Evaluating learner engagement with academic literacy via a virtual learning environment

2018

Core research team

Fiona Willans (School of Language, Arts & Media)

Ralph Buadromo (Centre for Flexible Learning)

Tilisi Bryce (School of Language, Arts & Media)

Rajendra Prasad (School of Language, Arts & Media)

Assisted by

Sanjeet Chand (Centre for Flexible Learning - Moodle analytics)

Pita Tuisawau (Centre for Flexible Learning - Instructional design)

Aluwesi Fonolahi (FSTE Student Learning Support - Statistical analysis)

Student Learning Support specialists at the regional campuses

Executive Summary

This report summarises preliminary findings from a project that has set out to evaluate a new approach to supporting academic literacy at the same time as disciplinary content of a course. The literature suggests that the most effective way to support academic literacy is through an embedded approach, rather than through standalone 'study skills' courses or workshops. However, it is often considered too challenging to embed support into a mainstream academic course without dumbing down or reducing the amount of disciplinary content that can be covered. For this project, a core 100-level linguistics course has been completely revised with separate but interrelated learning outcomes relating to each of content, skills and communication.

The first stage of the project has focused on the way learners have engaged with the academic literacy support that has been embedded within the course. Our working model of engagement comprises four elements: ***access*** (the extent to which students have accessed the materials designed to support academic literacy), ***compliance*** (the extent to which they have followed the guidelines that were in place to assist development of academic literacy), ***investment*** (the extent to which they have gone beyond minimum requirements despite no obvious short-term gain), and ***achievement*** (the extent to which they have scored well on aspects of assignments that we have supported).

Three research tools have been used to investigate these elements: the in-built learning analytics tools on Moodle to track participation and completion of online activities for the whole class; screencast-assisted multilingual interviews with a sample of students at each of four campuses, to help make sense of the analytics data; and an end-of-course feedback questionnaire posted on Moodle, to quantify some of the reported views of the course expressed during interviews.

The data presented here suggests that, while a large number of students were not ***accessing*** as many of the course materials as they needed to, those that did access the materials containing the academic literacy support were attempting to complete them broadly as intended, in other words ***complying*** with their sequencing and deadlines. Moreover, many students clearly ***invested*** far more effort in the activities than the bare minimum required to score marks on the immediate assessments, suggesting that the academic literacy support may well have been working as intended for those that attempted all the activities. At this stage, it hard to evaluate effectiveness of the academic literacy support in terms of whether it raised ***achievement***, which will be the focus of the next phase of analysis. However, brief findings from the assessment data are also presented.

Contents

1. Introduction

This project set out to evaluate a new approach to supporting academic literacy at the same time as disciplinary content of a course. The aim is to find a way to support students in making the transition from school to university, making more explicit the hidden curriculum (Christie, 1985) behind the learning and assessment of content - students' abilities to search for relevant sources, read these sources with understanding, incorporate their ideas into their writing, put forward an academic argument, communicate effectively, and so on - abilities without which they often fail to achieve the content learning outcomes.

The course of interest here is LN111 Introduction to Language Studies, a 100-level linguistics course. It was redeveloped in 2018 with learning outcomes relating to each of content, skills and communication. For example, one week, students learn about linguistic diversity in the world and in the Pacific. In terms of content, we expect them to become able to state approximately how many languages there are worldwide, in the Pacific, and in their own country, and to explain why these figures are only approximate. In terms of skills, we expect them to learn how to search the Ethnologue (an online database about the languages of the world), as well as being able to select relevant information from a long academic text about linguistic diversity that will help them answer a forthcoming assignment. In terms of effective communication, we expect them to be able to use articles, quantifiers and plurals with accuracy when discussing the many languages of the world.

The premise behind taking a discipline-specific academic literacy approach is that students need to learn how knowledge is created and debated within specific disciplines, rather than learning a generic set of 'academic skills' that can then be applied to any discipline. Moreover, students are considered more likely to see the value and relevance of 'academic skills' if they are presented in the context of their own disciplines. This shift towards an embedded academic literacy approach is well-attested in the literature (McWilliams & Allan, 2014; Purser et al, 2008; Thies, 2012; Wingate, 2006, 2012; Wingate et al, 2011), but typically encounters two types of resistance: academic lecturers are reluctant or unable to deal with matters of language or skills at the same time as content, and there is a concern that time spent dealing with these issues will reduce the depth of content that can be covered.

In this course design, we avoid both issues. Firstly, the course coordinator and principal researcher has a background in both academic literacy research and the teaching of Academic English, as well as linguistics. Secondly, by utilising Moodle, we are able to supplement rather than replace the teaching of content with the additional academic literacy support material. The course is taught in blended mode at Laucala, and in online mode at all campuses. The online materials each week for both modes comprise a series of short lecture videos supported by pre-listening notes, a reading accompanied by notes, a directed 'exploring ideas' mini research task which students complete individually before reporting their findings on a discussion forum, and a sequence of 'effective communication' notes and quiz activities. Tutorial activities that tie together the content and skills from the week are given face-to-face for blended students and via additional online materials for the online students.

2. Research design

This first phase of the study evaluates the way students engaged with the additional academic literacy support provided[1]. Our working definition of 'engagement' comprises four facets: access to materials, usage of materials in the way we expected, investment beyond minimum requirements, and achievement of related learning outcomes on assessed activities.

2.1 Research questions

Each facet has led to one research question:

1) *ACCESS*: To what extent have students accessed the materials designed to support academic literacy?
2) *COMPLIANCE*: To what extent have students followed the guidelines that were in place to assist development of academic literacy?
3) *INVESTMENT*: To what extent have students gone beyond minimum requirements despite no obvious short-term gain?
4) *ACHIEVEMENT*: To what extent have students scored well on aspects of assignments that we have supported?

2.2 Research tools

To answer the above questions, three research tools were used, combining quantitative and qualitative approaches.

2.2.1 Moodle analytics

When the online materials were developed on Moodle, they were set up to enable participation tracking via the Early Warning System and activity completion. Throughout the semester, we took weekly snapshots of overall trends, and we zoomed in on the activity of specific students prior to campus visits. At the end of the semester, an overall report was run from the back-end of Moodle by the learning systems team to provide us with whole-class and individual data on who had accessed which activities, how many times activities had been completed but not awarded marks (e.g. discussion forum posts added after the deadline or on the wrong topic), how many times quizzes had been retaken in order to get a better mark, and overall log-in trends. This data provides broad insights into what the whole class was doing, as well as individual snapshots of particular students.

2.2.2 Screencast-assisted multilingual interviews

To help us make sense of what the analytics data shows, we also conducted interviews at four campuses: Laucala, Labasa, Kiribati and Emalus. Where possible, these were conducted in the students' dominant language, using a research assistant to transcribe and translate if core team members didn't speak the relevant languages. Some of these interviews used printouts of individual snapshots of Moodle activity (e.g. a bar chart showing individuals' activity on each day of the week during the first six weeks of semester), which we asked students to discuss with classmates, explaining how often they accessed the online materials, and why they chose to do things at particular times. In most instances, we had the Moodle shell open on a laptop during the interviews, so we used screencast software to capture participants' navigation of the resources at the same

---

[1] Later phases will evaluate the effectiveness of this support for this course and for subsequent courses in the linguistics programme.

time as talking. This enabled us to gain insights from the student point of view, watching whether they seemed familiar with the layout of the shell and the order in which to complete activities, as well as ensuring that we were talking about the same thing. This interview data has been used primarily to check what we think we are seeing from the Moodle analytics, and to inform the design of the final feedback questionnaire. It also enabled us to intervene in the course delivery if we realised that students were confused or struggling, so it should be noted that the iterative nature of the course and research design has impacted the 'purity' of the findings.

2.2.3 End-of-course feedback using the Moodle questionnaire tool

Certain aspects of the student experience were captured via an online questionnaire posted on Moodle during Weeks 14 and 15. The purpose of this questionnaire was to attempt to quantify some of the students' reported views of the course. Some questions asked how often they completed certain activities (for which we had concrete data via the Moodle analytics already). The purpose of this type of question was to find out their perceptions of what they had been doing. Other items asked fairly direct questions about why they behaved in certain ways, such as why they still posted on the forum if they had missed the deadline, or whether they enjoyed doing the research task or simply did it to gain the credit.

2.3 Participants

180 students were registered in LN111 by the time of the exam[2], 93 of whom took the course in blended mode (i.e. they attended a two-hour class each week in addition to completing the online components), while the remaining 87 studied online. The students were registered at the following campuses:

Campus	Mode	Number of students
Laucala, Fiji	Blended	93
	Online	30
Kiribati	Online	6
Labasa, Fiji	Online	27
Lautoka, Fiji	Online	13
Marshall Islands	Online	2
Samoa	Online	1
Solomon Islands	Online	3
Tonga	Online	2
Vanuatu	Online	3
TOTAL		**180**

Completion tracking was carried out for all 180 students, of whom 21 also participated in interviews. All students were invited to complete the online questionnaire, but only 40 did so.

---

[2] The number of registered students was tracked throughout the semester. This number peaked at 194 on Sunday of Week 2. Only the 180 students still registered at the time of the exam are included in the analysis presented here, but Moodle data for those who dropped out will also be analysed.

3. Results and discussion

3.1 Access: To what extent have students accessed the materials designed to support academic literacy?

Figure 3.1.1 shows the average number of hits on Moodle per student each week, providing a broad picture of online activity across the semester.
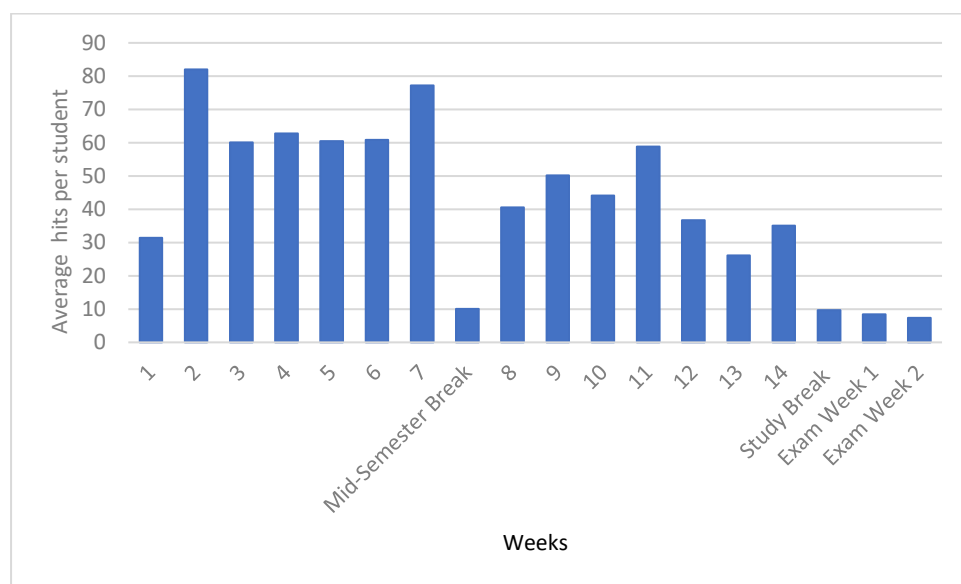

Fig 3.1.1. Snapshot of average number of Moodle hits per student per week

This shows that Week 2 was the busiest week on Moodle, presumably due to the amount of exploration students did around the Moodle shell, as well as the initial enthusiasm for getting started. The next four weeks remained steady at around 60 hits per week per student, before another peak in Week 7, when the first major assignment was due. There were fewer hits per week after the break. We can assume that some decrease is due to either students dropping out or losing interest in the course, but some of the reduction in activity will also be due to students using Moodle more efficiently, going directly to the resources they required.

