Language and learning in ‘the late age of print’:
Situating a web-based essay writing project

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Abstract
In 1999, the Language and Learning Services Unit at Monash embarked on a ‘Strategic Innovations’ project aimed at providing online web-based learning to students. One of the main components of the project has been the creation of a series of online tutorials in a range of academic skill areas. This paper provides a description and a critique of one of the first tutorials developed - an essay writing tutorial. In evaluating this resource, our aim is to give a sense of the processes of learning and reflecting we have been engaged in on the project and also to situate these within broader debates about the new technologies and their impact on language and learning practices. We shall argue that the success of web-based language and learning resources is contingent on recognising the implications - both textual and pedagogical - of the technology used.

The Language and Learning Services Unit (LLS) at Monash, like many other academic support units at Australian universities, has in recent years begun to adapt its practices to the exciting, but also sometimes daunting, world of the online technologies. In 1999, the Unit was fortunate to be the recipient of a generous Strategic Innovations Fund (SIF) grant from the University and embarked on a project designed to provide an electronic gateway to our services and resources, the Online Student Resource Centre. One of the main components of the project has been the provision of online web-based learning for students who are unable to draw on the benefits of face-to-face academic skills teaching. This has mainly involved the creation of a series of online tutorials in a range of academic skills areas including: essay writing; report writing; lecture listening and notetaking; academic reading; seminar presentations and grammar.

In the present paper we provide a description and a critique of one of the first tutorials developed - the essay writing tutorial (http://www.monash.edu.au/lls/sif/LLS_Tutorials/Writing/writing.html). For most of us at LLS, the reconceptualisation of our work for an online environment has represented a significant challenge, one requiring a good deal of learning and re-orienting of our thinking. Our aim in what follows is to situate these reflections within broader debates about the new educational technologies and their impact on language and learning practices. In relation to the specific learning resource described here - the essay writing tutorial - we shall argue that, whilst the materials have the advantage of being widely accessible to students, their online effectiveness may be constrained somewhat by certain difficulties we found in attempting to translate modes of classroom instruction to the new environment. We argue further that the design of any future web-based learning materials needs to take into account the special ‘modular’ structure that characterises the key technology of hypertext.

AN ESSAY WRITING TUTORIAL

Of the range of language and academic skills teaching the Unit is engaged in, clearly it is the teaching of essay writing and related skills that occupies most of our energies and resources. Whilst the essay as a genre is more integral to certain discipline areas (i.e. the humanities and social sciences), a recent survey of writing requirements across the university (Moore & Morton, 1999) found that this assignment type continues to be the main generic currency in a majority of subject specialisations. The development of a set of online essay writing materials with broad applicability was thus a priority for the project.

A benefit of our work as language advisers is that the needs of our students are well understood. We know for example that students have difficulty with understanding and critiquing references, with interrogating assignment topics, with structuring their work. With the online environment, though, it was necessary to imagine a variety of students all at different points in their progress. The same personalised attention could not be given. The ‘attention’ itself had to be different. Increased student access was clearly an advantage, but to what? The aim had
to be, as Thomas, Carswell, Price and Petre (1998) suggest, not only to increase accessibility of the materials, but also to improve practice. In the following sections, we discuss briefly principles that guided us in the development of the essay materials. These were in three broad areas: writing pedagogy and self-directed learning - with which we were already familiar - and web design which was new.

PRINCIPLES OF WRITING PEDAGOGY

The first challenge in developing a set of essay writing materials for mass consumption across the university was negotiating between the 'generic' and the 'discipline-specific'. This related in the first instance to the problem of identifying a suitable content base for materials - one that was both academic in nature, yet comprehensible and potentially of some interest to students from a range of disciplinary backgrounds (see Swales, 1987). Another related difficulty concerned the need to generalise the genre, as it were; that is to deal in some purposeful way with the sorts of discursive variations in essay writing across the disciplines noted by many analysts (see for example, Taylor, 1988; Ballard & Clanchy, 1988).

For the content-base of the essay writing tutorial, we chose to rely on a 'thematic' model, one from a range of content models proposed by Brinton, Snow and Wesche (1989). As Brinton et al., suggest, the choice of model will depend on the relationship one envisages between language skills and content in the particular learning context to hand; that is whether, in crude terms, language is thought to be working in the service of content, or content in the service of language. In our context, with a focus on the teaching of a 'generic' skill to a non discipline-specific group, clearly the latter obtained. For a 'thematic' approach, Brinton et al., recommend content of a broad sociological, political or cultural nature, one that will be schematically familiar to students. (For a more detailed rationale for using sociology as the content base of EAP courses, see Gaffield-Vile, 1996). For our tutorial, we chose the sociological theme of 'divorce in society', believing this would be of broad interest to students. However, one might just as easily have chosen from other themes outlined by Brinton et al., viz 'environmental problems', 'culture shock' and so on.

