

The proof of the pudding ... analysing student written texts for evidence of a successful literacy intervention

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In recent decades, the contextualisation of academic literacy practices through in-discipline initiatives has become more common in Australian universities (Harris & Ashton, 2011), and such approaches are encouraged by the Australian Department of Education, Employment and Workplace Relations' Good Practice Principles for English Language (DEEWR, 2009). Although this approach makes sense to those of us who work in academic language and literacy (ALL) contexts, it can be difficult to demonstrate the effectiveness of the interventions, and studies so far have often relied on student satisfaction or analysis of course pass rates. This paper reports on a study which took a different approach. We analysed students' written texts for evidence of the effectiveness of an in-discipline literacy intervention in a first year management course. A convenience sample of nine student essays was de-identified and examined for evidence of how effectively students applied the academic writing skills and conventions highlighted through an in-discipline intervention. Each of the essays was qualitatively analysed using a discourse analysis framework which reflected the intended learning outcomes of the ALL intervention. Although the student essays bear the hallmarks of novice writers, and in particular we found that the students struggled to use complex management theory effectively to build an argument, the students all demonstrated their ability to emulate the genre required in a management essay. Our analysis suggests that the students in this study did indeed benefit from the intervention, and contributes another perspective to the already strong body of research supporting in-discipline embedding of academic literacy development.

Key Words: academic writing, embedding, higher education, management, literacy.

1. Introduction

Over the past two decades, universities across Australia have come to recognise the need to support students in their development of academic literacy practices. Academic language and literacy

(ALL) practitioners have increasingly adopted embedded approaches to academic literacy, working with their colleagues across disciplines to build support into the delivery of award courses. However, such approaches are arguably expensive in terms of staff time and it is incumbent on the profession to demonstrate their value. Both quantitative and qualitative attempts have been made to evaluate embedded literacy interventions, all somewhat inconclusively. This paper aims to demonstrate a methodology which can be used as a form of triangulation with other sources of data. We provide an example of how discourse analysis can be used to explore the extent to which the literacy intervention is reflected in students' subsequent writing, and suggest that analysing what students actually produce after intervention may be a more accurate measure of success.

2. Literature review

2.1. Towards embedding

The ability to communicate effectively is, perhaps, the most fundamental of all the generic skills which undergraduates are expected to develop at university. And of all the modes of communication, still the most central to success at university is the ability to write effectively. The responsibility of higher education institutions to develop excellent written communication skills is recognised by both government and industry regulatory bodies. For instance, the Australian Government's Qualifications Framework outlines an expectation that students who complete a bachelor's degree will not only be able to display knowledge and ideas, but will be able to demonstrate critical thinking, problem-solving and the ability to write clearly and coherently (Australian Qualifications Framework, 2013, p. 48). Similarly, the Association to Advance Collegiate Schools of Business (AACSB) emphasises the need for students to be able to think analytically, frame problems and communicate effectively (AACSB International, 2016). However, meeting these goals can be challenging for those who teach in higher education institutions, particularly given the changes that have taken place in this sector over recent decades.

The development of undergraduate students' written communication skills has become more challenging as the number of students commencing undergraduate programs has increased – tertiary enrolments have more than doubled in recent decades (Baik, Naylor & Arkoudis, 2015) without a commensurate increase in staffing or funding (Universities Australia, 2015). This increase in student numbers has contributed to larger classes and increased teaching and marking loads for university academics. In addition, students who attend university now come from more diverse backgrounds. For instance, there is an increased take-up of university places by students from low socioeconomic backgrounds, those who are first-in-family (Baik, Naylor & Arkoudis, 2015; Bradley, Noonan, Nugent & Scales, 2008) and students from culturally and linguistically diverse backgrounds. There is evidence that some of these students may be underprepared for the literacy demands of their courses (see, for instance, Edwards & McMillan, 2015). There is also considerable variety in how well different high schools, matriculation systems (Goodrum, Druhan & Abbs, 2012, p. 9) and entry pathways prepare students for further education.

