertise in teaching information literacies and expert knowledge in using and managing LibGuides; the ALL lecturer, an expert in applied linguistics, had extensive teaching experience on the nature of academic discourses to undergraduate students and established cross-disciplinary team teaching networks in other first year units. Combining our experiences and insights about teaching and learning with our capacity for making connections with students and staff across and beyond our departments and disciplines, we felt confident in creating a cohesive and personalised blended learning experience.

To achieve both action *and* research, we met regularly to plan, recollect and reflect on what we were doing. In addition to our critical reflections on our in-class experience, we collected and analysed students’ feedback, site traffic data and informal feedback provided by external stakeholders.

5. Semester one

5.1. Planning

Early in the project, we agreed upon LibGuides, a content management system (CMS) widely used across the tertiary sector, as the preferred online platform for content delivery. Several factors informed this decision: LibGuides has a proven track record in breaking down “barriers, both linguistic and cultural” and for “scaffolding a wide range of search and evaluation skills” in a student’s transition to tertiary study (Han & Hall, 2012, p. 295; Vaughan & Smith, 2013, p. 21); and it promotes collaboration among different parts of the university (Gonzalez & Westbrook, 2010, p. 648; McMullin & Hutton, 2010, p. 796). This CMS has the additional advantage of either operating as a stand-alone platform or being embedded in the university’s learning management system (LMS).

We planned eight weekly online literacy modules to be used for different educational goals: preparation for the weekly lectures and tutorials, as a natural extension of classroom interactions, as explicit scaffolds to the assessment tasks, as well as classroom activity and engagement templates for the teaching team. The blended approach would therefore support students and educators, most of whom were sessional staff with a discipline, rather than ALL, background. We anticipated that this blended learning model would lead to a more robust educational experience for students and enhance the teaching team’s capabilities while capturing the synergies created by the collaboration of discipline, ALL and library staff.

In the lead-up to semester one, the ALL and discipline lecturers spent a significant amount of time developing learning material that was aligned and sequenced with the weekly topics and readings as well as with the assessment tasks. This process was heavily informed by the notions of inclusion and support of a diverse student cohort and, at times, restraint by the technological affordances of the university. Each module contained study and learning tips and exercises tailored around the unit content. We kept the text short and conversational in style and utilised videos, pictures, cartoons and graphics to illustrate points in a dynamic manner (Figure 1).

The screenshot displays a LibGuides interface for 'Week 2' of a 'Reading for University' module. The top navigation bar includes tabs for 'Home', 'Week 1', 'Week 2' (selected), 'Week 3', 'Week 4', 'Week 5', 'Week 6', 'Week 7', 'Week 8', 'Week 9', and 'Week 10'. Below the navigation, there is a search bar and a 'Print Page' button. The main content area is divided into two columns. The left column features a text-based activity titled 'Reading for University' with a blue header. The text asks students to reflect on their reading strategies and provides a link to a video. Below the text is a citation for Manne, R. (2011) and a 'watch it now' link. The right column contains two video embeds. The top video is titled 'Highlighting strategies are personal, too!' and shows a person highlighting a book. The bottom video is titled 'Academic Expectations: 2 Hours per week' and shows a person speaking. Both video embeds include a play button and a 'Comments (0)' link.

Figure 1. Week 2 Module – Developing Reading.

To ensure that students engaged with the blending of online and face-to-face content from the outset, we guided them towards these modules through the mechanism of five graded online quizzes scheduled across the semester. Each quiz, which would be ‘open’ for a period of two weeks, tested students on the material in a specific module. Students were advised to access the relevant modules and complete any activities and exercises prior to attempting the quizzes.