Figure 3.1.2 provides more detail about the materials accessed. Figure 3.1.2a shows the percentage of blended students each week who completed the book of core online materials, completed the effective communication quiz, posted on the forum (up to Week 10), and attended the tutorial. Figure 3.1.2b shows the same for the online group, with completion of the online tutorial activities in place of attendance.

It should be noted that 'completion' of the online book must be interpreted as clicking through its pages to the end, and 'completion' of the online tutorial activities must be interpreted as downloading the file. An 'attempt' at the forum means that students posted something on the forum, whether or not it was on time or on task. These caveats explain why we refer to this aspect of engagement only as 'access' to the materials. An important part of engagement is a deliberate attempt to find and view the materials, but this tells us nothing about what (if anything) students then did with them once they had found them.
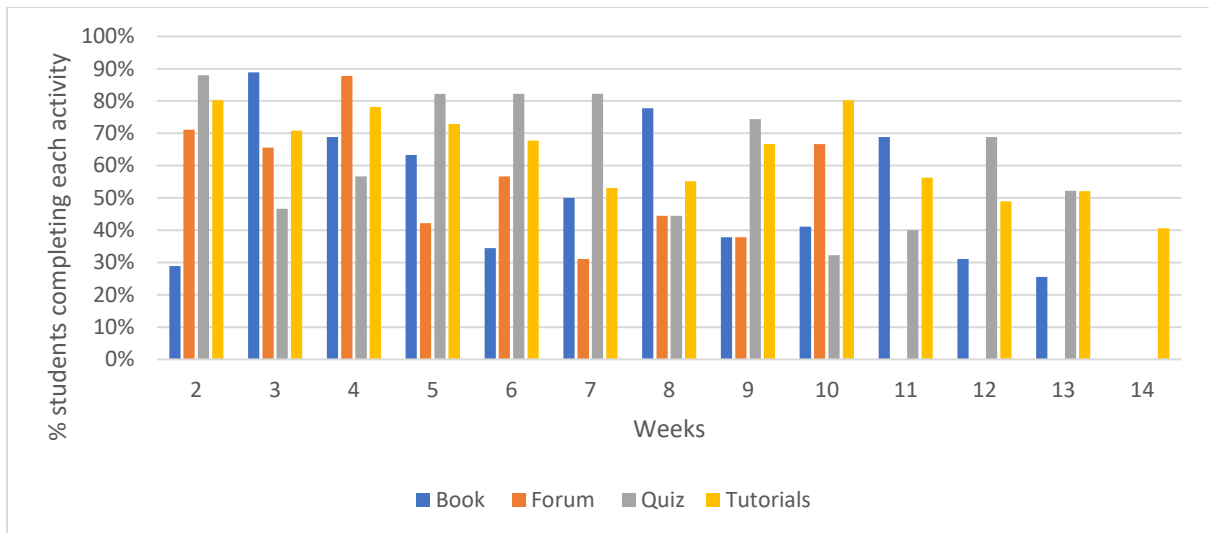
Fig 3.1.2a. Book completion, Quiz completion, Forum attempts, Tutorial attendance (blended)
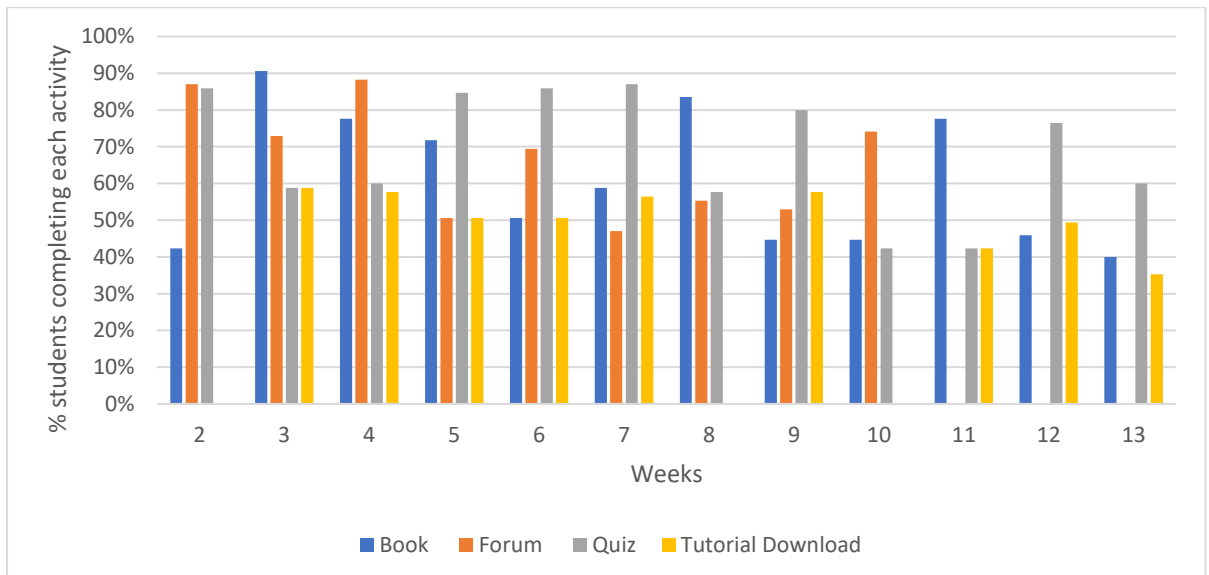

Fig 3.1.2b. Book completion, Quiz completion, Forum attempts, Tutorial activity downloads (online)[3]

A comparison of Figures 3.1.2a and 3.1.2b shows that, while the assessed forum and quiz completion rates are similar across the two modes, the blended students appeared to have prioritised tutorial attendance over completion of the online books, while the online students have prioritised the online books over the online tutorial activities. This may stem from students' perceptions about modes of teaching. Although the blended group were informed that a substantial proportion of their course is delivered online (including pre-recorded lectures), it appears that many felt more accountability to the face-to-face elements, perhaps because there is a minimum 60% tutorial attendance requirement but no such minimum participation requirement online. Similarly, the

---

[3] Note that the tutorials for Weeks 2 and 10 were used for assessments, so there were no online materials to complete in those weeks.

online group may have felt that tutorial activities can only apply to campuses where face-to-face tutorials are offered, and not have seen their relevance.

This latter assumption was borne out by interviewees at the three campuses outside Laucala. For example, during the Kiribati campus visit in Week 7, the students acknowledged that they had not even opened any of the tutorial activities to see what they contained, but all demonstrated the ability to locate them easily. Once they had been shown that the tutorial activities told them clearly which parts of the weekly reading to focus on, as well as providing explicit guidance about completing each assignment, they started to access these each week, as indicated by their completion reports for the rest of the semester. The Labasa and Emalus students similarly explained that they didn't do the tutorial activities because they weren't assessed. Meanwhile, a few Lautoka students emailed to ask if they could have tutorials at their campus, but the completion reports of these students showed that they had not clicked on the online tutorial activities provided, despite accessing the pages where they were located. Their requests suggest that they wanted the face-to-face contact with a tutor, rather than that they particularly thought they were missing out on any of the content provided at Laucala. Since the additional academic literacy support was provided in the online books and the tutorial activities, it is clear that many students were simply not even accessing much of this support.

Figure 3.1.3 presents reported data from the questionnaire that indicates what students said they had accessed. Given the small number of respondents (40), the data is not separated into modes.
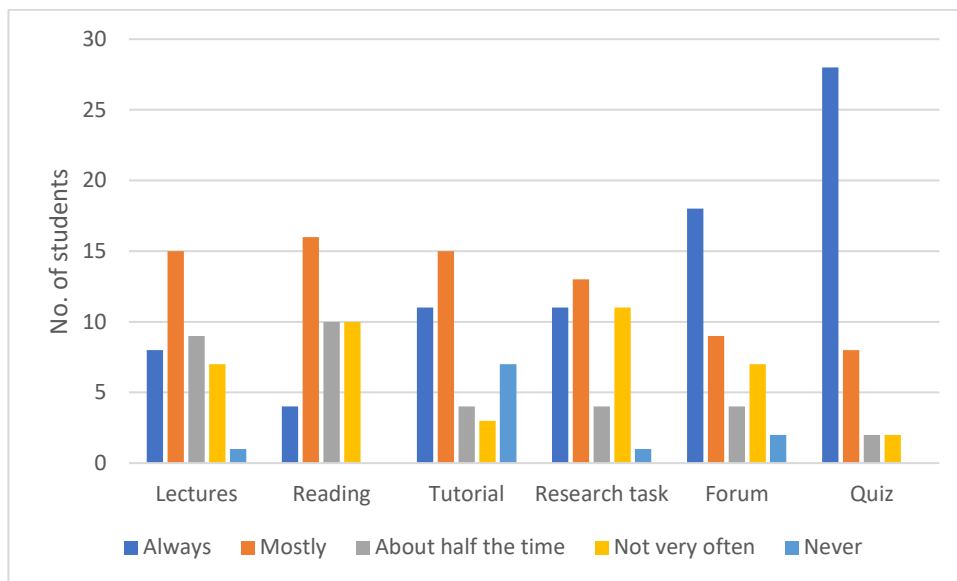

Fig 3.1.3. Reported completion of activities

If 'always' and 'mostly' responses are combined, there is no obvious difference between reported completion of the first four activity types. However, it is noticeable that the number of students reporting that they always or mostly completed the forum and quiz is much higher. This is undoubtedly due to the fact that these two activities were assessed each week, albeit with a value of only 0.5% for each. It is also worth pointing out that the highest number of 'never' responses was recorded for the tutorial activities. 6 of the 7 students giving this response were online students, and this fits with the data from Figure 3.1.2b, which showed that the tutorial activities

were given lowest priority by online students. (However, the other student who selected 'never' actually had an 87% attendance record for the face-to-face tutorials.)