With respect to the essay itself, the tutorial aimed to include a genre sample that had disciplinary authenticity (that is, was identifiable as a 'sociology' essay), but that would have relevance to essay writing practices in other discipline areas. To ensure the latter, we sought to use a type of writing that was constitutive of certain 'canonical text structures' (Johns, 1988) - with clear cross-disciplinary application. The sample essay topic used (see below) was chosen, in part, for its prescription of a range of these structures - 'explanation'; 'critical analysis'; 'application of theory to practice'.

In the last 20 years, rates of divorce have risen significantly in Western countries. Critically analyse some of the different explanations given for this phenomenon. In your discussion you should consider what implications these explanations might have for social policy.

It needs to be acknowledged, however, that the 'generic - discipline specific' tension in any form of academic skills teaching can never be entirely resolved, only mediated in some way. As Taylor (see this volume) suggests, the struggle is always to try to draw the two tendencies into 'some fruitful relationship'. Throughout the essay tutorial, the tension between the generic and the discipline-specific is manifested in various ways, but none is as explicit as the 'each way bet' expressed in the following information to students on the opening screen (see Figure 1):

In this tutorial you will learn about approaches to essay writing at university level. The tutorial applies especially to writing in the arts and social sciences, but is relevant to other study areas as well.

For the actual design of the essay writing materials, we were influenced strongly by the push in recent years to achieve a sensible synthesis of 'process' and 'product' (or genre) approaches to the teaching of academic writing, which until not so long ago, represented two distinct and adversarial theoretical positions (see Candlin, Gollin, Plum, Spinks & Stuart-Smith, 1998). The essay tutorial was intentionally 'synthetic' in its design. The materials are organised in the first place around the various stages of the writing 'process' (see Figure 1, left hand column) including: topic analysis; provisional essay planning; selecting of readings; note taking; drafting.
For the 'product element', a number of authentic and semi-authentic texts were selected (an essay topic; sample readings; a sample essay), serving both as generic exemplars and as the basis for interactive tasks. A key element of genre pedagogy is the use of activities which draw students' attention to various linguistic and rhetorical features thought to be criterial to a particular genre. In the earlier days of the genre approach, this type of activity tended to operate as a crude prescriptivism, with a focus arguably more on genre conformity than on the producing of good writing (Freedman, 1994). Recent genre-based pedagogies have sought to apply a more 'descriptivist', 'discourse analytic' approach, with students encouraged to conduct their own research into 'texts, genres and the literacy practices of others' (Johns, 1997, p. 92). Elsewhere this approach has been described as a 'critical descriptivism' (Moore, 1999), the aim of which is not only to help students identify the characteristic features of writing in their field, but also to 'encourage them to consider why high status texts are constructed in the way they are and to what rhetorical ends' (p. 19).

There was an attempt to incorporate this 'critical descriptivism' into the tutorial. To take one example, in a section on Analysing citations (see Figure 2), students are asked to identify variable citation forms in the sample essay - 'information-prominent' citations (in example 1) and 'author prominent' citations (in example 2) - and then to consider on what basis these different rhetorical choices might have been made by the writer.
SELF-DIRECTED LEARNING

A distinctive feature of our work is that we commonly work closely with students to support their learning in a personalised way, whether this takes the form of individualised support, small groups or larger classes. The best learning of any kind, we agree with Laurillard (1993), is in the form of a conversation - a dialogic relationship - between teacher and student, ideally on a one-to one basis, centring on variations of the goal-action-feedback cycle. How, then, were we to deal with a situation at odds with this approach - the replacement of the teacher, as it were, with a web browser. For guidance here we relied on the framework provided by ‘self-directed learning’ (SDL).

Self directedness as an approach became especially popular in the language field during the 1980s, marked by the proliferation of self-access and resource centres, including those within university study skills units. The broad philosophy has also seen a parallel development in the burgeoning area of university distance education. SDL has been driven in part no doubt by certain economic imperatives, but also by enlightened notions of ‘autonomy’ (Holec, 1980) and ‘learner centredness’ (Nunan, 1988). With the advancement of online computer technology, the possibilities for self-direction appear almost limitless.