However, since the LibGuides (CMS) did not allow for the automated grading of the quizzes, these could not be placed on the same platform as the modules. This led to some interface issues between the CMS and LMS and, in discussions with curriculum development and blended learning specialists, we explored ways of facilitating students' navigation between the two platforms. We decided that students would access the LibGuides modules via a link on our LMS homepage; they would then complete any activities and exercises prior to returning to the LMS and the quizzes. This was not ideal; however, it was deemed to be the most viable option given the platforms' limitations. We therefore needed to ensure that students were provided with very clear and explicit instructions regarding moving from one platform to another, but it also meant that we would not be able to prevent students from attempting the quizzes without first accessing the relevant modules.

Finally, we deemed it critical that the ALL and library staff members engage directly with students on a face-to-face basis. Thus, three adjunct workshops, participation in which was voluntary, were scheduled across the two campuses; each would be dedicated to specific assessment tasks.

The project went 'live' at the beginning of the academic year with a cohort of 450 students split into twenty tutorial groups, taught by eight tutors. Prior to the start of semester, we organised a meeting for the unit's teaching team. Tutors were briefed about the rationale behind the project and we emphasised the importance of collaboration and capability building around the first-year teaching team to facilitate student transition into tertiary learning. Since our approach heavily stressed inclusion and support of a diverse student cohort, tutors were asked to discuss the blended learning approach with students in the first two weeks, allowing generous time for explaining the purpose of the online modules and how to access and complete the quizzes. Although optional, students were also strongly encouraged to attend the adjunct workshops.

5.2. Benefits and challenges

Studies of factors influencing learning within a blended environment show that the time spent by students accessing and adjusting to new communication tools can lead to procrastination and frustration in learning (Lim & Morris, 2009). Similarly, to create effective blended environments, educators require specific training in the affordances of online technologies and appropriate online pedagogical methods (Owens, 2012, p. 396). The qualitative difference between "teaching online" and "putting a course online" is sometimes overlooked (Donnelli, 2010, p. 351). While teachers may receive initial support for the design and development of blended projects, they are often "left on their own to struggle through the initial implementation of their course (re)design" (Garrison & Vaughan, 2011, p. 26).

In the present study, students and educators alike experienced the frustrations that can eventuate when blended learning 'meets' a relatively non-user friendly and limited LMS. The lecturer/unit coordinator fielded numerous emails from students experiencing on-going difficulties in accessing the LMS. This often resulted in students missing quiz deadlines, particularly in the initial weeks of the semester. Moreover, we encountered various technical issues with quiz release dates. These release dates were necessary given our intention to manage students' engagement with the online material synchronously with the relevant face-to-face content. As a result, in order to allay student concerns that they would miss out on marks, we regularly had to 're-open' quizzes to ensure that students were not disadvantaged in terms of access to the quizzes.

Another problem we encountered was a measure of inconsistency with tutors, the ALL lecturer and librarian not always 'speaking with one voice'. This applied to integrating the online resources into face-to-face teaching as well as to instructions relating to assessment tasks. For example, the ALL lecturer felt at times that the advice offered at the adjunct workshops regarding assessment task requirements conflicted with that provided by tutors in class (for example, on structuring a particular assignment or flexibility around due dates), not surprisingly leading to some levels of confusion among students. The ALL lecturer sensed that this lack of communication undermined their credibility and thus represented a missed opportunity for building rapport with students.

Additionally, a site traffic analysis (Table 1) showed that student access to the modules peaked heavily where these were linked to assessable quizzes (albeit with some pronounced fluctuations) and, moreover, coincided with quiz due dates. Otherwise, site traffic dropped quite sharply, declining to insignificant levels towards the end of the semester. It is also pertinent to note that quiz completions were at their highest earlier in the semester but then gradually decreased. For example, while 76% of students completed the first quiz, only 50% completed the last quiz (Table 2). We will discuss these findings in section 5.3.

The open-ended item in the student evaluation surveys (which were administered in hardcopy format in the final two weeks of semester and generated a response rate of 37%) allowed for some interesting insights into students' often mixed responses to the blended learning approach (Appendix 1). The question, "Would you like to make any comments/suggestions regarding the online modules, quizzes or writing workshops?" elicited 107 comments which focused on the following themes:

- the modules' perceived usefulness and difficulty
- their value as alternative ways of learning
- their accessibility from an educational technology perspective
- their perceived impact on student workload.