Two further items from the questionnaire indicate the extent to which students accessed the academic literacy support for lectures and reading. Figure 3.1.4 shows responses to a question about how useful the 'preparing for lectures' notes were, and Figure 3.1.5 shows the same for the 'As you read …' notes. Although not phrased in exactly the same way as the items reported in Figure 3.1.3, these responses give an indication of the extent to which students were accessing these additional materials. We can assume from the results that the majority of students who answered the questionnaire had at least accessed these notes.
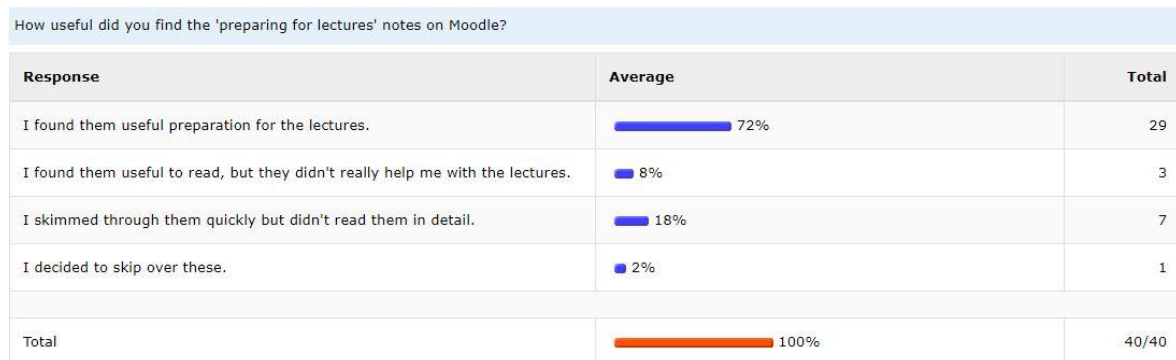
How useful did you find the 'preparing for lectures' notes on Moodle?		
Response	**Average**	**Total**
I found them useful preparation for the lectures.	72%	29
I found them useful to read, but they didn't really help me with the lectures.	8%	3
I skimmed through them quickly but didn't read them in detail.	18%	7
I decided to skip over these.	2%	1
Total	100%	40/40

Fig 3.1.4. Reported usefulness of the 'preparing for lectures' notes

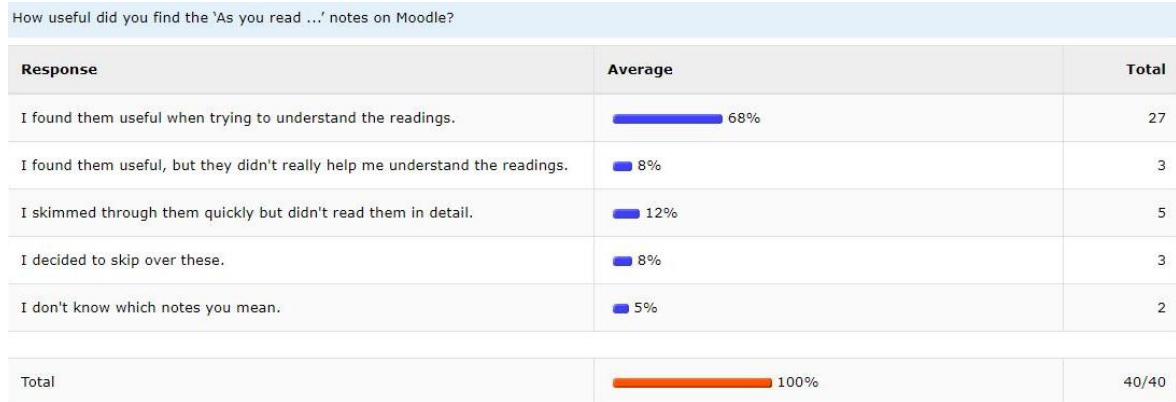| How useful did you find the 'As you read …' notes on Moodle?		
Response	**Average**	**Total**
I found them useful when trying to understand the readings.	68%	27
I found them useful, but they didn't really help me understand the readings.	8%	3
I skimmed through them quickly but didn't read them in detail.	12%	5
I decided to skip over these.	8%	3
I don't know which notes you mean.	5%	2
Total	100%	40/40

Fig 3.1.5. Reported usefulness of the 'As you read …' notes

Finally, while this study did not set out to investigate technical issues relating to infrastructure, connectivity and instructional design, these issues do obviously impact students' ability to access the course materials. One item was therefore included on the questionnaire about such issues. Figure 3.1.6 presents an overview of responses (divided simply into whether they did or did not suffer any technical difficulties) and Figure 3.1.7 elaborates on these difficulties.
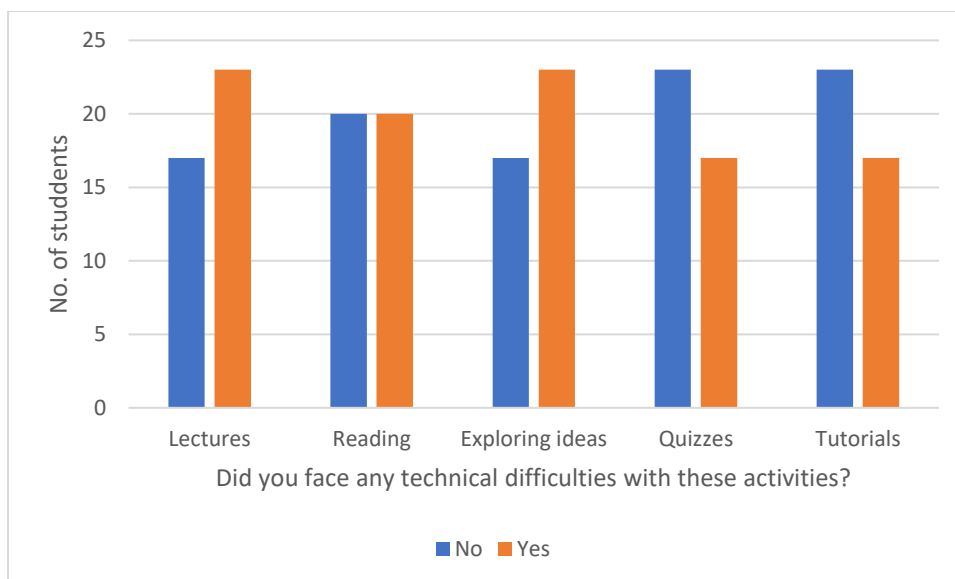
Fig 3.1.6. Extent to which technical issues prevented access to materials

Technical difficulties reported		
Lectures	The videos froze while I was watching online.	18
	The files in the backup folder were too big to download.	9
	I couldn't open the folder once I had downloaded it.	12
	I couldn't find the lecture materials.	2
	No, I didn't face any technical issues with the lectures.	17
Reading	The files in the backup folder were too big to download.	10
	I couldn't open the folder once I had downloaded it.	15
	I couldn't find the readings.	4
	No, I didn't face any technical issues with the readings.	20
Exploring ideas	My internet connection wasn't good enough to complete the tasks.	14
	I couldn't access the internet regularly enough to complete the tasks on time each week.	12
	I couldn't access some of the websites or resources you directed us to.	10
	I couldn't find the information I needed on the websites and resources.	5
	No, I didn't face any technical issues with the 'exploring ideas' tasks.	17
Quizzes	The internet connection wasn't good enough to complete the quizzes	12
	I found some of the actions (e.g. dragging and dropping, filling in the blanks) hard to do on my device or browser.	10
	I found it hard to read the instructions and do the activities at the same time.	4
	I couldn't find the quizzes.	0
	I didn't face any technical issues with the quizzes.	23
Tutorials	I couldn't find the online tutorial activities and answers (online students only).	9
	I couldn't find the copies of ppt slides and handouts that had been used in class (blended students only).	8
	No, I didn't face any technical issues with the tutorials.	23

Fig 3.1.7. Nature of any technical issues that prevented access to materials

It is gratifying to see that the lowest response each time was related to not being able to find the materials, as this is the aspect over which the course coordinator and instructional designer have the greatest control. However, it is clear, firstly, that some students did report not being able to find things and obviously hadn't felt able to raise this issue during the semester, and, secondly, that there were a range of technical issues unrelated to course design that prevented students accessing the basic materials, as the following two open-ended answers illustrate:

> Yes, I do have difficulty for week 2 readings and back up resources. I faced difficulties because no matter how many times I tried to open it it wouldn't. I've downloaded it already but it's still not working and that is why it is still hanging there and says "NOT CRITICAL, NOT COMPLETED".

> Most lectures I downloaded were too big and so sometimes if I had enough money I went to ATHKL to download them as it is more fast to download big sized files. As this costs money I sometimes did not go to ATHKL.

3.2 Compliance: To what extent have students followed the guidelines that were in place to assist development of academic literacy?

In order to evaluate whether the additional academic literacy support materials work, it is necessary to work out whether students were using them as intended. This is quite hard to ascertain, but three proxy measures have been used.

Firstly, we investigated whether students posted on the discussion forums as intended. The forums were included so that students could demonstrate whether they had completed the 'exploring ideas' mini research tasks, which were designed to support the development of research skills progressively over the semester. To comply with the requirements, they needed to post the findings of the research task by the deadline (on time) and they needed to post in a way that was relevant (on task) to the research task. Posts were considered on task, and awarded full marks, as long as they made it clear that the research had been attempted. Figure 3.2.1 shows the extent to which this was the case.
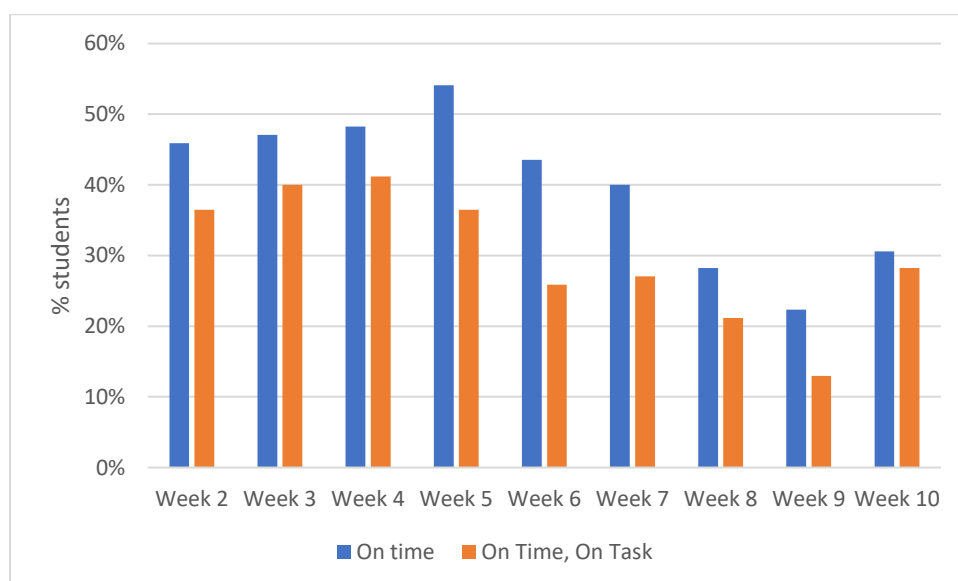

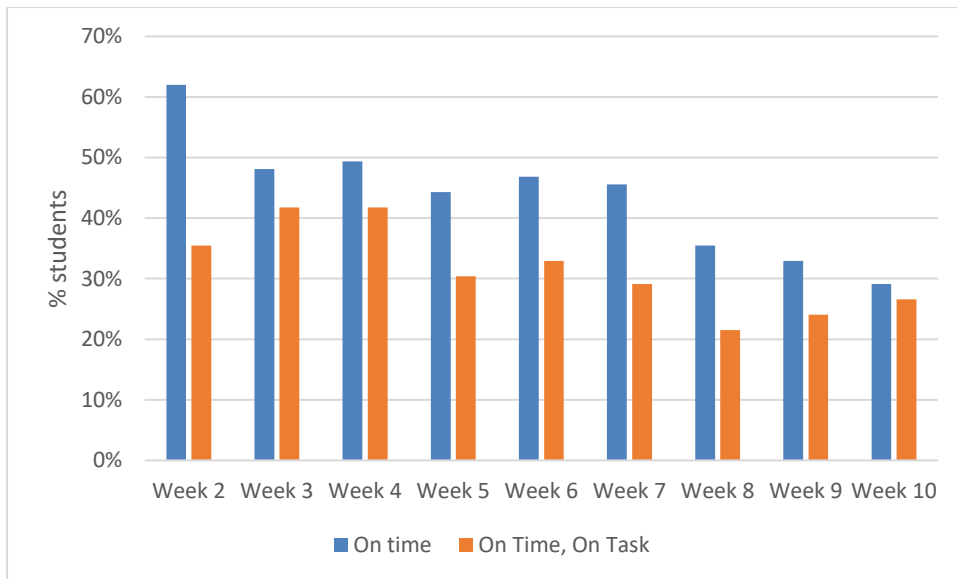*Fig. 3.2.1a. 'Exploring ideas' posts that were on time and on task (blended)*

Fig. 3.2.1b. 'Exploring ideas' posts that were on time and on task (online)

The largest gap between those who posted on time (but off task) and those who posted on time and on task was in the very first week for the online students. Many of these students simply posted on the forum to share their opinions about the weekly topic, without having done the 'exploring ideas' research task. Once the guidelines had been clarified, there were fewer students posting off topic. However, there were clearly still many students who had not completed the research task first. Interviews at the regional campuses suggested that this issue often stemmed from a lack of access to the resources, rather than lack of compliance with the sequencing of the activities. For example, a student in Kiribati showed the interviewer what happened when she clicked on the link to one of the research tasks - she received an error message saying "Your connection is not private". She had not mentioned this to the coordinator at the time (who was unaware of the problem because the site was accessible from Laucala), but simply attempted to post on the forum without doing the research task, thereby losing the marks for being off task.