In addition, in the past couple of decades, literacy experts have moved away from a view of literacy that positions it as a simple, discrete set of skills which students can be taught in isolation and which they can then apply to a variety of situations. Rather, what we call literacy is now widely recognised as a set of social practices embedded within particular and varied contexts (Lea & Street, 1998, 2000; Jacobs, 2005; Hyland, 2009). Consequently, the types of assignments and the sources of knowledge that are valued, and with which students are expected to engage, vary from discipline to discipline, and genre to genre.

One example of such discipline-specific genres is case study analysis in the discipline of management. Case studies are valuable sources of shared knowledge and practice between management experts (Ross, Zufan & Rosenbloom, 2008; Vega, 2010), and students are frequently introduced to them, and to this method of critical analysis, early in their program. However, to analyse effec-

tively and comment on particular case studies, students need to understand the principles of management theory and how these have developed. In undertaking the analysis of the case study in hand, students must demonstrate an understanding of the body of knowledge that has been developed about management practices by the acknowledged experts in the field. As in many university assessment tasks, students are expected to answer a particular essay question – via a written argument – to demonstrate that they have read, understood and thought about the nominated case study and that they can apply the knowledge of the discipline – theories of management developed and tested by recognised experts – to answer the given essay question. This makes sense as an assessment task for future managers who will need to use similar skill sets effectively in their future workplaces. As Vega (2010, p. 574) argues, clear expository writing, along with an understanding of course content and the capacity to analyse business situations reflectively are all “critical skills for business students”. However, undertaking the analysis and creating the text – the finished essay – is challenging for many beginning university students.

As mentioned previously, students coming to university have very different levels of experience with essay writing. In addition, unless a student has actually studied a course in a business program, they are unlikely to have experienced writing an essay based on a case study analysis. As novices in the field of management, they are most unlikely to know which academic journals are valued. Neither are they likely to know how to identify which papers are written by acknowledged experts nor how to read these papers quickly and efficiently so that they can use them effectively as sources to build a convincing essay argument. Moreover, many first year, first semester university students do not understand when and how to reference these sources appropriately. Furthermore, in our experience as literacy educators, many management lecturers do not know much about why particular styles are valued in management writing either. Because university teaching staff are the experts and leaders in their field, the particular ways of representing their expert knowledge have often become invisible to them through years of use. Those who teach management are experts in management theory and practice and they have developed their skills in writing in management by means of a lengthy apprenticeship, without consciously seeing how specific to their discipline it is (Carter, 2007; Russell, 1990). Identifying and teaching the discourse practices of ones’ field can be challenging, particularly when one is faced with large groups of higher education students from diverse backgrounds. For these reasons, we argue that a cooperative team-teaching approach between academics with expertise in management and academics with expertise in academic literacy and language makes sense. One approach is to teach effective written communication skills alongside subject content.

This contextualisation of academic literacy practices within specific academic disciplines has become increasingly common in Australian universities (Harris & Ashton, 2011), and indeed is supported by the Good Practice Principles for English Language formulated by the Australian Department of Education, Employment and Workplace Relations (DEEWR), (2009). This document underlines the developmental nature of students’ literacy practices: as students progress through their university courses they can be expected to develop more and more sophisticated and discipline-appropriate abilities.

2.2. Models of embedding

Over the past twenty years or so, a range of different intervention models has been developed (Harris & Ashton 2011, Maldoni, 2017):

- The adjunct model

The most basic form of collaboration between literacy and in-discipline educators is when extra workshops are offered at times outside the normal timetable as a ‘remedial’ option for students who are struggling. These workshops may be generic in nature, or tied to the particular discipline. Attendance is often poor, and the workshops may lack credibility, even if they are endorsed by the disciplinary staff. It may also be hard for students to put

general principles into practice for a specific assignment because of the considerable variation between different academic disciplines. Adjunct workshops can also act inversely: the students who need extra support do not attend, while those who do not need the support attend (Tran, 2013).

- The integrated model

Literacy staff are invited to present lectures and/or workshops to all students in the course at times scheduled into the normal timetable in the discipline, but without the involvement of the disciplinary lecturers. Alternatively, literacy staff can develop online materials to supplement the mainstream course offering (see for example, Mort & Drury, 2012). Again, the credibility of such an approach may be questioned by students, who can react poorly to multiple “authority figures”. As a student in Fleming and Stanway’s study pointed out “[the management lecturer] knows the topic and assignment; he’s marking our assignments so I would rather ask him” (Fleming & Stanway, 2014, p.145).