Student comments on the usefulness and relevance of the modules to their learning were divided, with an equal number of students finding these useful on the one hand and confusing or not relevant on the other. Students were more divided on "the modules' perceived level of difficulty".

While only a tiny fraction of students found them either too easy or too hard in terms of content, approximately 25% thought they were difficult to access, navigate, or complete. This negative attitude towards the incorporation of digital technologies into their learning can be traced to frustrations around access to the quizzes, counter-intuitive formatting of some of the questions, as well as awkward navigation between the two platforms (LMS and CMS).

On the other hand, students commented positively on 'the modules as a way of learning'. As many as 25% of the comments referred to the clarity of content and weekly rhythm which helped these students create learning routines and reinforce content. However, 6% noted that it could have been better embedded into classroom activities by some tutors. In terms of workload, the modules, which were intended to be accessed on a weekly basis and calculated to take an hour to work through, were mostly perceived as adding to an already heavy workload. Compounded by the demands of completing the five quizzes, this may have led to increased stress for some students.

We also sought informal feedback from colleagues teaching in other first-year discipline units. This was very encouraging; colleagues picked up on students' improved essay writing skills as compared to previous years. For example, a colleague emailed post-semester that

In particular, what I noticed is that students are producing essays which have an introduction, are grouping the information appropriately into paragraphs and then including a conclusion. The writing itself is also mostly improved. In terms of referencing, students know how to paraphrase, they know how to quote directly using quotes. Reference lists and within text referencing are also much much (sic) better than ever before.

5.3. Lessons learnt – semester one

Here we reflect on our observations of, and develop questions about, our blended learning model. We do not reflect on these questions with the aim of 'quick-fix' solutions, but rather with the desire to better understand the complexities of developing and applying blended learning in our particular context.

Table 1. LibGuides module site traffic semester one.

Module	Online page views (12-week semester) - semester 1												Total
	Wk 1	Wk 2	Wk 3	Wk 4	Wk 5	Wk 6	Wk 7	Wk 8	Wk 9	Wk 10	Wk 11	Wk 12	
Week 1: Introduction to unit	37	62	63	14	6	1	3	-	-	2	-	-	188
Week 2: Developing listening - linked to Quiz 1	34	259	425	89	19	5	5	5	2	4	5	3	855
Week 2: Developing reading - linked to Quiz 1	13	211	358	93	20	3	3	3	2	4	1	3	714
Week 3: Developing summarising - linked to Quiz 2	6	12	189	254	82	10	10	8	2	4	11	5	593
Week 4: Developing paraphrasing - linked to Quiz 3	5	5	14	148	154	29	38	9	5	5	7	5	424
Week 5: Using Harvard	2	2	2	24	65	130	88	32	13	15	8	5	386
Week 6: Essay-writing - linked to Quiz 4	4	5	2	3	7	238	211	163	48	27	16	13	737
Week 7: Advanced summarising and p'phrasing - linked to Quiz 5	-	-	-	-	-	-	97	142	17	7	6	4	273
Week 11: Advanced essay-writing	-	-	-	-	-	-	-	-	-	-	1	8	9

Table 2. Quiz completions semester one.

Quiz	Completions (%)
Quiz 1	76
Quiz 2	69
Quiz 3	64
Quiz 4	60
Quiz 5	50

To begin with, the fact that one in four students expressed negative perceptions towards the usefulness of the online material, its accessibility and impact on student workload led us to reflect on why it was that students appeared to be lacking in motivation to engage with the online content. While the modules linked to quizzes generated peaks in usage, on-going administrative problems (particularly with student enrolment processes) meant that some students could not access the material in a timely and meaningful manner. One of the limitations within the LMS that impacted on the completion of quizzes was that numerals and words were not allowed as equally valid answers, leading to further frustration. Thus, if a student had written '2' rather than 'two' in the answer box, the answer was not recognised as correct by the system. In an investigation into task-technology fit, Lin and Wang (2012, p. 62) found that the "system satisfaction in terms of provided functions and presenting styles all have impacts on learners' continuance intentions" within a blended learning environment. It would be legitimate to suggest that such issues might have prompted negative feedback on the online learning material.