Dickinson (1987) in his well-regarded manual on ‘self-instruction in language learning’ makes a broad distinction between ‘learner-centred’ and ‘material-centred’ approaches. Learner-centred approaches are characterised by modes which place greater responsibility on the learner to assess their own learning needs and to act upon these, while material-based approaches build the teacher’s role more deliberately into self-instructional resources. In the latter approach, resources are organised so that decision making and the management of the learning are predetermined to a greater degree. The model for the ‘materials’ approach is very much the language classroom. As Dickinson explains: ‘materials [in this mode] should ideally contain the help and information which a teacher would normally supply’ (p. 9).

The essay tutorial is based to a greater extent on the ‘materials’ approach to self-instruction. Our thinking on this issue was guided in part by equity considerations, believing that the online materials should be able to provide a fair alternative for those students, who for whatever reasons, would be unable to attend our face-to-face courses.
In the online tutorial, we therefore hoped to create an experience for students that would have the same value for them as participating in a university writing class.

Read the following essay topic from a sociology subject:

In the last 20 years, rates of divorce have risen significantly in Western countries. Critically analyse some of the different explanations given for this phenomenon. In your discussion you should consider what implications these explanations might have for social policy.

1. Which words or phrases do you think are particularly important in working out what the topic is about? Enter these into the text box below.

- rates of divorce have risen significantly
- critically analyse

The essay topic

In the last 20 years, rates of divorce have risen significantly in Western countries. Critically analyse some of the different explanations given for this phenomenon. In your discussion you should consider what implications these explanations might have for social policy.

Critically analyse ....

To critically analyse is a common instruction in essay topics. In broad terms, critically analyse means to assess the value of some entity with respect to its strengths and weaknesses. This entity may be a theory, a policy, an argument, a piece of research etc. In the case of this essay topic, what needs to be evaluated are the different explanations given for rising divorce.

Link from the next highlighted phrase above to find out its meaning in the context of the whole topic

Or, move to the next task

Task Different interpretations

Figure 3. Sample interactive task and feedback.
A key element in the design of self-instruction materials is the concept of ‘task’, derived in part from the move in recent years towards task-based learning (TBL) in language learning and in other fields. The task-based approach finds its rationale in the uncontroversial view that ‘learning takes place most effectively when students are actively involved, and in the context in which knowledge is to be used’ (Boud & Feletti, 1991, p. 6). Whilst the efficacy of this approach is undisputed, there is within the applied linguistics literature, some dispute about what the principal focus of language tasks should be. For some like Candlin (1987), tasks should always have a problem-solving element to them and be concerned primarily with issues of content. For others like Swales (1990), there is room within the approach for a focus on form, in particular those related to particular genre formations. Elsewhere, these latter activities have been referred to as ‘noticing tasks’ (Ellis, 1995).

In the essay writing tutorial we sought to make ‘task’ central to the design of the materials, not only believing this to be pedagogically appropriate, but recognising it also as an opportunity not to be missed with the new technology. We found the tutorial lent itself to the inclusion of both task-types - the ‘problem-solving’ and the ‘noticing’ kind - with the former relevant more to those sections concerned with the processes of essay writing and the latter relevant to those sections dealing with the written product (Figure 2).

PRINCIPLES OF WEB DESIGN

At the commencement of the SIF project, one area of pedagogy that was new to us was the design of instructional materials for a web environment. For directions here we relied on the array of design resources available on the web itself, including Jakob Nielsen’s comprehensive materials - Writing for the Web. Some of the key design issues that needed to be considered for the essay tutorial - discussed here briefly - were: screen readability; navigability and interactivity.3

Much is made in the web design literature of how screen reading differs from the reading of print - characterised more as scanning than reading. This has lead to the formulation of a number of stylistic strictures including the need to make one’s web texts considerably more succinct than they would be in a printed form; to use dotpointing to a greater extent; and to write in a more inductive style with summaries at the beginning of text sections. Despite some initial resistance to this type of stylistic adjustment - somehow at odds with the type of discursive forms we were seeking to teach - we were able, during the course of the project, to recognise these parameters as an opportunity to experiment with a less formal spoken-like instructional style, one more characteristic of classroom discourse.

A second important consideration was navigability. With the often complex hypertext structures of web resources, there is the potential, as commentators have pointed out, for a good deal of confusion and disorientation. As Foertsch (1995) explains: ‘the screen reader may have difficulty recalling items because the same retrieval cue is linked with too many pieces of information’. In the same way that students attending a series of essay writing sessions often need to know about the organisation of the syllabus (along with their progression through it), in the essay tutorial we needed to provide clear navigation signals to help users identify where in the tutorial’s macro-structure they were currently working. Following an early focus group session, we added a site map in response to student comments.