- The embedded model

Academic literacy staff and subject lecturers work closely together to develop and present literacy materials within the course in order to scaffold students’ developing literacy practices in the discipline. The collaboration includes work on curriculum development, such as refining learning outcomes, programming literacy lectures and workshops, and the setting and wording of assignments and marking rubrics.

The benefits of embedding academic literacy support in the curriculum are backed up by many research papers using a range of evaluation methodologies (see, for instance, Jacobs, 2005; Harris & Ashton, 2011; Maldoni, 2017, in press; Arkoudis, 2014; Fleming & Stanway, 2014). Many studies have relied on student satisfaction and/or participation (eg. Harris & Ashton, 2011) while others have used analysis of student pass rates (eg Thies, 2012; Mort & Drury, 2012), and one study has used pre- and post-testing (Maldoni, in press). All these forms of evaluation may risk bias if there is no control group – notoriously difficult in educational research.

The project that we report on here uses a different approach to those described above and we suggest that our method could be used – perhaps as a form of triangulation – to add weight to studies which evaluate the effectiveness of academic literacy interventions. Through the in-depth analysis of student texts *following* an in-discipline literacy intervention, we seek to answer the following question:

- to what extent does the embedding of an in-discipline literacy intervention in a first year management course contribute to the quality of student essay writing?

3. The context: an academic literacy intervention in *Foundations of Management*

The intervention that we describe was the result of several years of close collaboration between our team of academic literacy developers and the management lecturer in a first year, first semester course, *Foundations of Management (FoM)*. Our intervention builds closely on the work of Devereux and Wilson (2008), Morley-Warner (2009), Hyland (2009), Lea and Street (2000) and Rose, Lui-Chivizhe and Smith, (2003). Using Systemic Functional Linguistics, and in particular a genre-based approach, we worked to scaffold students’ written texts through enabling them to pay close attention to both expert and model student texts which demonstrate effective writing within the discipline (for a detailed explanation of the theoretical underpinnings for this work, see Wilson and Devereux, 2014).

Most of the students in our cohort were graduates of the Australian high school system, and were native, or near-native, speakers of English. By 2016, the year reported on in this paper, the ALL team and the FoM lecturer/course coordinator had developed a strong relationship built on trust

and mutual respect for each other's expertise. Lengthy discussions had enabled the ALL team to identify the purpose and structure of the assignment, as expected by the FoM lecturer. The 2016 cooperative teaching initiative comprised:

- Jointly created marking rubrics: one for assessing students' academic literacy practices (35% of available marks), and one for assessing management content (65% of available marks). An academic literacy expert marked the essays using the first rubric while the students' usual FoM tutors marked for content and argument using the second.
- A joint lecture in week one where the FoM lecturer outlined the requirements of the course and the ALL lecturer gave a research-based account of how to become a successful university student.
- A joint 1.5-hour activity-based tutorial on effective and efficient reading at university where ALL staff helped students to determine how to read strategically and with purpose, questioning their texts, and relating what they read to what they were learning in lectures and tutorials and to management theory. In essence, the ALL work encouraged students to become critical and strategic readers in the context of management.
- A joint lecture in week 8 to prepare students to write their first management essay. The aim of the lecture was to revise essay structure and induct the students into the norms of academic writing practices expected in the management course, and in particular the need to read widely and show evidence of this reading in their essays. Students were shown examples of good management writing to illustrate the points being made. For example, they deconstructed an introduction from a previous student's essay and examined the use of references in this essay. Showing the example texts elicited many questions from students and gave the management lecturer an opportunity to clarify expectations while everyone was together. This approach helps to relieve student anxiety about high stakes assessment tasks and avoids different information being given in different tutorials.
- ALL staff led interactive tutorials in week 8. In these sessions, ALL lecturers used another model text – a high-scoring student essay from a previous year based on a different case study. Activity-based learning was used to help the students analyse the model text and identify what made it successful. Staff drew students' attention to issues such as: what good management writing looks like; how an essay is structured; how the writer uses sources to develop an argument and the mechanics of citing these sources appropriately; and how the model text uses management theory to facilitate analysis and develop an argument. In addition, ALL lecturers helped the students to deconstruct their own essay question and begin planning their own reading and writing.
- The management staff led a further tutorial modelling the application of management theories, such as Deming's "Seven Diseases and 14 points", within case studies (See Darity 2008 for further information on Deming's work).