Students' negative attitudes may also be explained by insufficient clarity around how to access the modules and quizzes, the rationale for their introduction, and their relationship to classroom activities. For instance, the extent to and manner in which individual tutors dealt with the modules in their classes is unclear. We observed that certain tutors seemed uncomfortable with the blended learning approach, reflecting unease with this initiative; not everyone necessarily embraces innovation and digital classroom technologies. On the other hand, and in fairness to the teachers, the University had only recently started to push the blending of online and face-to-face teaching in first-year units which can explain why some teachers felt less confident in using the modules in class. Or maybe they thought the lecturer had sufficiently explained the online content in the lecture and felt that they needed the tutorials to focus on other areas. This illustrates the tension "between those who want increased technology in the classroom and those who are concerned that increased technology will prevent or limit what they see as effective instruction" (Davis 2011, p. 3). It can also reflect the "social distance" (Chanock et al., 2012, p. 1) between content and literacies teachers with discipline tutors fearing that attention to literacy will take time away from the teaching of content. We concluded that in the next semester we needed to be more inclusive and supportive of our tutors. This could be difficult considering the realities of sessional employment, the lack of institutional support in terms of professional development and a remuneration system that discourages collegiality. We gave much thought to these challenges and acknowledged that we had piloted our blended learning model with a large student cohort and teaching team, which was not necessarily ideal.

We also reflected on site traffic data (Table 1) which showed that students tended to access only those modules that were linked to assessable quizzes. It is notable, too, that quiz completions were at their highest earlier in the semester but then gradually declined. Student attrition might account for the latter while assessment-driven learning may largely explain the drop off in student visits to the modules. With regard to the patchy and quite disappointing attendance at the workshops, we speculated that, given their "adjunct" nature, this would be linked to students' concerns about taking on additional commitments (Wingate, 2006). Another factor could be the conflicting advice relating to the structure and due dates of assignments that we referred to earlier; could this have discouraged attendance?

A final reflection concerns collaboration within our working party. Collaborative partnerships in the development of academic and information literacy are considered sustainable partnerships "by means of engaging the majority of the discipline to be part of the solution" (Purser 2011, p. 32). The difficulty, however, of undertaking such collaboration in higher education contexts such as ours lies in its major premise: sustainable academic and information literacy development must be based on ongoing dialogue and collaboration (Wingate, 2006; Frohman, 2012; Macdonald, Schneider, & Kett, 2013). This could be particularly apposite to our project, given that we had assumed educational developers' roles without sufficient training and support or specific training in the affordances of online technologies and appropriate online pedagogical methods (Owens, 2012). Our different roles and responsibilities certainly placed competing demands on us. Since discipline, ALL and Library staff do not have equal access to the norms and values of the target discipline, we became increasingly aware that, in this highly complex space for learning, we need constantly to negotiate our roles, build rapport and be prepared to discuss and challenge our approaches to teaching and learning in an ongoing effort to examine its impact upon student learning and how new opportunities for learning can be created (Macdonald, Schneider, & Kett, 2013). We agreed that we needed to strengthen our collaboration, and indeed include our sessional tutors more fully, if we were to build a better learning environment in semester two.

6. Semester two

6.1. Planning

Based on our reflections, we settled on a number of changes for semester two. We should note here that the student cohort in semester two was significantly smaller than that in semester one, with 108 commencing students, four tutorial groups and a correspondingly smaller team of three tutors.