Whilst screen readability and navigability might be seen as problematic for the design of materials, the third area - interactivity - clearly offered immediate opportunities. In the interactive capabilities of web-based technology, we saw the opportunity to implement in a quite elaborate way some of the principles of task-based learning discussed above. The essay tutorial contains a variety of tasks with associated forms of feedback, including the following sample shown in Figures 3a and 3b. In this task students are asked to identify key words in a sample essay topic; they are then provided with teacherly feedback on their responses.

In the preceding discussion, we have outlined the more salient principles that informed the development of the essay materials. In summarising these, we can refer perhaps to a single overarching principle, one that functioned as the cornerstone for most design decisions for this tutorial - this was that the online tutorial should seek to simulate, as far as possible, the types of procedures, materials and interactions that occur in the classroom. But herein, we suggest, lies a problem. To understand why this otherwise sound approach should be problematic, we need to consider the special characteristics of the main technological tool used for the tutorial - hypertext.

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DIFFERENCES BETWEEN TEXT AND HYPERTEXT

Of the various developments in online technologies over the past decade hypertext is regarded by many as the most significant. For a number of writers, hypertextuality is not simply an alternative way of organising a text, but a fundamentally different mode of communication, one which is thought to be creating a new set of ‘literacy practices’ (Snyder, 1996). In line with this, Bolter (1991) suggests - somewhat extravagantly- that we are living in the final days of one era - ‘the late age of print’ as he dubs it - and entering a new era of electronic literacy, with new ways of writing and reading and ultimately of thinking. Whilst we need to be a little circumspect about such grand predictions, it is clear that texts in an online environment are different in many respects from those in a traditional printed form and that understanding these differences is necessary if our efforts to bring language and learning activities online are to be successful.

As a technology, hypertext is not conceptually complex - simply ‘a structure composed of blocks of texts connected by an electronic link’ (Snyder, 1996, p. x). This feature, however, has an important effect on the way that texts are structured - both in terms of their authoring and especially in terms of their reading. The main difference between print and hypertext modes, as characterised in the literature, is between a ‘linear, hierarchical and narrative’ structure on the one hand, and a ‘lateral, rhizomic and hypernarrative’ structure on the other (Burbules, 1997). In printed text, the flow of ideas is broadly a linear one, constructed by the paradigmatic choices made by the writer in the composing process. This linearity is manifest in the various structural units of the text - in the movement from one sentence to the next, from one paragraph to the next, from one chapter to the next and so on. Whilst a reader may choose not to read a printed text in exactly the same linear manner in which it is realised - indeed this type of reading may only apply to certain genres of printed text - it is reasonable to say that the broad linear narrative of introduction-middle-conclusion is a text’s unmarked structure. In the terminology of computing, the default position for the reader is ‘to continue reading on’.

In a hypertext, by contrast, text structure is considerably freer for the reader. On encountering a link, a reader must make a choice between activating or ignoring it. Once a link has been activated, there is then a further choice - whether to return subsequently to the previous screen with its associated set of additional links, or to pursue the orientation provided by the new screen with a whole new set of potential links. The processes of interacting with a hypertext mean that a text’s structure is effectively constructed in its reading. As Corbel (1997) states:

> With hypertexts readers create the text, or a version of it as they go along. It has been suggested that rather than referring to readers and writers of texts, we should talk only about users of electronic texts (p. 119).

In an educational context, the student working with hypertext is a more active agent. Although the broad learning framework will be shaped by the teacher-designer, individual students will make their own choices about how they engage with materials. They can choose which sections of the materials they will work with, how quickly or slowly they will work with them and so on, all involving moment-to-moment choices different from those that relate to the print medium.

