TRANSFORMING LITERACY FROM SECONDARY TO TERTIARY LEVELS

In the context of changes in the economy, technology and culture available to students beginning university studies, warnings that institutions have responsibilities to deal explicitly and nurturingly with the literacy readiness of their students have been more like dissipated echoes than clarion calls to action. Estimates of literacy-related failure and withdrawal from undergraduate courses in Australian universities indicate we are losing a significant number of students who with some help might otherwise have continued in their tertiary studies. In this presentation, the authors argue that these students are casualties of the tension between knowledge demands for the general purposes of content mastery and its demonstration, and logical development in line with principles of genuine lifelong learning. In presenting this argument, the authors will (a) review some studies on what makes for effective literacy in tertiary settings, and, (b) view developments in a website prepared to assist students who seek help with procedural aspects of knowing how to conceptualise and write university assignments.

Introduction

Popular opinion reflected in media reports is that Australia has a number of crises associated with literacy (Street 1999). “Standards are dropping”, “teachers are confused”, “workplaces are affected by high school and university graduates incapable of spelling and punctuating a sentence”, typify banner headings across the past decade. While many (Green, Hogens, & Luke 1994; Welch & Freebody 1993) consider such claims are ill conceived, or driven by political and economic agenda, some reports indicate that standards in universities are in decline (Buckley 1993; Connolly 1994; Moens & de Lacey 1993). In contrast, others (Holbrook and Bourke 1989; Taylor & Nightengale 1989; Taylor & Nightingale 1990) have asserted that evidence supporting the “in decline” position is paltry. For example, Holbrook and Bourke (1989) found few students routinely produced mechanical literacy errors.

Whether universities are in crisis or not, the Australian Vice-Chancellors’ Council have acknowledged a need for deliberate and explicit attention to literacy generally and to students’ literacy, particularly. In a telling statement, the Council noted:

Universities have a direct interest in the enhancement of literacy levels.... Literacy is the prime foundation for the acquisition and use of knowledge generally and the capability that underlies and secures all other major capabilities.... Literacy, therefore, lies at the heart of university concerns (Australian Vice-Chancellors’ Council 1994, p.4).

In relative terms, the desirability of a more positive sequence of skill development and performance enhancement has been observed nationally, “Australia’s capacity to generate new knowledge is fundamental to the strength and health of our society. It must underpin our economic growth and our capacity to effectively solve social problems” (Kemp 1999). However, there is no clear evidence that we have attended to such national need by systematically identifying and removing obstacles that prevent university students becoming more knowing and effective in the literacy
associated with their performance as students. Conceivably, such obstacles include failure on students’ part to recognise and respond to the literacy demands of such frequent tasks as writing assignments. Another is failure on the part of academics to see that they have a role to play in promoting students’ perceptions of such demands and to be involved directly or indirectly in redressing and perceived shortfall in students’ responses.

Literacy practices in universities have evolved over time to achieve such culturally recognised, and different, purposes (Woodward-Kron & van der Wal 1997). Nonetheless, across departments, capable demonstrations of knowledge by staff and students rely on predictable and consistent approaches to composing texts that record and deliver information in convincing and authoritative ways. While the two are interrelated, consistency may be more problematic than predictability. For example, use of citations is a fairly predictable practice across departments as writers (students and staff) attempt to give authority to their written texts (Swales 1991). But, procedures for citation and referencing differ, and a writer’s choice of a particular set of conventions and writing style may affect outcomes such as a reader-marker’s evaluation (Bartlett & Fletcher 1996). Students new to writing assignments need to know that preferences for how to write may be just as significant in a lecturer’s assigning a grade as an expectation that appropriate and sufficient substantive content will be presented. They need to know also that the former may be more idiosyncratic than consistent across the various fields under study and the several academics they will encounter as setters, readers and evaluators of their written work.

Generally, the voice of academic writing is impersonal and formalised (Nevile 1996; Norton 1990), and some students entering university will not have been schooled in working through this voice. Along with researching and reporting information logically and cohesively, using citations and references to present and support a position, and meeting word limits and time limits, students need guidance to do these things. They need to transform literacy skills developed through past experience to the particular demands of tertiary settings.

Tertiary literacy requires particular literacy practices for particular socio-cultural contexts.