To begin with, we decided to timetable the three literacy workshops in lieu of lectures, that is, to hold the workshops in the timeslot normally set aside for lectures. We calculated that this would lead to improved attendance, the benefits of which would outweigh any drawbacks from cutting back on content delivery (Einfalt & Turley, 2009). We also agreed that the discipline lecturer and tutors would attend the workshops together and engage in team-teaching with the ALL lecturer. Creating this shared teaching space would allow us to speak to the students with one voice (thus avoiding the problems we encountered in semester one where students were receiving mixed messages on matters such as assignment requirements), would enhance opportunities for the ALL lecturer to interact with students, improve communications, encourage tutors to more heavily utilise the modules, and better integrate the online material with our face-to-face teaching.

Furthermore, we agreed on the need for stronger collaboration around re-developing elements of the modules and quizzes as well as the assessment tasks. The latter were modified to bring into sharper focus core skills such as critical reading, summarising, paraphrasing and evaluating an argument. This necessitated an increase in the number of modules to twelve as well as amending some content to align with the revised learning goals. Among other changes, the modules became less text heavy by way of including more examples and images. We also simplified the wording of the quiz questions and, given the problems we had encountered with certain question formats available to us in the LMS, we restricted ourselves to using true/false and multiple choice questions. Our earlier concerns that students might by-pass the modules and head straight to the quizzes appeared to be unfounded, but neither could we have addressed this, given LMS limitations. Finally, we allowed students more flexibility in terms of quiz completion times in the expectation that this would alleviate the frustrations experienced in semester one.

Prior to the start of semester, a meeting was held involving the working party and tutors. The changes proposed for this semester were explained and the importance of incorporating the modules into their weekly teaching plans was strongly reiterated to tutors. Student evaluation surveys, with the same set of questions as in semester one, would again be administered in hardcopy format in the final two weeks of semester.

6.2. Benefits and challenges

Based on the teaching team's observations, site traffic data and the student evaluation surveys (a response rate of 50%), the changes introduced in semester two seem to have contributed to some positive outcomes. To begin with, and perhaps not surprisingly, attendance at the literacy workshops improved dramatically. Particularly gratifying was the increase in the percentage of students who attended all three workshops (Figure 2).

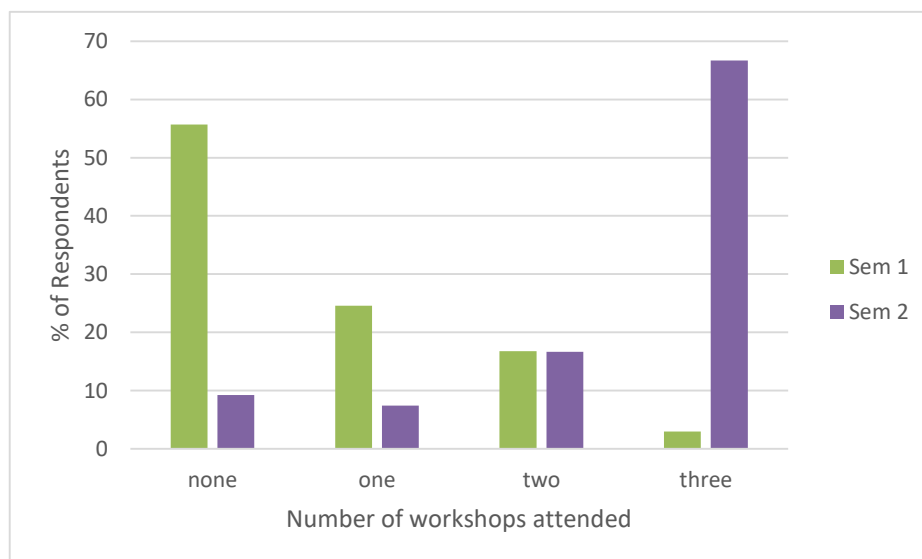


Figure 2. Student responses to the question, “How many of the writing workshops did you attend?” For semester 1, $N = 167$. For semester 2, $N = 54$.