All sessions were compulsory and were well-attended as evidenced by the number of anonymous evaluation sheets collected after each workshop. The essay writing tutorial was video-recorded and so the few students who were unable to attend were able to access the recording online and other students could also review it if they wanted to. Lectures were recorded and PowerPoint slides, handouts and a copy of the model text were available to students online.

Student evaluations and informal discussions with the course coordinator, tutors and the literacy experts who marked the essays confirmed that the intervention was useful. 90 out of 90 students passed the essay assessment task. In addition, the student evaluations received after the workshops demonstrate that 95% of the students agreed or strongly agreed that the initiative increased their

skills and confidence. However, we were interested in further examining the strengths of the embedded approach, to discover to what extent the intervention had assisted the students to write in the required genre.

4. Methods

To answer the question we had posed, we decided to undertake an in-depth analysis of a sample of students' essays for evidence of students' writing development in relation to the teaching intervention.

We used a genre approach to discourse analysis (see Paltridge, 2006), reflecting the Systemic Functional Linguistic underpinnings of the intervention itself. As Paltridge (2006, p.85) explains, genres are characteristic ways of communicating in particular social contexts in order to achieve a communicative purpose. To be valued as apprentice members of the discourse community (in this case, the community of business studies) students must learn to write within the expected norms of that community. Genres are characterised by typical stages of development, and by particular registers which entail the use of certain conventions. In the case of writing in business studies, the overall structure of the text, the particular norms of referencing, the logical development of ideas, the use of formal sentence structures and the characteristic lexis of the discourse community all contribute to effective communication within the genre. In other words, an analysis of student writing requires us to look from the top down at the overall structure and development of the argument, as well as from the bottom up at the lexico-grammatical features of the text. These features all contribute to the student's ability to achieve their purpose: answering the question (or more cynically, getting a good grade!)

The University Ethics Committee provided permission to collect and analyse students' marked essays with their consent. Nine students (10% of the FoM cohort) responded to the invitation to participate and this offered a convenience sample for analysis. The nine essays represented a broad spread of competence.

The essays were de-identified by an administrator outside the research team. Each of the nine essays was analysed using a discourse analysis framework which reflected the intended learning outcomes of the ALL intervention. Following previous genre analysis of academic writing, we based our framework on the work of Hyland (2009), Morley-Warner (2009) and others, as follows:

- Essay structure
- Task fulfilment
- Use of citations and referencing
- Sentence structure choices
- Vocabulary choice.

Each essay was rigorously analysed by each of the four researchers and then moderated by the team as a group to enhance accuracy and consistency.

5. Findings

5.1. Essay structure

One of the major aims of the ALL intervention was to assist students to structure their essays appropriately with an introduction, body and conclusion, and logical paragraphing developing a well-argued position. This structure would enable the students to achieve cohesion and coherence, so that readers would find it easy to follow the argument and evidence presented.

All nine students in the sample group demonstrated that they had understood the general principle of structuring their work. All nine essays had a clearly defined introduction, body and conclusion,

and all had substantial and clearly delineated paragraphs. All nine essays clearly focussed on answering the question:

Using theory from the course to explain your answer, how was Toyota able to have such a significant impact on the demise of General Motors?

5.1.1. Introductions

In the intervention, students were shown model essay introductions which included four “moves” (Hyland 2009): (1) general background, (2) focussing in on the question, (3) thesis statement, and (4) essay map.

In setting up the general background, eight of the nine students opened their essays with an announcement of the topic: General Motors. In this way, they were directly following the model assignment which had been analysed in the workshop. For example, Student G began his/her essay:

General Motors (GM) was once the biggest automobile producer in the world, however, due to a long range of management and financial issues, the company crumbled in 2009, 101 years after it was founded (Alam 2009, p. 234). The Japanese brand Toyota quickly

Three students softened this announcement of the essay topic with a sub-clause:

For more than fifty years, General Motors has been dominant in the car industry. (Student F)

For much of the twentieth century, General Motors was synonymous with car making in the United States (Student C).