A number of terms are used to characterise the readerly structure of hypertext. In contrast to the ‘linearity’ of print, the reader’s experience of hypertext is said to be ‘lateral’, involving not an orderly vertical movement through text, but a random horizontal movement across texts. Similarly, whereas printed texts are said to be organised hierarchically, the structure of hypertexts is seen as more arbitrary or ‘rhizomic’ (root-like). A final distinction is between ‘narrative’ and ‘hypernarrative’, the latter involving, as Kaplan and Moulthrop (1991) describe it, ‘not a vectoring of the reader toward a single closure or solution, but enabling a multitude of outcomes’ (p. 13). In Figure 4 below we represent in tabular form a number of the contrasts outlined above, along with several others discussed later in the paper. For us, these differences are significant, and need to be a consideration in the design of web-based language and learning materials.
Reflecting on the essay writing tutorial, it is for us clearly more rooted in the linear structures of printed text. This is not altogether surprising, given the materials are concerned primarily with instructing students in a range of print-literacy skills. Nevertheless, it is interesting to understand from whence this linearity derives, and whether there might be other ways of constructing the pedagogy. One source of linearity is the tutorial’s narrative of classroom discourse. As mentioned earlier, the overarching design principle was to simulate, as far as possible, the learning interactions of classroom teaching. As was also explained, much of the ordering of the material was derived from specific essay writing courses we have taught in face-to-face modes as part of the overall program of our centre. Artefacts from the classroom can be seen, for example, in the principled movement in the web materials from a discussion of writing processes to an analysis of written products (see Figure 5). A problem, however, with this approach is that it tends to impose the hierarchies and ordering of a teacher’s programmed curriculum on to what will be in practice a randomly-created curriculum of the web user. This attempt to direct users’ interactions with the materials is evidenced in the recommendation to students on the opening screen ‘to work sequentially through each of the sections of tutorials’ (see Figure 1). But whilst students are enjoined to engage linearly, the technology itself encourages a more lateral engagement. As Lanham (1993, p. 133) suggests, hypertext-based learning resources ‘stand at odds with our heretofore unquestioned assumption that the curriculum ought to be linear, if it possibly could’.

THE PROBLEM OF STRUCTURE IN THE ESSAY WRITING TUTORIAL

<table>
<thead>
<tr>
<th>TRADITIONAL PRINT TEXT</th>
<th>COMPUTER HYPertext</th>
</tr>
</thead>
<tbody>
<tr>
<td>Linear, hierarchical, narrative structure</td>
<td>Lateral, rhizomic, hypernarrative structure</td>
</tr>
<tr>
<td>Author/teacher creates structure of text</td>
<td>Reader/learner creates structure of text</td>
</tr>
<tr>
<td>Structure is prescribed</td>
<td>Structure is arbitrary</td>
</tr>
<tr>
<td>Unmarked structure: introduction-middle-conclusion</td>
<td>Unmarked structure: entry point-hyperlinked screens</td>
</tr>
<tr>
<td>Text as product - fixed, permanent, bounded</td>
<td>Text as process - mutable, unstable, open</td>
</tr>
<tr>
<td>Unified, globally coherent - low modularity,</td>
<td>Fragmented, locally coherent - high modularity</td>
</tr>
<tr>
<td>Reading as progression</td>
<td>Reading as digression</td>
</tr>
<tr>
<td>Conclusion</td>
<td>Abandonment</td>
</tr>
</tbody>
</table>

Figure 4. Some differences identified in the literature between text and hypertext.
The other narrative structure at work is the writing process itself. Although, there was an attempt to depict this in a 'recursive' manner, the broad effect again is a linearity, derived from the chronologies of researching and writing an essay. This linear structure can be seen for example in the Table of Contents of the tutorial (Figure 5), with an implicit circumscription of the engagement from top to bottom. Again, however, there is arguably an element of disjunction between the technology and the text - a student is able to move upward or even randomly through the sections of the tutorial, but in such a reading, elements of the text's internal coherence is lost. For example, an exercise that requires students to comment on the relevance of a set of reading passages (see Figure 5, 4.1) will be problematic if students do not first engage closely with the essay topic in a preceding exercise (see Figure 5, 2.1).

In understanding the problems of structure in the essay materials, we can refer to a useful distinction drawn by Balestri (1988) between writing for 'hardcopy' and writing for 'softcopy'. For Balestri, hardcopy is a type of writing geared towards the printer. In this mode, the computer is used primarily as an electronic typewriter to create fixed, linear paper text. Softcopy on the other hand is writing that is designed to exist on the screen only - not to be printed, but 'displayed', as Snyder (1996) suggests. Softcopy, according to Balestri, is a departure from a static and product-centred conception of writing to one that is dynamic, and process-centred. For Bolter (1992), a softcopy electronic text is 'fluid, adjustable right up to the moment of reading. Indeed [it] only exists in the act of reading' (p. 20).

The essay writing tutorial, it must be conceded, bears more of the qualities of hardcopy than softcopy. Indeed, in the instructions on the introductory screen (Figure 1), students are given the option of printing out the materials.
and working from a ‘hardcopy’. In terms of structure, there is not much to distinguish between the two versions. Our ongoing evaluation of the overall project has only recently commenced and is expected to take in a range of evaluative methodologies. One type of evaluation that we think worth pursuing, however, is learners’ responses to working in the two different environments and whether they have a preference for one of these. Initial student feedback on the web version has been mainly positive, half the group wanting to work with a combination of online learning and printed essay. It is possible, however, that the print version of the tutorial - because its linearity is more in keeping with the writing processes being taught - is more likely to develop the desired print literacy skills.