We perceived that the team-teaching approach we took to the workshops had worked well, not least in terms of student engagement, an impression supported by responses to the student evaluation survey. In addition, quiz completion rates were significantly healthier, with a more even pattern emerging than that in semester one, when a gradual but pronounced decline was evident between quiz 1 and quiz 5 (Table 3).

Table 3. Quiz completions, semesters one and two. For semester 1, $N = 167$. For semester 2, $N = 54$.

Quiz	Completions (%) Sem 1	Completions (%) Sem 2
Quiz 1	76	88
Quiz 2	69	89
Quiz 3	64	82
Quiz 4	60	74
Quiz 5	50	75

We also experienced more consistent site traffic, in relative terms, through the modules (Table 4) and students accessed these with more regularity across the semester.

On a less positive note, site traffic again dropped away dramatically where the modules were not linked to assessable quizzes (Table 4). Similarly, problems with student access to the LMS and quizzes persisted, particularly early in the semester.

Our observations were largely supported by student evaluation survey responses. Whereas responses to the open-ended question, “Would you like to make any comments/suggestions regarding the online modules, quizzes or writing workshops?” were generally mixed in semester one, those in semester two showed a marked improvement. For example, an analysis of all 24 comments revealed more positive perceptions of the value of attending the workshops as well as of the quizzes in reinforcing module content, a finding supported by the abovementioned increase in workshop attendance and quiz completions (Figure 3).

On the other hand, student comments regarding the technology remained largely negative, similarly with respect to the additional workload associated with working through the modules and completing the quizzes.

6.3. Lessons learnt – semester two

Our post-semester reflections added to our understanding of the complexities involved in introducing a project of this nature while also raising further questions. To begin with, we speculated that our more focused collaborative efforts, particularly in revising the module content and quizzes, but also on team teaching – reflected in the manner in which we conducted the workshops – seemed to have yielded positive results. In these workshops, the teachers together with the students probed how we know what we know, relating to the ways of how knowledge is constructed by individuals and groups, that knowledge can be legitimate for some but contested by others. Our modelling seemed to encourage first-year students to acknowledge “the relativity of knowledge” and “that some forms of knowledge can have greater explanatory power than others” (Luckett & Humna, 2014, p. 184). Throughout the semester, we engaged with academic spoken and written debates around a number of often contentious issues facing contemporary Australians (such as the place of Australia in a globalised world, government policies towards asylum seekers and refugees, or the role of sport and religion in public life) and how information and academic literacies can be employed to understand and discuss such questions.

Table 4. LibGuides module site traffic for semester two.

Module	Online page views (12-week semester) - semester 1												Total
	Wk 1	Wk 2	Wk 3	Wk 4	Wk 5	Wk 6	Wk 7	Wk 8	Wk 9	Wk 10	Wk 11	Wk 12	
Week 1: Introduction to unit	37	62	63	14	6	1	3	-	-	2	-	-	188
Week 2: Developing listening - linked to Quiz 1	34	259	425	89	19	5	5	5	2	4	5	3	855
Week 2: Developing reading - linked to Quiz 1	13	211	358	93	20	3	3	3	2	4	1	3	714
Week 3: Developing summarising - linked to Quiz 2	6	12	189	254	82	10	10	8	2	4	11	5	593
Week 4: Developing paraphrasing - linked to Quiz 3	5	5	14	148	154	29	38	9	5	5	7	5	424
Week 5: Using Harvard	2	2	2	24	65	130	88	32	13	15	8	5	386
Week 6: Essay-writing - linked to Quiz 4	4	5	2	3	7	238	211	163	48	27	16	13	737
Week 7: Advanced summarising and p'phrasing - linked to Quiz 5	-	-	-	-	-	-	97	142	17	7	6	4	273
Week 11: Advanced essay-writing	-	-	-	-	-	-	-	-	-	-	1	8	9