Secondly, we investigated whether students submitted their assignments on time, considering this an indicator of the extent to which they were proceeding through the course on the intended schedule. Students were told that they could still receive grades for work that was submitted late, but only at the end of the semester, thus missing out on the opportunity for meaningful feedback at the time. Figure 3.2.2 shows the percentage of students for each mode who submitted each assignment on time.
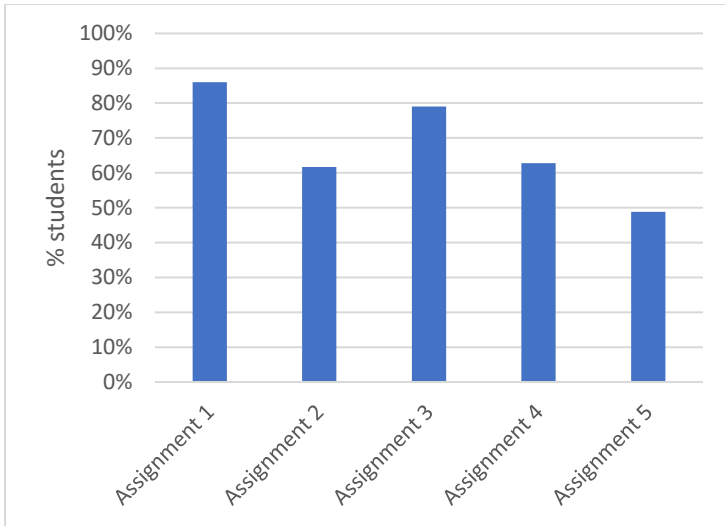
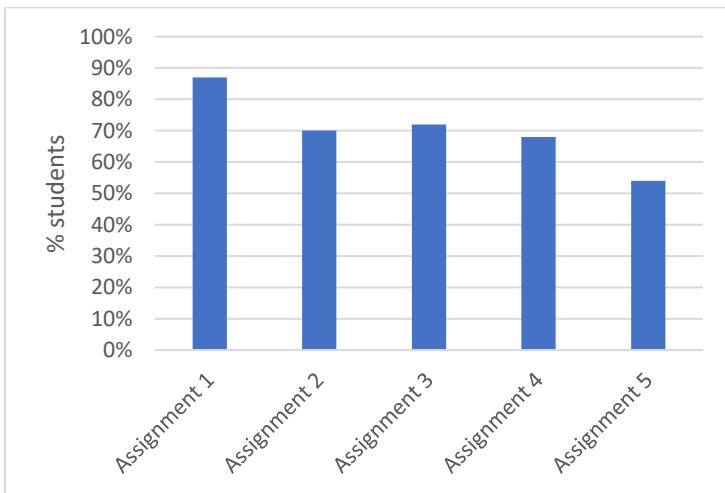*Fig 3.2.2a. Assignments submitted on time (blended)*

Fig 3.2.2b. Assignments submitted on time (online)

Thirdly, we asked students whether they completed activities within the expected timeframe. Figure 3.2.3 shows their reported data.
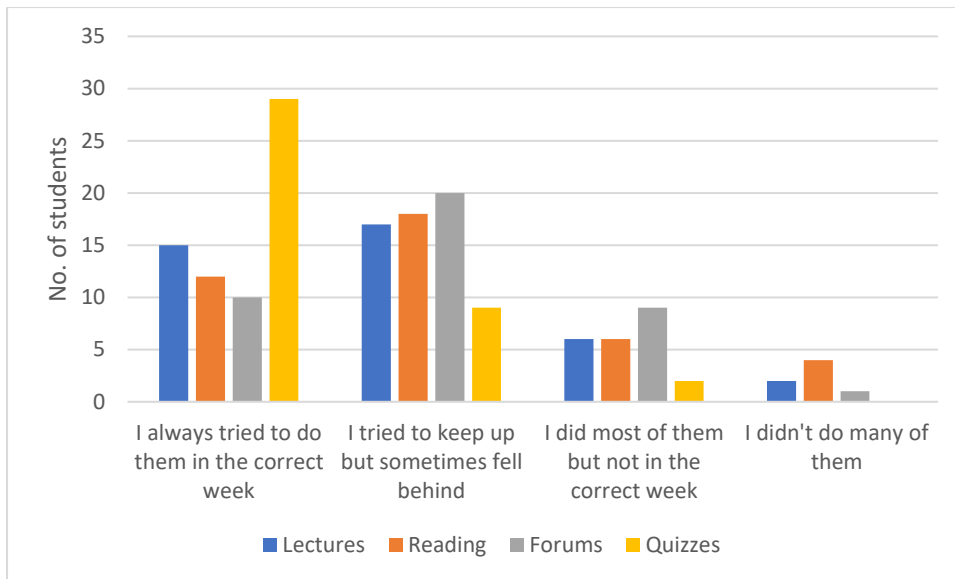
Fig 3.2.3. Reported timeliness of activities

We can see that the majority of students who responded to the questionnaire reported that they did try to do the activities in the correct week, even if they sometimes fell behind. This suggests that they were attempting to follow the timeframe of the course, whether for the benefit of scoring marks (as indicated by the high response for quizzes during the correct week) or simply to keep up with the course. It can be assumed that students thought that tackling the activities in the right order and roughly on pace with the whole class (i.e. complying with the course structure) was beneficial.

3.3 Investment: To what extent have students gone beyond minimum requirements despite no obvious short-term gain?

A particularly interesting aspect of engagement for us has been the extent to which students went beyond the minimum requirements, even if knew they would gain no obvious short-term gain from doing so.

Figures 3.3.1a and 3.3.1b show the number of attempts students made to score a higher mark on the 'effective communication' quizzes, with each bar indicating the proportion of students taking each quiz once, twice, three or more times, or not at all. Given that the maximum mark available each week was only 0.5%, the increase in score was likely to be negligible compared to the effort expended, so we consider repeat attempts to indicate investment in a longer-term goal, achieved through deeper understanding of the grammar point being tested.
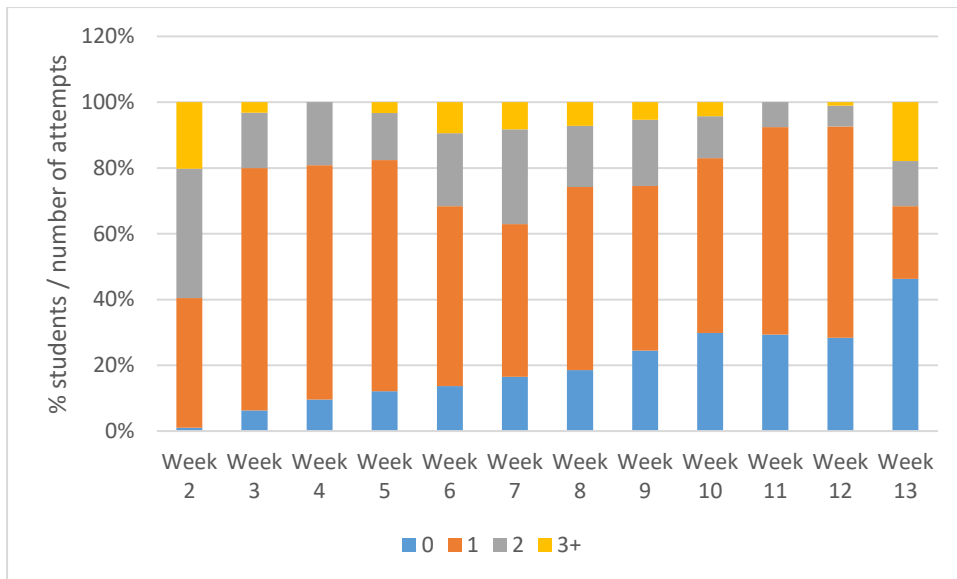
Fig 3.3.1a. Number of attempts at each 'effective communication' quiz (blended)
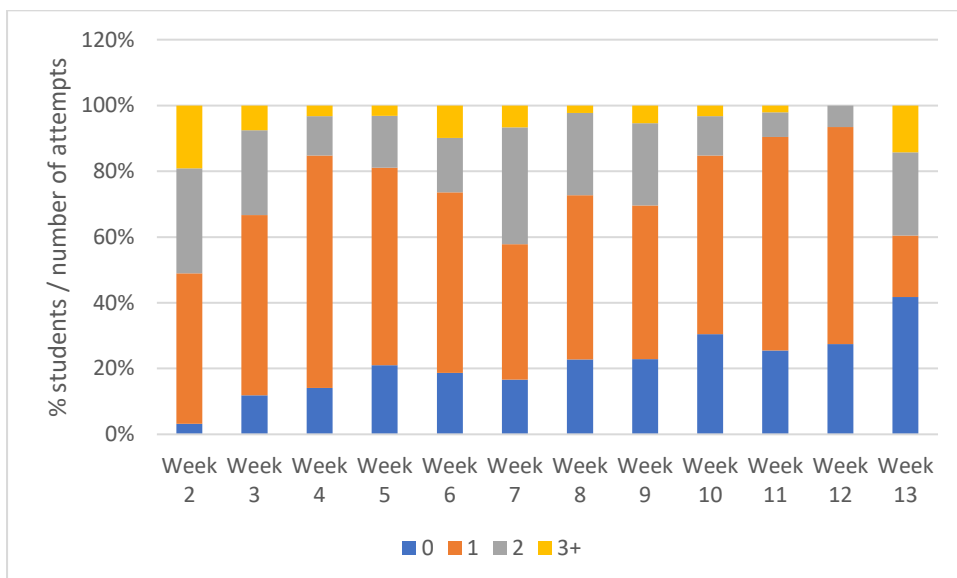

Fig 3.3.1b Number of attempts at each 'effective communication' quiz (online)