A WAY FORWARD?

The problems we have identified in the essay writing materials arise, in short, from an attempt to apply the norms of print culture to an online context. In this section we will discuss briefly an alternative design approach and consider the extent to which it might be applied to the essay writing tutorial. Bernhardt (1993) in a useful piece - The shape of text to come: The texture of print on screens - outlines in a systematic way a number of ‘dimensions of variation’ between paper and screen texts. The ‘dimension’ that has particular relevance to the present discussion is what he calls ‘modularity’. All texts, Bernhardt asserts, are modular to some extent in that they are composed of other texts - for example, books are made up of chapters, newspapers of articles and so on. The movement from paper to screen, however, encourages a far greater degree of modularisation. In screen text, the computer window becomes the ‘structural unit of prose’; this unit or module, Bernhardt argues, needs to be considerably more self-contained than in a printed text.

Each module must to some extent stand on its own, interpretable without close logical cohesion with other screens. The writer must assume that a reader can arrive at a given screen from practically anywhere, so there can be no assumption that a reader has built up a model of the logical relations of the text from processing pages in a linear order (p. 160).

In the terminology of linguistic cohesion (Halliday & Hasan, 1976), we can say that a screen hypertext is of necessity, more ‘locally anaphoric’, in contrast anaphora in a printed text, is considerably more extensive (e.g. ‘In the previous section/chapter/unit, it was shown that ...’).

In our regular surveying of language and learning materials across the world wide web, we are aware of just one resource that embraces thoroughly this principle of ‘modularity’ - this is the ‘kibbitzer’ material of Tim Johns from the English for International Students Unit, University of Birmingham (http://web.bham.ac.uk/johnstjl/timeap3.htm). The term ‘kibbitzer’ (from central European chess culture at the turn of the century) refers to a person who did not play chess, but rather watched and commented on games in progress. In his web materials, Johns is not a ‘kibbitzer’ of chess, but of the sorts of language problems observed in students’ work in one-to-one consultations. Provided on the site is a collection of discrete, ‘stand alone’ modules on some of these language points (lexical, syntactic and discoursal) including for example: expressing academic modesty (Kibbitzer #32, see Figure 6); managing transitions in a text (Kibbitzer #36); distinguishing authorial voice in an essay (Kibbitzer #56).

The point about Johns’ materials is that they are produced in a random and continuous way and are accessed by readers in the same manner. As Nicholas Groom, a lecturer at the Institute of Education London and regular user of the material, has commented:

What is distinctive about the site is its randomness … there is no syllabus, no ordering of points from easy to difficult, no macro-view - just a range of material that students and teachers can make their own sense of (personal communication; emphasis added).
The following revision is taken from an Abstract by a Thai-speaking postgraduate student of chemical engineering:

<table>
<thead>
<tr>
<th>Original</th>
<th>Revision</th>
</tr>
</thead>
<tbody>
<tr>
<td>In conclusion, this study is a useful first step in the development of biodegradation techniques.</td>
<td>In conclusion, it is hoped that this study may be a useful contribution to the development of biodegradation techniques.</td>
</tr>
</tbody>
</table>

Two principles of Academic Modesty are broken by the original drafting:

1. Do not praise your own work. As an academic writer, you may describe the work of other people as valuable, useful, interesting etc.: however, you may not describe your own work as valuable, useful, interesting etc. The closest you may come to such a statement is to express the hope that the work is valuable, useful, interesting, etc. (in the judgement is for others to make, not you).

2. Show that you understand the limitations of your work. In the present case, even I, a non-expert, know that previous work has been done on biodegradation techniques: so clearly this cannot be a "first step" for science (though it was, clearly, a first step for the student).

Figure 6. Sample kibbitzer 'Academic modesty'.
http://webbham.ac.uk/johnstf/revis032.htm

The modular structure of the 'kibbitzers' can be contrasted with the linearity of the essay writing tutorial (see Figure 7a and b). These contrasting structures also imply different modes of engagement - in the case of the 'kibbitzer' material, this engagement is controlled essentially by the reader/student; in the essay tutorial the preferred mode of control is with the author/teacher.