The relationship between tertiary literacy and rate of graduation was examined in a Bachelor of Pharmacy degree program (Holder, Jones, Robinson & Krass 1998). The literacy skills of 634 pharmacy students were measured using the MASUS (Measuring the Academic Skills of University Students) procedure (Bonnanno & Jones 1997). Content failed to discriminate. However, structure and development of text, control of academic writing style and grammatical correctness were significant predictors of progression rate through the course. These variables then suggest ways that academics might design helpful ways for students to prepare and evaluate drafts of their written assignments.

One way to do this may be to provide deliberate and explicit teaching in being logical and coherent with what one gathers as appropriate and sufficient content knowledge. Studies of the effects of “structure” on literacy performances that have
focused on the logical relations throughout content networks that give texts coherence. Have revealed a clear influence from this variable (Farrell 1997). Meyer (1975) found university students who reproduced the top-level structure of a text they had read, recalled significantly more and remembered content over a longer period. Lawe-Davies (1997) found that high-rated examination essays from Dentistry students generally established clear global strands of coherence, together with topic organisation that was evident at discourse and sentence levels. In low-rated essays, students did not apply procedural practices about how to write. Their content was not presented in a genre that established contextual information for the reader by establishing writer and reader roles in the essay. They did not relate their content to the topic and introduced information that did not expand and elaborate the topic in relevant and meaningful ways. Finally, these writers did not assist their readers in following their line of discussion by explicitly building on ideas across sentences.

Interestingly, these data appear quite different from those reported by Norton (1990) who also differentiated essays scored “high” or “low”. In addition to that high scoring essays listed significantly more references, Norton (1990) observed that both sets of essays had similar amounts of structure. However, “structure” had been measured in terms such as headings rather than with top-level structuring (Bartlett and Fletcher 1997; Fletcher & Bartlett 1997; Meyer 1975; Meyer, Young & Bartlett 1994), a procedure that analyses the type and efficiency of logical frameworks in the idea networks of a text.

These studies have identified literate practices associated with more successful academic writing in terms of assessment results. It seems that many academics recognise communally agreed types of writing or genres, and textual features associated with that writing. The features include structure of text and style of writing (Bartlett 1978; Farrell 1997; Holder, Jones, Robinson & Krass 1998; Lawe-Davies 1997; Meyer 1975; Meyer et al. 1994), amount of reference material cited (Norton 1990) and grammatical correctness (Holbrook & Bourke 1989; Holder, et al 1998). However, academics may have a dilemma about how to handle the contrasting status of expert in a substantive area and one not so expert concerning the literacy used by a relative novice to communicate new knowledge (Akerlind & Jenkins 1998). For those of them who choose to do something actively to teach literacy, the question remains what to do?

For their part, students seem to realise that they must master the content under study. But, it is uncertain whether many know to look at an assignment topic not just as content field, but also as literacy challenge (Fletcher & Bartlett 1997). In cases where they do both and see such features as part of the demand of the assignment, there may be the further dilemma of knowing what to do about it.

To us the answer is clear. Successful acquisition of literacy practices requires practise (Bartlett 1990; Bartlett & Fletcher 1997). Students need to use their cognitive resources to enable them to know about the "what" and the "how" of writing, and to draw upon that knowledge strategically when writing (Bartlett and Fletcher 1997; Fletcher & Bartlett 1997; Meyer, Young & Bartlett 1994), and academics need to help them to do these things.
Approach

In this paper, Phase 1 and 2 of a longitudinal study are reported as work in progress. The research design involved a case study approach applying an embedded design using several units of analysis (Yin 1984). Results of data collected from undergraduate students and their lecturers identified a range of perspectives related to what each party considered as effective literacy practices in a tertiary setting.

Student perspective

Forty-one students were interviewed in Phase 1. None of them had received special help with assignment writing. Characteristically, they relied on gathering and re-assembling topic information as a means of addressing a given question or topic. When asked for their perspective on effective assignment writing, 24 students identified research and understanding the topic as the key elements. A typical response was “You need a good understanding of the topic...(to be)... able to understand what you are writing about” (AC 95). The next most frequent focus was structure. For example, “Writing structure is important” (JI 95). While both are logical in terms of necessary elements, neither is sufficient. Even in the cognitive sense, it was unclear from their descriptions whether interpreting how to do the assignment following a first serious reading of the topic was generally lasting or relatively fluid.