It was harder to quantify investment in the 'exploring ideas' research task, since all posts on the discussion forum were awarded full marks if they were posted on time and were broadly on task. To exemplify this, both of the following were awarded full marks as responses to the task to search the Ethnologue (an online database of the world's languages) to see what students could find listed for their own languages:

Student 1: *Fiji has a population of 898,000 (2017 World Bank) and the number of individual languages listed for Fiji is 10. Fiji has three official languages which are English, Fijian and Hindi and, followed by some immigrant languages such as Chinese (5,500), Eastern Punjabi, Malayalam, Pitcairn-Norfolk, Samoan (1,200), Tamil, Telugu, Tongan (1,300), Tuvaluan (490), Urdu, Wallisian.*

Student 2: *Having lived in the Marshall Islands for over two years, I thought it best to find information regarding this country's language. What was surprising to me is the fact that there are only two languages recorded in the Ethnologue. The two principal languages are Marshallese and English. What was interesting though, is that there are only three dialects. I guess this surprise was based on the bigger and more diverse the dialects are in Fiji that I was shocked at how little this island nation has, in terms of the variety within its language. But then again, they have a population of almost 60, 000 people compared to the 800, 000 plus of Fiji. So, in hindsight, this could be the reason for the fewer number of dialects. The three dialects of the Marshallese language are the Ralik, Ratak, and Ujelang. The Ujelang dialect, however, has a 33% lexical (words/ vocabulary) similarity to Pohnpei (a state in the Federated States of Micronesia). The Marshallese language is classified with the Austronesian, Malayo-Polynesian, Central-Eastern Malayo-Polynesian, Eastern Malayo-Polynesian, Oceanic, Central-Eastern Oceanic, Remote Oceanic, Micronesian, Micronesian Proper, Marshallese language families.*

It is clear that Student 2 invested significantly more effort in her post, not just in length but in the degree of critical evaluation of the information she had found. This student went on to score an A+ in the course, while Student 1 scored a C+, and it is likely that this type of investment in low-stakes tasks will correlate with high achievement in the course. However, more qualitative analysis of posts is needed in order to understand this aspect of engagement in more depth.

At this stage, we again rely on proxy measures to tell us about investment. Figures 3.3.2 to 3.3.5 present students' responses that provide a few insights that need to be followed up in more detail. Figure 3.3.2 shows the reasons students put forward for posting on the forum even once the deadline had passed.

If you had missed the deadline, did you still post your answer on the forum?		
Response	**Average**	**Total**
Yes, I didn't realise there was a deadline.	10%	4
Yes, I hoped that you would still accept it late and give me the mark.	30%	12
Yes, I had done the research task so I wanted to share my findings even though I knew it wouldn't be marked.	22%	9
No, I never posted after the deadline because I knew you wouldn't mark it.	20%	8
I never missed the deadline.	10%	4
I never completed these activities at all.	8%	3
Total	100%	40/40

Fig 3.3.2. Reasons for posting late

The majority of students appeared to be aware of the rules about posting on time, but it is hard to separate those who thought these rules were strict from those who didn't. The concept of 'investment' is best exemplified by the 9 students who reported posting because they wanted to share their findings even though they knew they would receive no credit, in contrast with the 8 students who knew there was no point doing so if there were no marks to be gained.

Figure 3.3.3 indicates the extent to which students considered their own posts on the discussion forum to be building on an ongoing conversation, and were invested in this conversation.
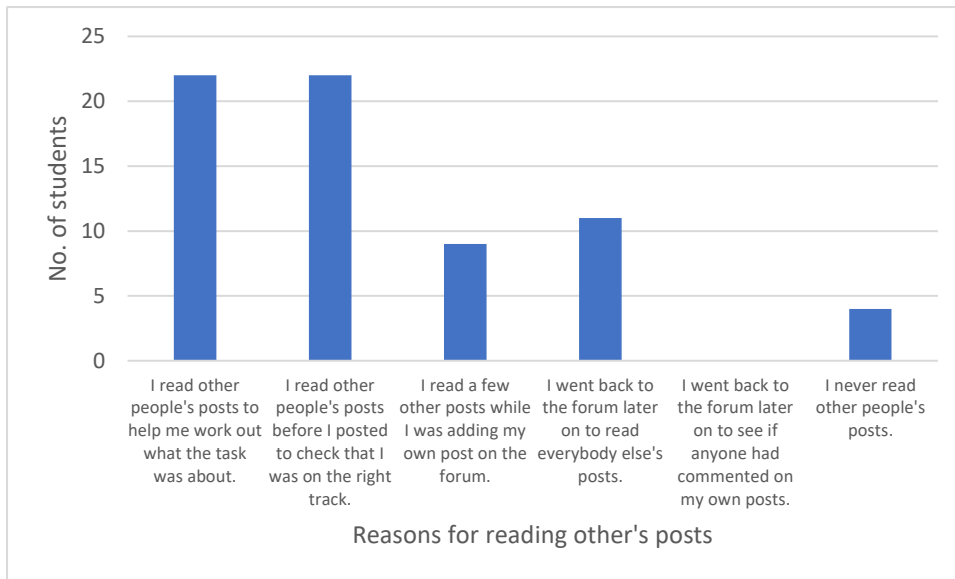
Fig 3.3.3. Approaches to reading and posting on the discussion forums

Although a number of students reported reading each other's posts, this appeared to be done in the service of improving one's own performance rather than in joining in a conversation about the topic. It is interesting that no student reported returning to the discussion to see whether anyone else had commented on their post (even though the course coordinator at least would respond to approximately 20 percent of posts each week), which suggests limited investment in this style of discussion.

Figure 3.3.4 summarises students' attitudes to this 'exploring ideas' component of the course. We see that just over half of the respondents enjoyed the task, while another 32% completed it for the sake of scoring the credit but didn't really like posting online about their findings.

Which of the following best sums up your attitude to the 'exploring ideas' tasks?		
Response	**Average**	**Total**
I enjoyed exploring the weekly topic in more detail and posting about what I had found.	57%	23
I enjoyed exploring the weekly topic in more detail but I didn't like posting about what I had found.	8%	3
The task was okay, but I basically completed it in order to get the credit.	22%	9
I didn't enjoy the task, but I completed it in order to get the credit.	2%	1
I decided not to do the tasks, because I didn't think they were valuable.	2%	1
There was another reason why I didn't do the tasks.	8%	3
Total	100%	40/40

Fig 3.3.4. Attitudes towards the 'exploring ideas' tasks

Figure 3.3.5 shows students' answers to the question of how the forum posts should be marked.

32	How do you feel about the allocation of 0.5% for each forum post (i.e. 5 marks in total)?		
Response		**Average**	**Total**
I would prefer the forums to be optional.		22%	9
I would prefer them to be worth more marks.		35%	14
I think the allocation of 0.5% each week was about right.		42%	17
Total		100%	40/40

Fig 3.3.5. How students feel about the allocation of marks for discussion forums

For now, we can summarise that some students have clearly put far greater effort into their mini online assessments than others, and it will be interesting to follow up whether greater investment on these low-stakes tasks correlates with greater achievement overall in the course.

3.4 Achievement: To what extent have students scored well on aspects of assignments that we have supported?

The final element of engagement investigated is student achievement. We have examined students' achievement on specific aspects of assignments that we have attempted to support through the additional materials.

Assignment 1, worth 5%, was designed to provide a baseline assessment of students' written English proficiency, as they were asked to write a few short paragraphs in Week 2 about their use of different languages. The blended students completed this on paper during their tutorial, while the online students typed their answers into an online quiz question which allowed them 2 hours to complete the task once they had chosen to open it.

Figures 3.4.1a and 3.4.1b show the breakdown of the different elements of written English proficiency for the two modes, using a mark scheme based on the criteria used in the writing section of USP's revised ELSA test. Each criterion carries a different weight (indicated in brackets).
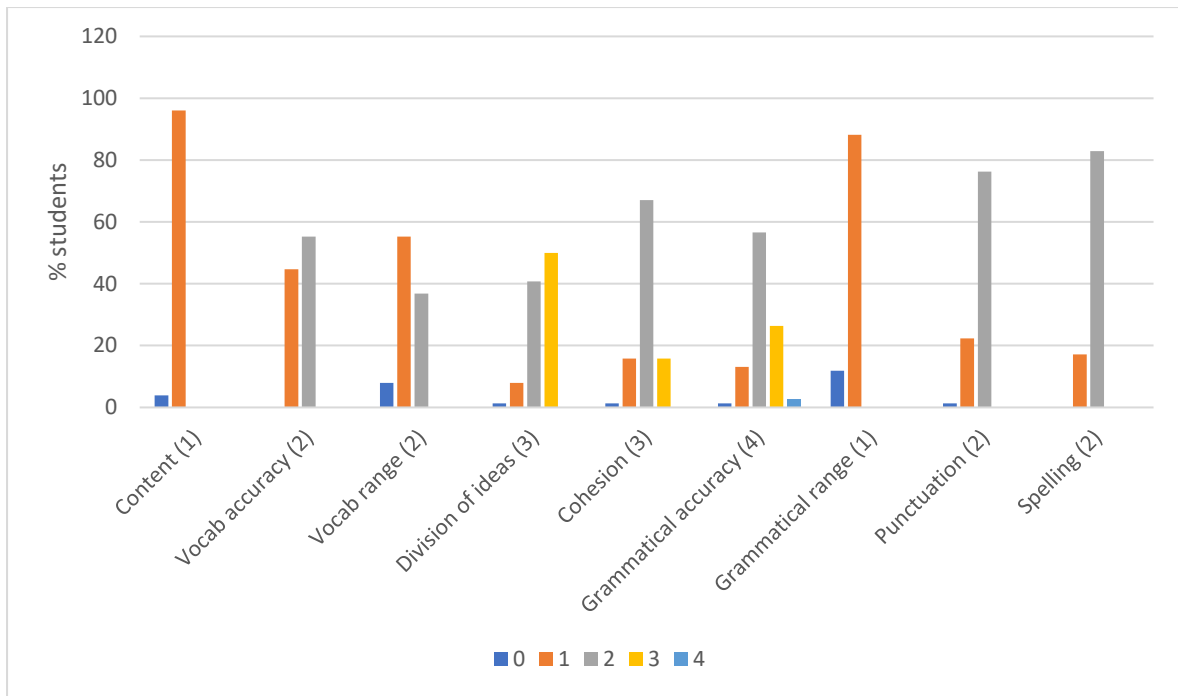
Fig 3.4.1a. Scores for each element of Assignment 1: Written English proficiency (blended)
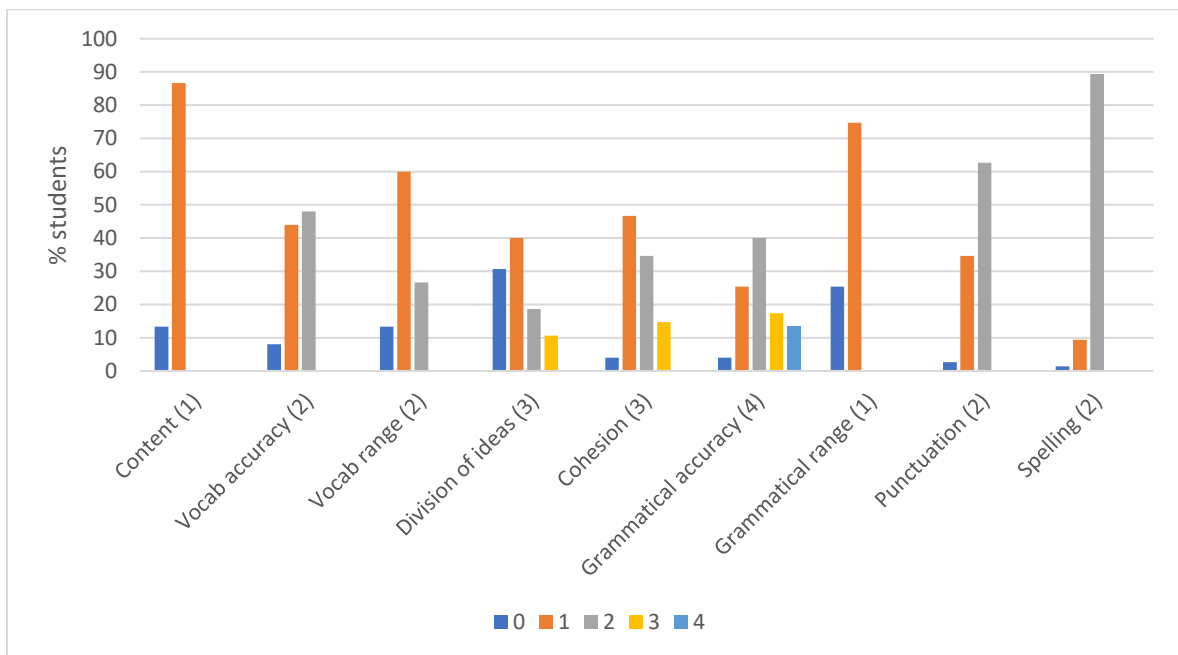