One student opened his/her essay with a “thesis statement”:

This essay will argue the theory behind the impact of Toyota on the demise of General Motors. (Student B)

None of the students used a more general introductory sentence invoking management theory such as: *In the highly competitive world of modern management, even the strongest companies can collapse if they do not adapt flexibly to a changing environment.* Although this may have been a more appropriate way to open their introduction, the model essay did not begin in this way, and eight of the nine essays closely imitated the model.

The students all focussed their introduction on the history of competition between General Motors and Toyota: all nine essays used language of causation rather than simply listing a chronology of events leading to GM’s demise. They used expressions such as ‘led to’, ‘culminated in’, ‘GM’s demise can be attributed to’ which indicated that they were going to address the impact of Toyota on the demise of GM as required by the question. However, although all the essays introduced management terminology and used language such as ‘quality management’, ‘internal and external environment’, ‘continuous product development’ ‘competitive advantage’, only two of the nine essays referred to any systematic theories of management in the introductory paragraph, and both struggled to do so effectively. For example:

To understand the full impact of Toyota on General Motors, the organisational strengths and weaknesses can be compared to various management theories as well as William Deming’s seven deadly diseases and fourteen success points. (Student G)

It appeared that the idea of using the lens of management theory to analyse a case study was particularly challenging for these students.

Most students had clearly understood from the intervention that they should include a thesis statement in their introduction, though they struggled to do so concisely. For example:

This essay will argue that GM itself lacked quality management, and grew complacent with its business model, causing top-line managers within the company to maintain a strict, highly bureaucratic, rigid structure and display an inability or unwillingness to continuously develop products as they had throughout the mid-20th century. While in contrast, Toyota had a suite of quality management tools that optimised both its efficiency and effectiveness as a competitor. Consequently leading to the strategy of Toyota having such a profound effect on GM's business. (Student A)

Finally, in terms of an essay map – the explanation for the reader/marker of what evidence the essay will use in the body of the essay – all nine essays contained an indication of what was to come in the body of their essay. Creating a succinct essay map which then links to the stages of the argument in the body of the essay, however, is an art which is learned over years by sophisticated academic writers. Seven out of the nine essays used their introduction more like a summary of the essay. One student, however, achieved a tightly constructed essay map which was then neatly reflected in the structure of his/her essay (underlining ours):

Toyota's presence in the automobile industry was merely one element that magnified the myriad systematic problems pervasive to GM. Needless to say, their failure to effectively engage in quality management, combined with their rigid structure, poor financial strategies and failure to innovate eventually led to their downfall and the requirement to file for bankruptcy in 2009. (Student H)

5.1.2. Body paragraphs

As mentioned above, the students had all written substantial paragraphs of 120-200 words in length, and generally each paragraph was unified (ie. addressed a single main idea without deviating) and was logically developed using evidence from the case study. In many instances, students had written good topic sentences which explained the topic of the paragraph, and had then used examples to back up their point. Some paragraphs also ended with a concluding sentence to pull together the elements of the paragraph. A good example is this paragraph from Student G who, unlike many other students, also incorporated references to management theory into his/her paragraph. Although the writing is obviously that of a novice, the student manages to control the topic of the paragraph. This topic (efficiency) is clearly stated in the opening sentence, and supported by examples, comparing GM and Toyota, and linking to Deming's "Seven Deadly Diseases". Student G links the paragraph into the overall flow of his/her essay with the word *further* in the opening sentence, and reinforces the topic of the paragraph by returning to the word *inefficiencies* in his/her final sentence:

General Motors further had large efficiency issues in production. Whilst Toyota was utilising production methods such as Kaizen, a continuous improvement and standardisation model, and Kanban, a just-in-time production system to reduce held stock and storage costs, they were able to significantly reduce the costs of manufacturing as well as reduce the amount of time taken to produce their products (Jayaram et al 2010, p.289). GM on the other hand had a very expensive production system, and they failed to adapt to new technologies, change in the external management environment and changes in suppliers, which resulted in an inability to cut costs (Alam 2009, p.237). GM also failed to operate a lean manufacturing process whereby they could reduce costs and maximise production methods and did not adapt easily to newer and cheaper technologies. Effectively, these additional costs provided yet another avenue that GM was spending money unnecessarily, which meant they had little to no flexibility when attempting to reduce sales costs to induce buyers.