The question then is whether an intentionally comprehensive treatment of a skill such as essay writing could be adapted to the web in a manner similar to Johns' highly modularised materials. The answer is that it may be possible, though our discussion here of how this might happen can be in hypothetical terms only. Drawing on the configuration shown in Figure 7b, the design model envisaged would have the 'entry point' acting as an anchor for all subsequent sections. Cohesion would exist strongly between the entry point and each subsection, but weakly, if at all, between different subsections. Such a configuration, one imagines, would necessitate including a fair amount of material at the entry point (including for example the essay topic and sample essay). The subsections would then provide short and discrete coverage of a range of areas (e.g. reading for an essay, citations in an essay, writing an introduction etc.) for students to access whichever way they choose.

It is difficult to know whether out of such a structure, it would be possible to fashion a useful resource for students. One wonders, for example, whether the sorts of dangers of modularisation suggested by Bernhardt (1993) might apply here - namely that the resource would become excessively "fragmented", and be inimical to any 'extended and engrossing transaction'. However, any judgements in this regard can only emerge out of processes of experimentation and evaluation.

Figure 7a). Essay writing tutorial.
Tim Moore and Rosemary Clerehan

THE SHAPE OF ESSAYS TO COME?

Along with considering how the teaching of essay writing needs to be adapted to online technologies, we also need to consider how the object of our instruction - the essay itself - is likely to be adapted. In this area, there are already a few intimations of change. At our university, we are becoming aware of writing assignments that prescribe an 'html approach'. For example, in many computing subjects, students are required to submit electronically and to include hyperlinks in their work, particularly for citation purposes. This practice is being reported increasingly at other Australian universities (see Garton, 1997, for an early example).

On the world wide web, the most thoroughly hypertextual essay sample we are aware of is a provocative piece - *E-literacies: Politexts, Hypertexts, and Other Cultural Formations* (http://raven.ubalt.edu/staff/kaplan/lit/) - written (constructed) by Nancy Kaplan, a former literature lecturer, now 'communications designer' at the University of Baltimore. Kaplan's text, based on a conference address heralding the advent of electronic literacies, is made up of a labyrinth of connections - 'approximately 35 nodes and 180 links' on her estimate. The essay exhibits a number of the features of hypertext discussed above, distinguishing it so thoroughly from a traditional essay. First of all, its structure is non-linear and uncircumscribed for the reader. Kaplan makes much of this, revelling in the fact that readers will create their own version of the essay in an essentially random fashion:

There are a number of ways to read this essay, none of which will exactly replicate the text of the talk I gave. Take chances with your choices.

Another notable feature of *E-literacies* is its ongoing nature - a permanent 'work in progress', as Kaplan describes it. The author refers to a number of iterations of the essay, posted on the web at approximately six month intervals. The conclusion of the essay, if indeed one can be said to exist, is 'watch this space'.

*E-literacies* is also interesting for the variety of functions given to the hyperlinks used. Some serve as extended digressions, in the manner of a footnote in a traditional print text; others are elaborated citations which not only refer to full bibliographical information, but also bring up chunks of the original cited text. Another function, perhaps the most interesting, is the participation of other writers in the essay, making it a genuinely dialogic discourse. For example, in the essay, Kaplan recounts how in response to an earlier iteration, an adversary in the computer literacy debate, Myron Tuman, takes issue with Kaplan's representation of his views. Tuman is then granted his own hyperlinked 'writing space' on the site. A spirited, at times acrimonious, dialogue ensues, all within the framework of 'an essay'.

*E-literacies* is an intriguing but ultimately frustrating document. There is the feeling that one is doing a good deal of navigating around ideas, without ever quite getting to the nub of them. Tuman is not being unfair when he asserts in his contribution that:

[the essay] confirms some of my worst suspicions concerning hypertext: that it is ideally suited for the storing and accessing of diverse information, not for sustained, critical analysis. It takes
considerable energy - and anxiety - to reach the point of feeling that one has finished reading the essay, or enough of it to feel as if one can fairly comment on it.

It is worth noting, too, that it is very hard to imagine a hypertext essay as structurally intricate as Kaplan’s *E-literacies* being written on any subject other than ‘the nature of hypertext’ itself. Whilst Kaplan and other devotees might marvel at this perfect semiotic fit in the work, there is an element of gimmickry here. One wonders in fact whether this extreme example of hypertextuality will in time be seen not so much as a milestone in the development of ‘e-literacies’, but as a mere artefact from the polemic of the ‘late age of print’.