Replacing the adjunct workshops with workshops timetabled in lieu of lectures was another positive move; as Wingate (2006) argues, separate study skills sessions are an ineffective way to enhance student learning. Additionally, the content and activities of the workshops were structured more tightly around the relevant modules and it appeared that students found this beneficial. With regard to the quizzes, the greater leeway allowed with completion times and the simplification of the questions, both in terms of the wording and the formats used, Moreover, whereas we had surmised in semester one that the decline in quiz completions might be linked to student attrition, the more positive results in semester two suggest that the extent to which we encourage and facilitate student engagement with a particular approach or strategy is a critical factor.

However, to what extent were such improvements attributable to the significantly smaller student cohort and the more compact teaching team which allowed for a greater consistency in our approach? It is difficult to establish the

extent to which such factors influenced student reactions, but here we recalled our earlier reservations about piloting this model with a large student cohort and teaching team in semester one. Had this been a misjudgement on our part?

We also reflected on challenges that had surfaced in semester one and persisted into semester two. For instance, access to the quizzes via the LMS remained problematic. It could be argued that certain contributing factors, such as issues associated with the university's enrolment processes as well as LMS inflexibilities and limitations such as interface issues with the CMS, were beyond our control. Of interest here is the university's shift to a new LMS which could alleviate some of these problems.

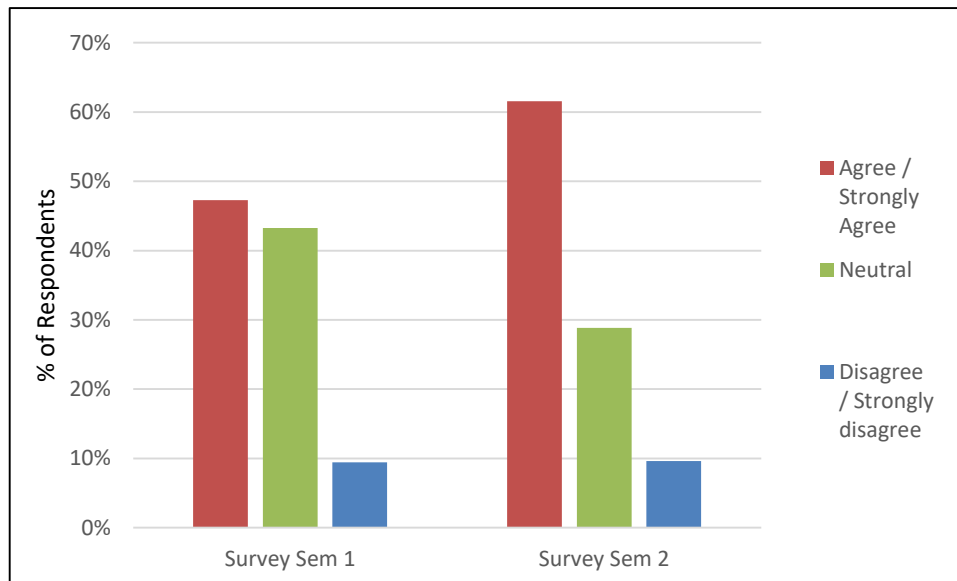


Figure 3. Student responses to the statement, “Attendance at the workshop/s has improved my writing skills.” For semester 1, $N = 167$. For semester 2, $N = 54$.

The very low access of modules which were not linked to assessable quizzes presents another challenge. This was particularly striking, for example, with respect to the last two modules (Table 4) in weeks eleven and twelve that scaffolded the final essay, reinforcing our reflections in semester one about assessment-driven learning. The observation that students approached their learning from an assessment-driven perspective may resonate with our readers. On a positive note, it could be concluded that the modules linked to quizzes provided timely and effective learning resources.