Toyota was operating a very lean production system, and hence had the flexibility to drive up or drive down the sales of vehicles. Deming states that excessive liabilities are a ‘deadly disease’ to good business conduct (Suarez, 1992, p.12) and using this theory it is again evident how Toyota was able to be superior and dominate GM. General Motors also had excessive medical costs (Alam 2009, p. 235) which is defined as Deming’s sixth deadly disease (Suarez, 1992, p.12). Therefore, the combination of poor efficiency in production produced excessive liabilities and in combination with excessive medical costs, caused General Motors to have a market disadvantage in their operating costs and hence inability to remain affordable to the market. The organisation was not very adaptive to change and the rigid GM structure prevented innovation which allowed these costs and production inefficiencies to remain. (Student G)

Like Student G, the other eight students generally began their paragraphs with a topic sentence which foregrounded a management concept, such as innovation, the external environment, high costs of production, or dealership arrangements. They showed themselves to be quite adept at bringing in examples and comparing the two automobile companies. However, only three of the nine essays used specific management theories in their topic sentences, and those that did struggled to express this effectively. For example, Student I began one of his/her paragraphs:

The mismanagement of General Motors goes further in to committing Deming’s 7 deadly disease of management when the company disregarded limiting medical costs and decreasing liabilities (The Seven Deadly Diseases of Management , n.d.)

Only one of the students used the device of organising his/her essay around Deming’s Seven Deadly Diseases, using topic sentences such as:

The second deadly disease is mobility of management. (Student C)

It was surprising that more students did not use this strategy as the model essay that the students had deconstructed during the academic writing intervention used this device almost consistently.

5.1.3. Conclusions

In their conclusions, all nine students made a good attempt at summarising the content of their essays and presenting a position in answer to the question. However, although all of the students used some management concepts in their conclusions, only two of the students referred to Deming or other theorists in their final answer to the question.

5.2. Task fulfilment

As can be seen from the discussion above, the nine essays that were analysed all made a reasonable attempt at this task. All the students gave a response to the question, although some tended to interpret it as a yes/no question (“Did Toyota have an impact on GM?”) rather than addressing the question “... HOW was Toyota able to have such an impact on GM?”. More seriously, many of the students had not properly understood the preface to the question: “Using theory from the course”. They understood this simply to refer to management concepts or terminology, rather than coherent, systematic theories proposed by particular theorists which could be used to analyse the case study. This meant that many of the students merely re-organised the case study as it was presented in the source text rather than analysing it through the lens of theory. Those who did use theory sometimes failed to explain it or to embed it into their argument. For example, Student E, opened paragraph 6 of his/her essay:

The Seven Deadly Diseases of Management were created by Dr W Edwards Deming to respond to barriers that limit improvement and effectiveness of management and businesses and can be applied to any organisation to assess

their success (Deming 1984). Toyota does not adhere to any of these diseases and can use the outlined ‘diseases’ as a goal setting tool to establish practises and systems that improve the business and ensure its continued success. (Student E)

It is clear that this student had not understood how to use theory as a tool for analysis in management studies even though the model essay had done so very effectively.

5.3. The use of citations and referencing

Considerable time and attention was given in the intervention to ensuring that students understood when and how to reference sources effectively in their essays. They had also benefitted from a research skills session delivered by library staff.

The average number of sources cited was 15, which would seem high for a first-year essay worth only 30%. One student cited 33 sources, while one cited only four (including a 1986 article from the magazine *Science!*). All nine essays used a range of sources: the case study itself (from Alam & Najumdar, 2009), peer reviewed journal articles, articles from newspapers and magazines such as *The Economist*, company websites, and other credible websites. As can be seen from the paragraph by Student G cited previously, the students were able to synthesize material from these sources into their writing, using a number of sources in a single paragraph. They generally achieved a good balance between writing in their own voice and using the voices of source authors.