Fig 3.4.1b. Scores for each element of Assignment 1: Written English proficiency (online)

Assignment 2, worth 10%, was a heavily scaffolded written assignment, for which students were required to use three (and only three) texts that we had studied in depth. The skills of selecting relevant passages from these texts, decoding their meaning, evaluating their points, synthesising similar ideas from different texts, integrating these ideas into a written answer, and using references were all covered during the 'As you read …' notes and the tutorial activities of Weeks 4 to 6. Figures

3.4.2a and 3.4.2b show the breakdown of the different elements assessed, each of which had been supported via the academic literacy materials.
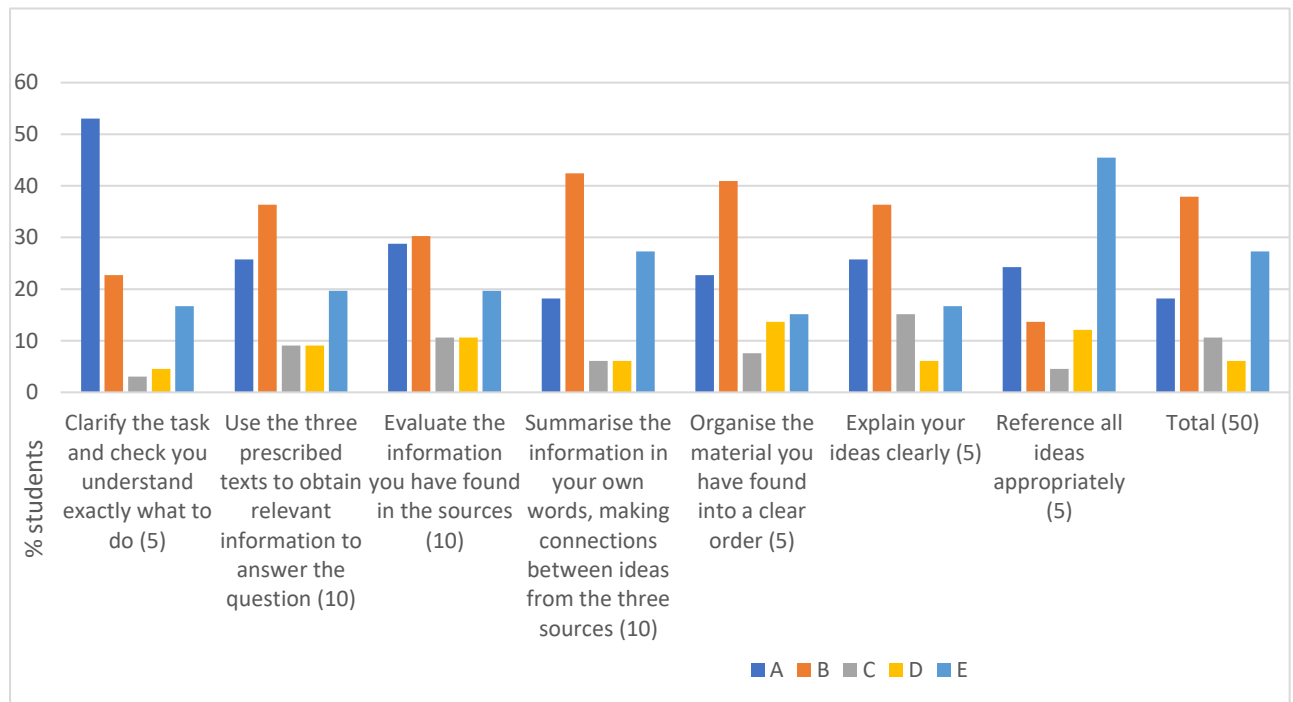

Fig 3.4.2a. Scores for each element of Assignment 2: Written task using prescribed sources (blended)
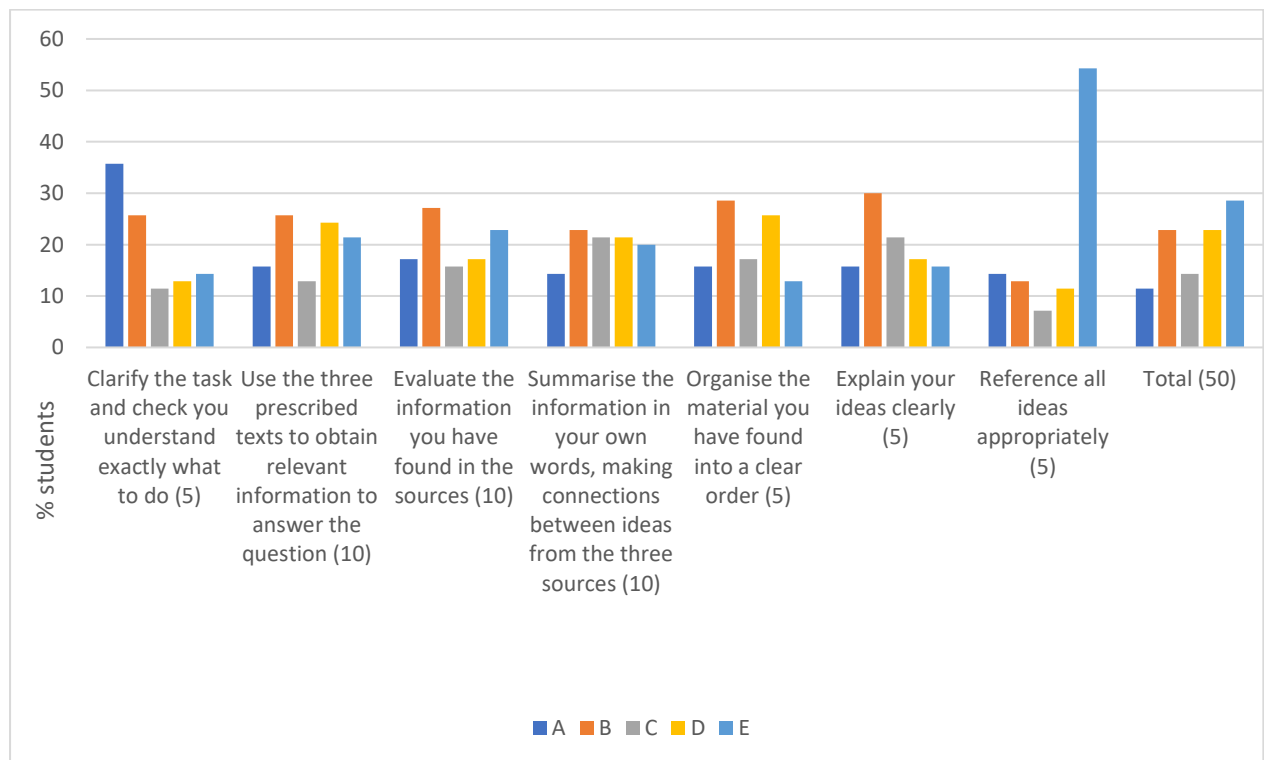

Fig 3.4.2b. Scores for each element of Assignment 2: Written task using prescribed sources (online)

In this assignment, the blended group did considerably better overall than the online group, with more than half of the former scoring A or B grades in all criteria except for referencing. There were very few D grades, suggesting that those who failed to meet the minimum requirements for any criterion tended to do so by a considerable margin. For the online students, although the vast majority knew what they were supposed to do in the task, as indicated by scores for the first criterion, there was a fairly even spread of high and low marks across the next five criteria, showing that roughly the same number of students scored in the fail range (D or E) as scored in the highest passing range (A or B) for most criteria. The stronger performance by the blended group is likely due to the fact that the assignment was so highly scaffolded by the tutorial activities, which many online students had ignored.

The noticeable exception is for referencing, with more than half of the online students scoring an E grade, and the blended students not faring much better. This criterion encompassed the technical elements of formatting of references as well acknowledgement of the source of all ideas. A high number of students plagiarised from sources other than the three prescribed texts, while some students used the correct texts without any acknowledgment. Further analysis is required to see if there is any correlation between completion of the relevant tutorial activities and this component of the assignment. However, it is also worth noting that the markers of the assignment felt that the guidelines for referencing had been made so explicit to students that they penalised harshly for any contraventions, perhaps more so than students had expected or had experienced in other courses.