This research will inform practice in coming years not only as we further develop this model, but also our approach individually to teaching and learning more broadly. A salient example would be the experience we have gained in breaking down that ‘invisible wall’ separating discipline, ALL and library staff; collaboration of this nature is critical to supporting students as they negotiate the transition to tertiary study. Over two semesters we jointly planned, created and implemented the online modules; we jointly observed and evaluated how students and teachers responded to and applied the modules to their learning and teaching. At the end of each cycle, we harnessed our different discipline and departmental perspectives to further improve student engagement with academic literacies in this first year credit-bearing unit. We equally shared ownership of content and curriculum. Together we felt more confident in developing new ideas, practices and beliefs about the affordances of blended learning to support diverse students. This newly developed, mutual trust informed our team teaching and relationship-building with all students and teachers; even colleagues working in other disciplines had started inquiring after our approach using LibGuides for teaching academic literacies. We ‘behaved’ our way into the new teaching mode; we were not just thinking or talking about it. With this publication we hope to strengthen the scholarship and evidence around the benefits of collaboratively developing academic literacies in subject core curricula so that such initiatives can be extended to subsequent years of the degree.

7. Conclusions

Increasingly diverse commencing student cohorts have become commonplace in tertiary education across Australia. Many universities are therefore moving towards an institution-wide approach to deliver a quality FYE and academic support to all students. In this paper, we have demonstrated that a blended learning model can be successful in providing access and engaging all students with varying levels of academic preparedness in academic and information literacy. While success in terms of discrete student learning gains may be impossible to quantify – and to measure students’ learning was not the aim of this qualitative study – testimonies from colleagues

about improvements in student writing are a promising result indicating that students were able to transfer their skills to other courses. This transfer of explicit knowledge around academic language and learning was also evident in students the ALL lecturer met in other disciplines' first year units (e.g. Psychology and Social Work). In class, these students commented favourably on their experiences in the blended foundational Arts unit and how it enabled their academic writing skills in those other subjects. The results show that the combination of collaborative curriculum development, team teaching, and blended learning activities can positively influence students' first-year experience, their engagement with the learning context and the development of transferable learning routines.

In developing an inclusive and sustainable blended learning model, we explored ways of offering students a more flexible timing and pace of learning which complemented the traditional lecture plus tutorial format, energised classroom discussions and encouraged more active engagement with academic and information literacy practices. The collaboration between discipline, ALL and library staff contributed to a richer first-year teaching and learning experience. Moreover, the approach taken was successful in encouraging students to actively and repeatedly engage in different forms of learning and teaching.

However, we also experienced a number of challenges, ranging from assessment-driven learning, to launching the project with a large student cohort, LMS-related problems, and barriers hindering a fully collegial involvement by sessional staff. The creation of a sustainable learning environment requires constant reflection and improvement but our project also highlights the extent to which creating a blended learning environment based on transition pedagogy principles requires institution-wide collaboration and the time to develop it. The need for a sustained effort of this nature when reaching out to students is often forgotten in our increasingly competitive sector.

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Appendix A. Student evaluation survey (semesters 1 and 2)

Dear Student,

This year, we've introduced online modules and quizzes in ... as well as writing workshops. We are always aiming to improve the teaching and learning of content and language; your feedback will assist us greatly.

Please select one response only

1. Campus:

2. Course: _____

3. How regularly did you access the online modules (via the unit's WebCT shell)?

daily once a week other (please specify) _____

4. How many of the workshops (in weeks 4, 8 and 12) did you attend?

none 1 2 3

		strongly disagree	disagree	neutral	agree	strongly agree
5	The online modules have increased my understanding/awareness of academic skills.					
6	The online quizzes have reinforced what I learnt in the modules.					
7	As a result of these activities, I am more familiar with the university's expectations with regard to Academic Integrity (paraphrasing, quoting, referencing and research skills).					
8	Attendance at the workshop/s has improved my writing skills.					

Would you like to make any comments/suggestions regarding the online modules, quizzes or writing workshops?