In their conclusions, as would be expected, they used few, if any, citations, speaking confidently in their own voice in response to the question.

5.4. Sentence structure choices

During the literacy intervention, features of academic writing style, such as sentence length and coherence, were highlighted. The students’ essays showed that they were able to write using an appropriate mix of simple and complex sentences, echoing the style of the model essay. Perhaps in an attempt to ‘sound’ academic, some students chose to write longer sentences than they could effectively manage, which sometimes led to sentence fragments (sentences without a complete main clause) and a general lack of coherence. Some students whose writing lacked coherence had perhaps not allowed sufficient time to complete the task effectively *and* edit their work carefully before submitting. However, in general, as demonstrated by the examples throughout this paper, the students’ writing was impressively coherent, and there were relatively few errors at the technical level.

One feature of coherent academic writing which the students appear to have assimilated from the workshops was the use of transitions (linking words) and anaphoric reference, that is, referring back to elements in the previous sentence in order to smooth the links between ideas. For example, Student F’s use of ‘linking back’ is almost overdone in the following extract (underlining ours):

Lastly, GM’s relationship with the UAW was another added burden which Toyota did not face. As a unionised company. GM had contractual obligations through the UAW to all its past and present employees. These obligations included health care and pension funds as well as guaranteed jobs or compensation in the event workers were laid off. These costs were estimated to be over \$183 billion annually. Toyota did not face such costs, nor were its worker’s [sic] paid ‘pay for knowledge’ scheme as most of GM’s workers were (Holden, 1986, p.274). (Student F)

5.5. Vocabulary Choice

In the academic writing intervention, we encouraged students to choose their vocabulary carefully so as to demonstrate their knowledge of the subject and to improve the brevity and clarity of their writing. As can be seen throughout the examples above, the students had appropriated the terminology of management to an impressive extent. However, some students were inept in using “sub-technical” vocabulary – the words which permeate all academic writing regardless of discipline. Some of these problems may have been caused by their use of the thesaurus in Word. For example:

These factors incited consumers to approach the car industry with tighter budgets. (Student I)

UAW crippled GM’s internal structure by resisting every attempt to shrink the workforce [...] and as a result management became superfluous. (Student H; underlining ours)

6. Discussion

Our analysis of the nine texts suggests that the students had indeed benefitted from the intervention. Although their essays bear the hallmarks of novice writers (and one appeared to have been written at the last moment), these students were making a substantial attempt at emulating the genre required in a management essay. All nine essays were structured with an introduction, body and conclusion. Eight of the nine introductions were clearly influenced by the model essay, and the students’ excellent use of sources – even though this is their first academic essay – suggests that the work done in the intervention workshops had helped them to understand how to integrate appropriate sources into their writing. Their conclusions expressed a clear answer to the question, and they had supported their answers with evidence and examples as they had been shown in the intervention.

Inevitably, the quality of the students’ writing varied. Some had put an enormous effort into gathering and synthesising source material, whereas Student A appeared to have written the essay in a hurry. Student G was able to achieve a sophisticated academic style in his/her writing, whereas Student E struggled to express him/herself at this level. Of course, as discussed above, the students have come from widely divergent backgrounds: some with substantial previous experience of academic writing, and others much less. Some students brought already well-developed writing practices with them to university; others less so. As emphasised in the Australian Universities Good Practice Principles (AUQA 2009; Harper, Prentice & Wilson., 2011), literacy practices are developmental and we cannot expect first year students to write like experts in their field, nor to all be at the same level of competence. In fact, the students’ struggles to express themselves academically, as seen in the examples above, are evidence that they are pushing themselves to work outside their comfort zone and take on new academic identities (Ivanic, 1997).

It appears from our analysis that the feature of management writing which was most problematic for some of the students was the use of systematic theory as a lens to analyse case studies and solve problems. This is fundamental to how to “do management” (Carter, 2007) and their failure to do so was all the more surprising as the model essay, highly valued by the lecturer, was almost heavy-handed in its use of theory: every paragraph directly addressed one of Porter’s Five Forces, beginning for example, “Porter’s third force is competitive rivalry ...” In this way, the model essay was a powerful demonstration of what Maton (2014) calls “semantic waves”: writing which flows between the presentation of abstract theory and its exemplification grounded in specific detail.