All comments about perspective-taking as a conscious and principled activity were at best ambiguous. For example, students readily identified the need to write about a topic in an “academic style”,

I think the first thing about effective writing at university is to answer the question. If you don't answer the question then you don't, then you haven't done what you're supposed to do [yep]and then the second thing would be to answer the question in a in a concise manner that other people can understand (0.4). The next thing I probably put after that was to help the conciseness of it, would be to get the grammatical stuff right and the spelling right and punctuation and stuff like so it’s easy to read, so the piece flows from one idea to another and it ((doesn't)) get stuck. It’s not jerky (JP 95)

While students described features they believed contribute to effective assignment writing, they struggled with the procedural tasks of writing.

But when I go into writing into the academic essay, I have extreme trouble trying to sequence the information. The research is fine. The information is good but in order to make the essay make sense and follow a good structure and a line of discussion, I feel every time, I just feel totally lost. I'm never sure on how to select a quote, how to use it. Being able to write in your own words but you can't because you must be able to reference your work. The introduction and conclusion I have problems with. How do I sum up every thing that I have written? (JI 95).

Lecturer perspective

Four lecturers were interviewed and a further 18 responded to an email survey. All agreed that effective assignment writing should address the topic. “They have to
understand clearly whatever the topic is, that it has a number of demands. It's multifaceted and (they need to) respond to all of them. Now they cannot write effectively unless they have the knowledge base” (2: 95). Furthermore, they identified coherence as an essential attribute of successful assignment writing. They described this as a “need to express coherent syntactic structures and use sentences and paragraphs and linking the sentences and paragraphs” (1:95); “synthesising the ideas that are being studied into a coherent organised structure” (3:95); “organising the information they have gathered into a logical flow” (4:95).

While there were consistencies across descriptions of the attributes of successful assignments, lecturers were divided about whether it was their responsibility to assist students as writers. “I took it for granted that the High schools do this job. Students should get assistance from learning facilitators or other services not from the academics who are heavily loaded anyway (12:95). Lecturers who claimed that they taught students how to write tended in their descriptions of process to focus on conventions of writing, rather than on structural aspects. For example, “I do give them formal advice and offer guidelines for researching and writing a quality assignment. For example I say that cross referencing a key idea is a highly effective way of showing that you are widely read” (2:95). “I tell them to write using the first person and to relate writing to their own experiences but this needs to be substantiated” (1:95). Additionally, from a teaching perspective, emphasis in these accounts is more on telling than on transforming.

Drawing on findings from Phase 1 of the study, we designed a website to assist students with the procedural aspects of conceptualising and writing university assignments. Phase 2 involved evaluation of the website.

A Learnerly Approach to Assignment Writing (“LAW”)

The website attempts to have students construct a learnerly approach to assignment writing. The program promotes “noticing”. Scaffolding was used to help students notice the shifts in role for all participants in the assignment culture. We wanted them to see what we think makes for successful writing based on Phase 1 analyses. Students form and test hypotheses as they learn about themselves in the role of successful assignment writers. They take a position to interact and collaborate with peers and lecturers as they apply their version of our procedural model to a real assignment.

To do this, the program scaffolds reasoning opportunities where students address a need for both perspective taking and operation of a cognitive system in approaching and responding to the task. As a perspective, the modelled view is that there are certain key principles to guide production of one’s ideas on a given topic. These operate from initial reaction to the topic through to a conscious decision that a final draft is a relevant and coherent written response. The model is an orderly, strategic approach to getting the job done.

Adopting a cognitive system to get the job done

Discursive practices that students use were determined from survey (N=174) and chat site data collected across a 14-week semester when 230 students in a core subject were
invited to participate in the LAW program. To act purposefully and planfully when reading and responding to an assignment topic, students in our sample learned how to:

- analyse the topic generally, and the topic of the nominated assignment, specifically;
- list the content elements of the topic, and relations amongst them,
- organise the elements and relations hierarchically;
- frame the writing task in terms of word-length, likely number of paragraphs, likely arrangement of paragraphs as sections corresponding to elements of the analysis;
- determine the number of facts needed to produce paragraphs of each section;
- interrelate content cohesively at paragraph, section and whole-of-text levels;
- select a genre appropriate for the style-demand keyword(s);
- write an introduction that focuses the main idea within the top-level structure of the topic text;
- tentatively frame a conclusion that focuses the main idea within the top-level structure of the topic text;
- associate outcomes from the foregoing steps with any documents provided by the lecturer that relate to the assignment topic (e.g., subject objectives; assignment completion guidelines, marking criteria);
- speak with the lecturer about word limits, referencing requirements;
- use the chat site;
- plan, draft and review as writers; and,
- read as a writer - write as a reader.