But these reservations aside, one has to acknowledge that out of the new online environment, new genres and textual formations will emerge. Snyder (1996) suggests for example that there is evidence of the once archetypal structures of ‘narrative’ and ‘exposition’ being superseded by a much looser rhetorical form - ‘collage’. Kress (1997) points to a more fundamental development - a hegemonic struggle, as he sees it, between the verbal and the visual. For Kress, the outcome of this struggle is not too difficult to predict:

The screen is the new space of representation. How it will be organised - as a largely visual entity or as a largely linguistic entity - will have far-reaching repercussions. It is too early to know, though my money is on the visual (p. 72).

Clearly, as language and learning practitioners, we need to keep a watching brief on these sorts of developments and ensure that in our work we do not seek to rely too much on past textual certainties. For Tuman (1992, p. 5), in a less combative mood, the question is not whether the essay will disappear altogether, but whether it may become ‘marginal to the central project of literacy education’. For the more hyperbolic Lanham (1993), if we fail to keep abreast of developments and do not embrace the new online literacy, we run the risk of teaching our students to be what he pejoratively calls ‘the clerks of a forgotten mood’ (p. 136).

CONCLUSION

As the content of Kaplan’s *E-literacies* suggests, there is a good deal of fractiousness in discussions about the new communication technologies and their likely impact on literacy practices and pedagogy. On one side of the debate are the ‘brave new worlders’, including Lanham, Bolter and Kaplan, who see a great liberating potential in hypertext - a potential to create a new literary culture that is ‘dynamic rather than static, open-ended rather than self-contained, participatory rather than authorial’ (Lanham, 1993, p. 132). On the other side are the ‘techno-skeptics’ including Birkerts (1994) and Postman (1993) and sometimes Tuman (1992), who see naught but ill coming of it. Among the concerns of this latter group is the fear that the revered practices of intensive and contemplative reading will be supplanted by some kind of superficial variant - ‘texting’ or ‘word-piloting’, as Birkerts scornfully suggests (p. 164). As in most debates of this nature, there is between these polarities a broad middle ground, one that is happily occupied by teaching practitioners like ourselves who must find sensible ways of dealing with these exigencies. This position has been described by Snyder (1996) as a ‘post-critical’ one, involving on the one hand an acceptance that the new communication technologies are ineluctably a part of our educational future; but on the other a recognition that the technology needs to be understood fully and with due circumspection to ensure it is used in ways that enhance - and do not derogate - our broad educational objectives.

For ‘middle-grounders’ attempting to negotiate the types of changes occurring in this ‘late-age of print’, the prudent approach we believe is not to think in ‘all or nothing’ terms, of one mode of literacy or another. As Bernhardt (1993, p. 163) sensibly suggests about the future of reading:

> [We] will continue to engage with extended, lengthy, integrated text for certain purposes, under certain conditions. And all of us will be exposed to increasing quantities of textbits - bits that are skimmed and scanned, compiled and com-positioned ... [emphasis added].

Applying this type of thinking to language and learning work, we need to be ever mindful of our ‘certain purposes’ and our ‘certain conditions’ and to adapt our practices and materials accordingly. This suggests to us several broad principles that might be applied to the design of web materials. The first is that we should seek to understand as fully as possible the nature of the technology we are looking to employ, and importantly to understand the implications it has for the key elements of our enterprise - that is for language, for teaching, and for learning. This we would suggest involves, among other things, avoiding being too easily seduced by the more
surface and ephemeral properties of the technology; but to look beyond these and to try to grasp what types of interactions are likely to be created and to what ends. A second principle, which follows on from the first, is the need to be judicious about the design of materials and the selection of the media in which they are to be presented. As was suggested in our discussion of the essay writing tutorial, an important objective should always be to achieve a good fit between technology and text, realising also that these are not separate entities but are inextricably related. And finally, we think it important not to forget about one of the great non-hypertextual capabilities of the computer – namely its ability to transfer, in an instant, printable text from one place to another. In other words, we must allow for the possibility that ‘for certain purposes’ and ‘under certain conditions’, Balestri’s ‘writing for hardcopy’ will be the optimal design solution. Thus, whilst we need to engage with and embrace the new online literacy, there will be times when we will also do well to remain the thoughtful servants of the once ‘great age of print’.

ENDNOTES

1 For broad coverage of the overall project, including the pedagogical and design rationales for the online tutorials, see Clerehan, Turnbull, Vance, Brown & Moore (1999).
2 A future paper will analyse the student evaluation of the tutorials.
3 For a more detailed discussion of design issues for the project, see Clerehan, Turnbull, Vance, Brown, & Moore (1999).

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