Assignment 3, worth 10%, was a group oral presentation, delivered in Week 10. The topics all related to the content covered in Weeks 8 and 9, but extended this content in new ways, requiring some independent research. This time, no texts were given, but students had been taught by this stage how to search for their own relevant sources, using the library databases as well as general search engines, and they were expected to be able to use the skills from the first half of semester to select, decode, evaluate, synthesise, integrate and reference relevant information from these sources. Working in groups, it was assumed that they would be able to do this. They were also provided with guidance in the Week 8 tutorial on how to create an effective oral presentation and, in the case of the online students, techniques for pre-recording and submitting their presentations via Moodle. Figures 3.4.3a and 3.4.3b show the breakdown of the different elements assessed.
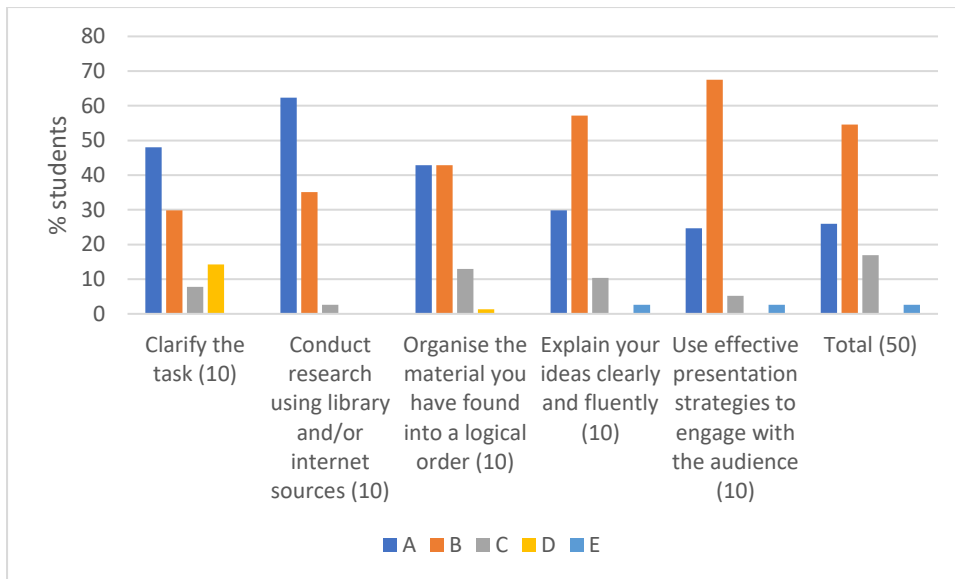
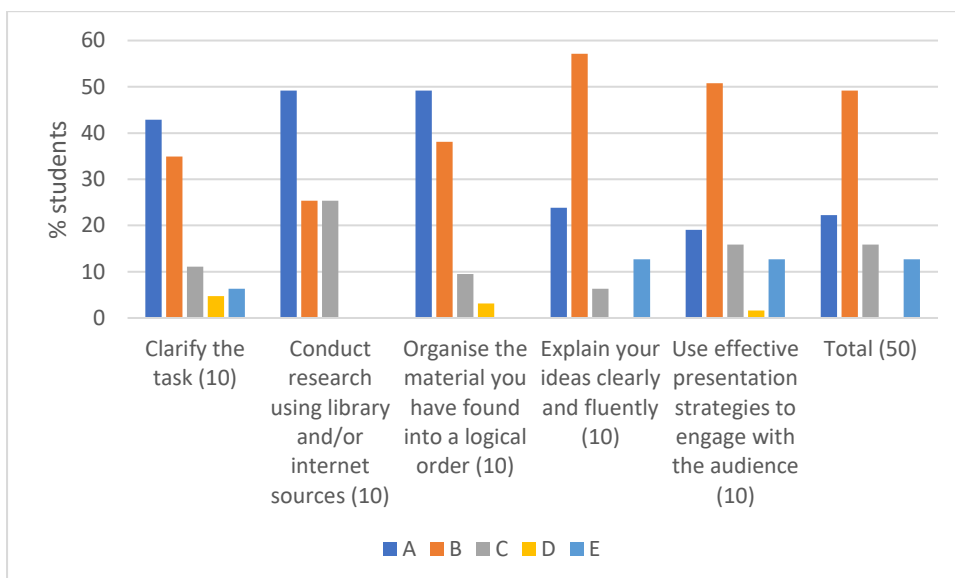*Fig 3.4.3a. Scores for each element of Assignment 3: Group oral presentation (blended)*

Fig 3.4.3b. Scores for each element of Assignment 3: Group oral presentation (online)

This assignment was generally performed very well, and students showed an excellent ability to do the independent research required, by working as a group and with a topic that could be handled by simple internet searches. They also clearly put a lot of effort into both the research and the planning of the delivery. The assignment was included in the course as a stepping stone to students carrying out their own individual research and essay writing for the final assignment.

Assignment 4, worth 10%, was an individual essay plan, which required students to build on the research they had done for the group oral presentation and prepare to answer a related question in written essay form. The plan comprised a thesis statement, a bullet point skeleton of key ideas, and a list of three sources (referenced appropriately) that they intended to use. It was assumed that students would be able to handle the research and reading components of the task, so the academic

literacy support at this point focused on the skills needed to select and support a thesis statement with evidence. Figures 3.4.4a and 3.4.4b show the breakdown of the different elements assessed.
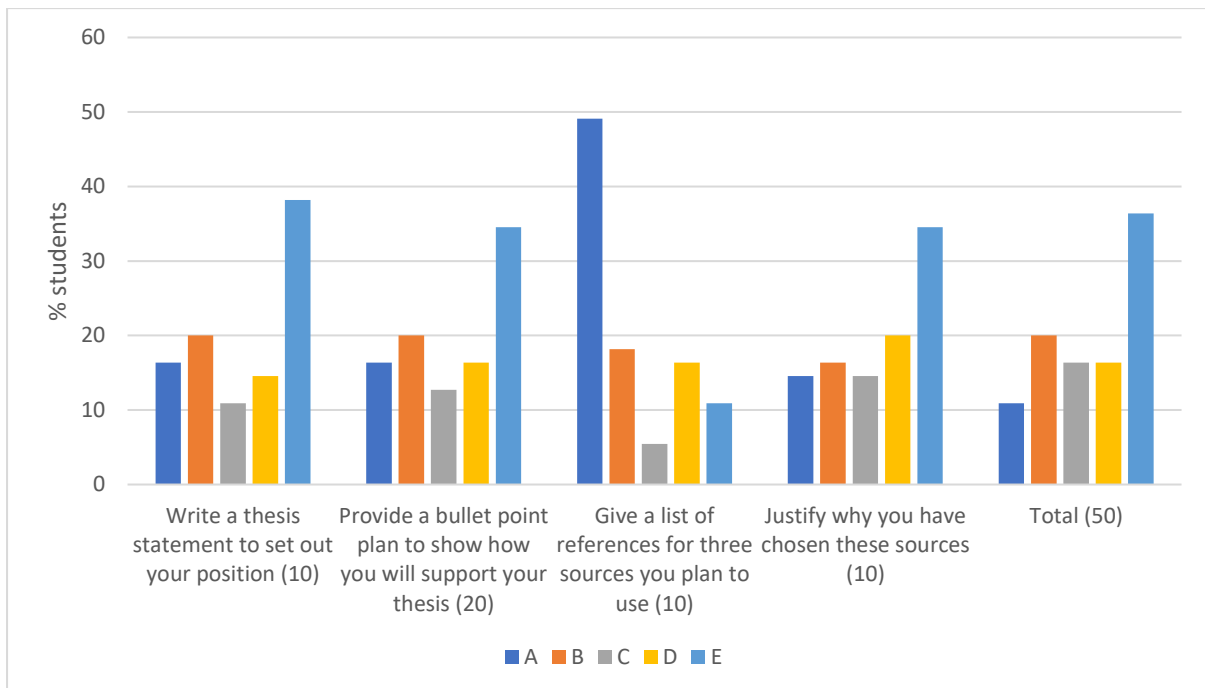

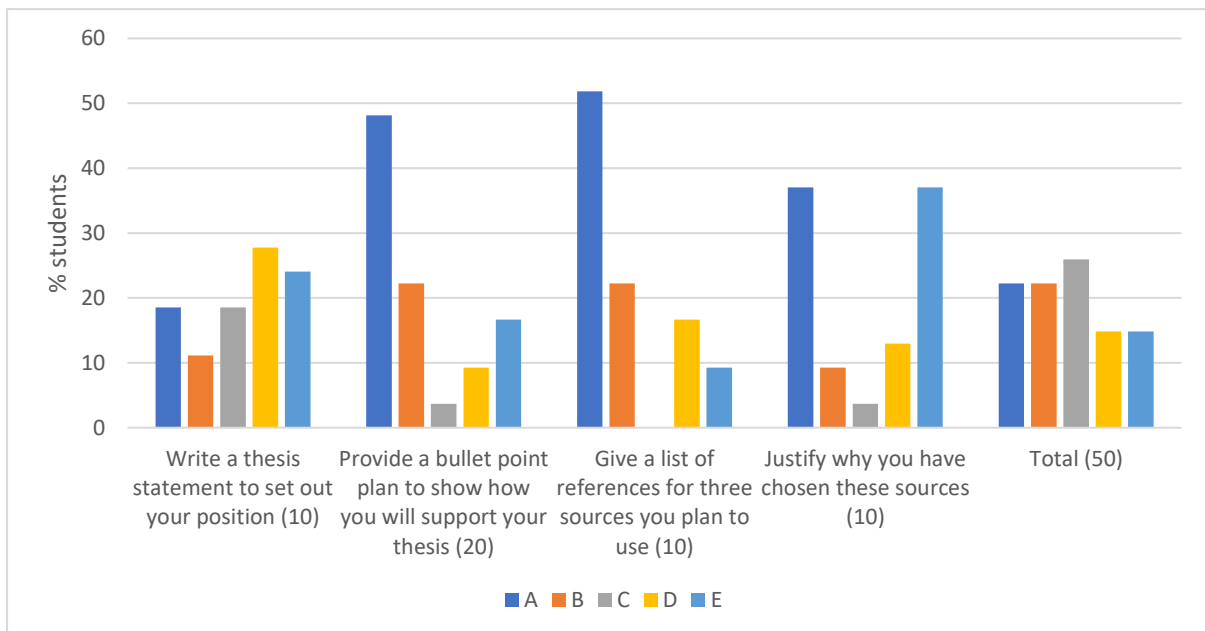*Fig 3.4.4a. Scores for each element of Assignment 4: Written essay plan (blended)*

Fig 3.4.4b. Scores for each element of Assignment 4: Written essay plan (online)

This assignment produced mixed results, with many low marks due to not following the specific requirements of the task, such as to write a thesis statement with a clear position (e.g. *this essay will argue that, while all animals communicate, language is a uniquely human trait*), rather than a general introductory remark (e.g. *this essay will discuss the question of whether language is uniquely human*), or omitting the justification of sources. Again, this data needs to be compared with the

tutorial completion data, given that the requirements were broken down in some detail in the relevant tutorials. Some results (such as the split between A and E grades in the justification criterion of Figure 3.4.4b) suggest that some students were well aware of the requirements and followed them, while others had no idea. There were relatively few online students scoring in between.