**Student-Perceived Outcomes**

Analysis of Phase 2 data indicated three major outcomes. First students now spoke about what they did. The content was a “knowing” one. For example, “It (LAW) helped in breaking the questions into parts…” (96.38). “Finding the key words and chunking were most helpful to me” (96.60). “If I was doing a research assignment it would greatly help skim reading, chunking, organising information, analysing the assignment question, and paragraphing effectively.” (96.165). They checked their performances at different stages of the implementation. They did that with us electronically. For many students, this was an enlightening experience. “This program was extremely useful, as no one since I have been at University, has actually shown us what is expected from assignments at a Uni-level. Thank-you for this program, as it has helped me a lot” (668).

A bulletin board allowed teaching staff to give general responses on common issues. Students appreciated the clarifying information lodged by staff. “This was fantastic. All those questions that were on my mind were answered here.” (28). The email provided for individual responses on particular issues. The email link was seen as an effective form of communicating with teaching staff. “You could get the correct answer without trying to run around to find a time to find M” (172). Students spoke with their peers face-to-face and using the chat site. The nature of this building dialogue is significant. Most students had a preference for peer-talk. “It (chat room) would have been more useful if others had used it instead of just the same group of people) (12). “I’m more comfortable with direct help where I can express that I am still confused” (38).

Second, students perceived an improvement in their assignment writing. Survey information indicated a general notion that their assignments were better because they were now better planned and written in an organised way. For example, “I found the
information on referencing helpful as I always seem to be unsure about this aspect of my assignments. The paragraphing information helped also. I often tend to write in a disjointed manner, and I found this section helpful in making my writing more cohesive”, (124). “The terms given (Finding the actions words) were an excellent learning tool to map out my assignment” (60).

Third, students believed that their confidence as writers improved. “It made me reflect on my assignment writing technique” (517). They now had insights into the process that affected positive affective outcomes either through ownership of skills learned from the program or affirmation that skills they already owned could be brought to bear in strategic and systematic ways. “It made me examine more closely how I write assignments” (51).

Issues
The following issues emerged as further areas for research.
• Web-based technology remains problematic in terms of access and reliability. Students who did not have access to Internet at home found using university computer labs inconvenient and sometimes unreliable. “If I was able to access the internet from my home, these programs would probably be of more use. I find it extremely difficult to sit in a cold computer lab with all sorts of people coming & going, and concentrate on the task at hand. I have never been able to write assignments or study in a room with more than one other person” (71).
• Use of a program to scaffold a critical response to writing assignments requires time management and planning. Students who leave assignment writing to the last minute are unlikely to have time to incorporate a learnerly perspective. “I ran out of time with the program and just had to get the assignment finished” (112).
• Where students find traditional support unhelpful, a software program that scaffolds their writing and literacy learning may offer effective alternative. “I found the web site more helpful than my tutor. Isn’t that saying something!” (615).

Conclusion
LAW is a problem-solving approach to assignment writing for those who find such writing problematic. Therefore, it is knowledge building. When students make a learnerly effort in writing, their planning, implementation and self-evaluation is systematic and purposeful. As such, it mediates effort that otherwise may be concentrated entirely on content mastery. As each student acts on this learnerly effort, the action is as much an object for reflection as the product of that action. For example, in deconstructing the topic as a textual entity, the method modelled became a subject for critical review, as did the items rendered by the deconstruction. The activity and the product are both tangible outcomes. New knowledge constructed in this way is heavily procedural. In Swain’s (1998) terms, it is a case of performance outstripping competence. This may explain why so many students in our study samples thought so highly of the process after they had been through it.

For many students there has been a perception that taking a learnerly approach to assignment writing had two macro-outcomes. First, they saw that they had done better academically. Their self-evaluations indicated that they had received better grades and more positive comments from teaching staff. Second, they felt better about
being academic. Their reflective comments about doing assignments indicated greater ownership and satisfaction with both the product of their effort and the process that enabled it.

For our part, real contact between teacher and students remains a key feature in the joint construction of procedural discourses that model what we consider to be performance enhancement in what students write and submit as their assignments. In large classes, the website offers a viable supplement to face-to-face contact, particularly when possibilities for interaction are included. Of course, contact alone is not sufficient. Rather, teaching staff need to notice and respond to the cognitive and affective needs students have about the literacy involved in writing assignments and these same needs as they apply to seeing themselves as writers. Importantly, we academics as teachers need to encourage students to think about these things. And, we need to know what to do when students not only think about them, but also ask for our help.
References


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