There were several reasons why some of the students may have struggled with this movement between theory and exemplification. First of all, the essay question itself underplays the role of theory by putting the instruction to use theory into a sub-clause: “Using theory from the course to

explain your answer, how was Toyota able to have such a significant impact on the demise of General Motors?" The students might have found it easier to write appropriately if the question had been phrased more specifically, like the essay question from the previous year: "Discuss Opel's competitive market position using Porter's Five Forces". In addition, unlike the previous year, the question did not specify which theories were to be used. This meant students required more time to research multiple theories and decide which ones could apply to the particular case study. Moreover, by using "theory" in a general sense, novices may have felt that simply using management terminology might be sufficient to answer the question. Thus, some students tended more towards describing the course of events rather than explaining them as required by the question.

Secondly, it may have been that the students had misunderstood what is meant by "theory", thinking that using a selection of management terms such as "efficiency" and "external environment" would be sufficient. A third reason for their failure to use management theory effectively is perhaps their previous experience of writing. At high school, students are usually expected to write in their own voice using a limited range of sources provided by teachers. As mentioned above, the students may also have resisted the model essay, finding the topic sentences, which each addressed one of Porter's Five Forces, to be too obvious.

In other respects, however, the effects of the intervention are clearly evident in the students' work. For first year, first semester assignments, the sophistication of the students' writing is impressive. Of course, their writing is by no means perfect: there will be plenty of room for improvement as these students progress into second semester and second year, especially if they are prepared to act on their lecturers' feedback from this assignment.

7. Conclusion

This research attempted to answer the question: How effective is the embedding of an academic writing intervention in developing students' academic writing practices in FoM? In times of shrinking resources when university teaching staff are being asked to teach greater numbers of students from more diverse backgrounds in more cost-effective ways, the data suggest that interdisciplinary interventions are an effective and inclusive way of helping students to develop the academic literacy practices that they will need to be successful at university and beyond. Although this study is limited in that it cannot show pre-and post-intervention results, and it is based on only a small convenience sample, the detailed analysis of student writing in relation to the teaching material used suggests that the intervention did have a positive effect on student writing. Particularly in their introductory paragraphs, the students quite clearly followed the model assignment. They had also acquired knowledge of how to incorporate references into their writing and how to balance their own voice with that of the sources. They were largely able to use sophisticated ways of answering the question coherently, even though they had not fully understood how to identify and incorporate systematically developed management theory into their writing.

However, the analysis also suggests that there are lessons to learn from the intervention. One of the key issues in 2016 seems to have been that the students found the wording of the essay question difficult. As discussed above, in many respects the question was more challenging than the one answered by the student in the model essay. Identifying appropriate theory and applying it effectively to a case study is not easy. There may be an argument for giving more straightforward essay questions as the first assignment for students new to a discipline, or for using a more directive approach for the research process as Vega (2010) suggests.

Collaboration of the kind described in this paper could be criticised for its extensive use of staff resources; however, it offers an equitable way of providing vital scaffolding to all students enrolled in a first year, first semester course. The model suggested here, incorporating two lectures and two workshops presented in the weeks preceding their first assignment, is an effective way

of reaching all students in a timely fashion and has the potential to set the students up for success early in their program.

The methodology that we offer in this paper is not without limitations. It can be difficult to establish a direct link between students' writing and the intervention, and some students in this study brought already well-developed literacy practices with them to university. In addition, students inevitably varied in the extent to which they paid attention to the intervention. We do not argue that this methodology can prove the value of embedding in isolation, but rather as a form of triangulation used along with other forms of evaluation such as those proposed by Harris & Ashton (2011), Mort & Drury (2012) and Maldoni (2017, in press).

In conclusion, a collaboration between discipline-based academics and literacy specialists can be very productive in scaffolding the development of students' writing. The model of embedding presented in this paper is only one of many possible collaborations which can be devised to meet the particular context. What this model and the analysis of student writing demonstrate, however, is that bringing together the different disciplinary knowledge of writing experts and other academics in an embedded literacy intervention can enhance the development of the sophisticated writing practices that students need to succeed at university and beyond.

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