Finally, Assignment 5, worth 15%, required students to write the essay that they had previously planned out, using the feedback from Assignment 4 to assist them. Again, it was assumed that they would be able to build on the skills already developed through Assignments 2 to 4 to complete most of the task, and the academic literacy support in the final few weeks of the course focused on the development of a written argument. Figures 3.4.5a and 3.4.5b show the breakdown of the different elements assessed.
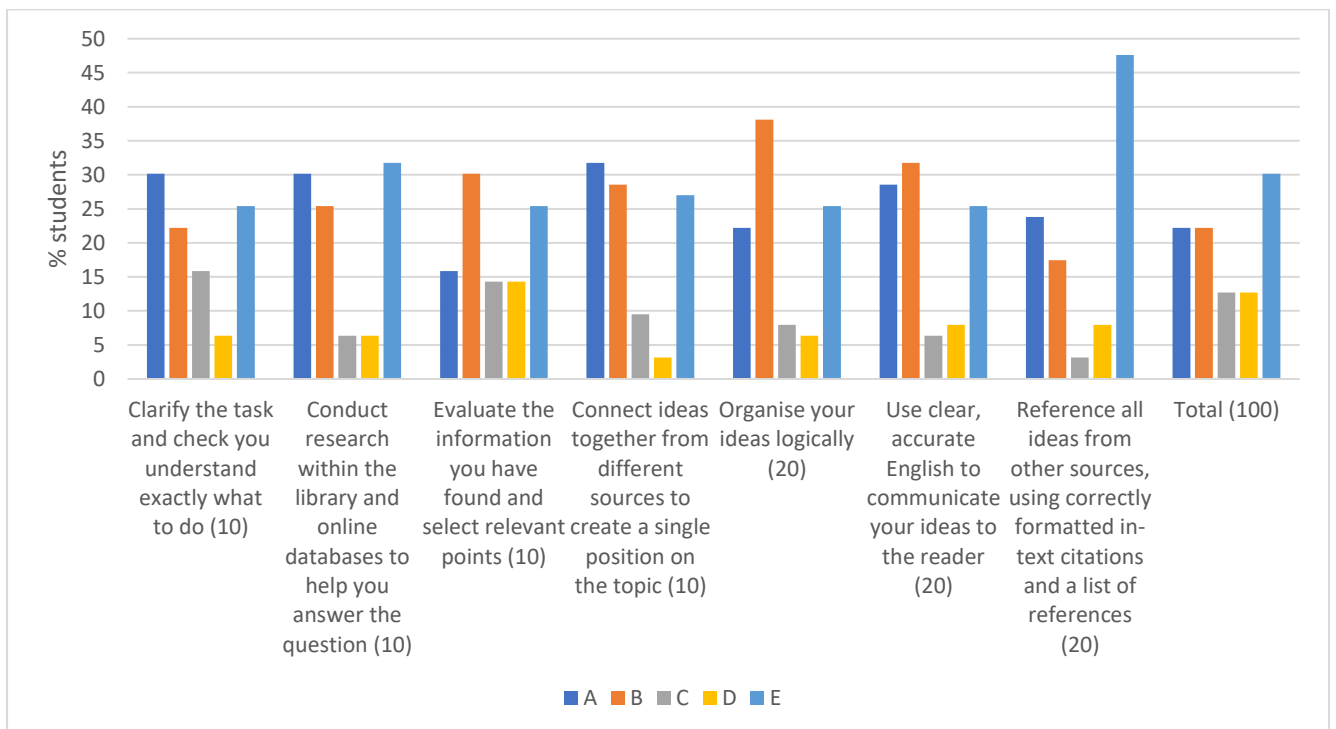

Fig 3.4.5a. Scores for each element of Assignment 5: Written essay (blended)
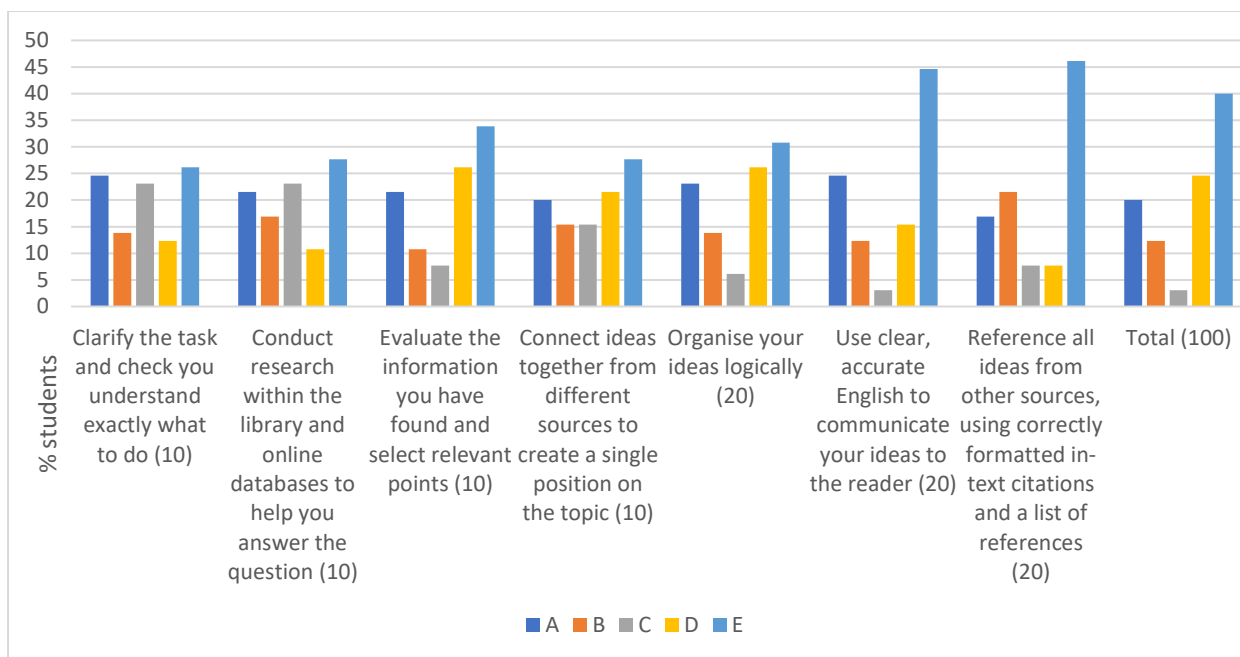
Fig 3.4.5b. Scores for each element of Assignment 5: Written essay (online)

This assignment was done quite poorly, and it may have been pitched too high. It had been assumed that students would draw on a culmination of the reading and writing skills developed and assessed in Assignment 2 and the research skills practised in Assignment 3, along with the feedback provided on Assignment 4. However, students struggled to identify suitable sources to research their topics, and then failed to find or understand relevant information from within the sources that they did find, with the result that their points were obscured both by a lack of confidence with the topic and a much weaker ability to express themselves than evidenced in earlier assignments. Incidences of plagiarism were high, accounting for many of the fail grades. In future, a short reading list of suitable academic sources for each topic will be provided, so that students can practise locating them through the library database, and will still have to understand and identify relevant points for themselves, but they won't get diverted by texts that are not relevant.

4. Conclusions

This study set out to evaluate a new approach to supporting academic literacy amongst new undergraduates. The main achievement has been undertaking a major revision to a core 100-level course that has successfully managed to embed discipline-specific academic literacy support so completely within the core materials without dumbing down the content coverage. There are undoubtedly minor revisions to be carried out before the next offering in 2019, but the project has shown that it is perfectly possible to redesign a course in this way, disproving the typical arguments that academics cannot take responsibility for language and content at the same time, and that time constraints will prevent both being covered in sufficient depth. In fact, LN111 provides more disciplinary content than most 100-level courses, given that the additional academic literacy materials are so closely tied to the weekly topics.

Evaluating whether this type of course provides effective academic literacy support is a complex task, and will take time. This first phase has attempted to evaluate the extent to which students engaged with the additional support, using a working model of engagement that comprises four

interrelated facets: access, compliance, investment and achievement. Preliminary results suggest that, while a large number of students were not ***accessing*** as many of the course materials as they needed to, those that did access the materials containing the academic literacy support were attempting to complete them broadly as intended, in other words ***complying*** with their sequencing and deadlines. Moreover, many students clearly ***invested*** far more effort in the activities than the bare minimum required to score marks on the immediate assessments, suggesting that the academic literacy support may well have been working as intended for those that attempted all the activities. However, without any control data to compare the assessment results to, it is hard to evaluate effectiveness of the academic literacy support in terms of whether it raised ***achievement***. The next phase of analysis will focus on linking specific materials and activities (targeting particular aspects of academic literacy) with specific components of the assessment criteria, to see whether completion of particular activities appears to have led to enhanced achievement on their corresponding assessment criteria.

This phase of the project has also provided valuable insights into the learning experience of students studying in online and blended modes, supporting the types of anecdotal evidence that we are all well aware of already. There are clearly significant issues with students lacking basic access to materials provided online, which limit what we can read into our data. If we could be sure that all students had reliable, freely-available access to all materials and activities, we could make assumptions about the way they are tackling different components of the course. In essence, we could assume that they would access the things that they thought were valuable, whether driven by intrinsic sources of motivation (such as an interest in finding out more) or extrinsic sources of motivation (such as the belief that completion of the activity would lead to a higher grade). However, with internet access and data costs causing so many issues, we somehow need to control for this in our analysis, since access is a hybrid construct that comprises both the choices that students make and constraints that are beyond their control.

Issues with access also force course designers and instructional designers to limit the use of many of the online resources and activities that we know create valuable learning experiences. We started this project trying to find out whether it was possible to utilise the flexibility of a VLE to supplement core course materials, thereby supporting the development of discipline-specific academic literacy. We have shown that it has been possible to design for this support, but have to acknowledge that the e-learning infrastructure of the university may not be sufficient to enable students to take advantage of the support offered.

5. Reflection

This research has been a collaboration between staff in the School of Language, Arts & Media and the Centre for Flexible Learning. We are used to working together on the design and support of courses, but we don't usually have this kind of opportunity to evaluate the way we work, or to evaluate the way our students engage with our courses. Similarly, it is unusual to conduct research that involves staff from UU114 and staff from other academic disciplines, again missing the opportunity to evaluate the way we are preparing our students to use English for Academic Purposes in their degree programmes. We therefore appreciate having the opportunity (and funding) to evaluate new ideas that we implement, given that we are often under pressure to react to new policies and initiatives without the time to reflect on what we are doing and why.

In tackling this research together, we have collectively learnt a great deal about the affordances of combining the in-built analytics tools of Moodle such as completion tracking with more qualitative

observation and interviews. By learning more about completion tracking, course coordinators can be more efficient and effective in the way they support their students and, by learning more about the way students talk about online learning, or respond in practice, education technologists can gain deeper insights into what the completion tracking data shows.

6. Budget

Expenditure	Amount
Research assistant (Moodle tracking)	2225.90
Research assistant (Statistics)	3000.00
Labasa campus visit	1595.90
Kiribati campus visit	4120.75
Emalus campus visit	3901.45
TOTAL	**14844.00**

7. References

Christie, F. (1985). Language and schooling. In S. Tchudi (Ed.), *Language, schooling and society* (p. 21–40). Upper Montclair, NJ: Boynton/Cook.

McWilliams, R., & Allan, Q. (2014). Embedding academic literacy skills: Towards a best practice model. *Journal of University Teaching & Learning Practice, 11*(3), 1-20.

Purser, E., Skillen, J., Deane, M., Donohue, J., & Peake, K. (2008). Developing academic literacy in context. *Zeitschrift Schreiben: Schreiben in schule, hochschule und beruf*, 1-7.

Thies, L. (2012). Increasing student participation and success: Collaborating to embed academic literacies into the curriculum. *Journal of Academic Language and Learning, 6*(1), 15-31.

Wingate, U. (2006). Doing away with study skills. *Teaching in Higher Education, 11*(4), 457-465.

Wingate, U. (2015). *Academic literacy across the curriculum: towards a collaborative instructional approach*. Paper presented at the International Conference on English Across the Curriculum, Hong Kong Polytechnic University.

Wingate, U., Andon, N., & Cogo, A. (2011). Embedding academic writing instruction into subject teaching: A case study. *Active Learning in Higher Education, 12*, 69-81.

8. Dissemination

'Evaluating engagement with discipline-specific academic literacy support'. *2nd international conference on English Across the Curriculum*, Hong Kong Polytechnic University, 3-5 December 2018. (Presented by Fiona Willans & Tilisi Bryce)

'Moving into the mainstream: Embedding research skills within a core academic course'. *Pacific People's Research Skills Symposium*, Suva, 29-30 August 2018. (Presented by Fiona Willans & Ralph Buadromo)