Academic Writing:
Process and Product

Milestones in ELT

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The British Council was established in 1934, and one of our main aims has always been to promote the wider knowledge of the English language. Over the last 75 years, we have issued many important publications that have set the agenda for ELT professionals, often in partnership with other organisations and institutions.

As part of its 75th anniversary celebrations, we are re-launching a selection of those publications online. Many of the messages and ideas are just as relevant today as they were when first published. We believe they are also useful historical sources through which colleagues can see how our profession has developed over the years.

Academic Writing: Process and Product

This volume, published in 1988, consists of papers from the eponymous University of Reading Conference of 1985. The choice of Academic Writing as a theme was designed to counteract the perception that it was the 'Cinderella of EAP', and the Conference aimed to enable practitioners to benefit from recent research in the teaching of writing from outside ELT as well as within the field. The papers dealt individually with different aspects of academic writing and its teaching, including that of essay writing, project writing, scientific writing, writing for examinations, and article writing. Interaction between learners and teachers, and between subject and language teachers are discussed. The publication carries 17 contributions, including the introduction, and offers a rich variety of experiences and approaches.

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Introduction

This volume comprises the selected papers of the 1985 Selmous Conference: Academic Writing: Process and Product, held at the University of Reading, 29th-30th March, 1985.

A brief explanation of what Selmous is, first of all. Originally standing for 'Special English Language Materials for Overseas English Students', it is an 'Association of Lecturers and Tutors in English to Overseas Students', working at the tertiary level of education and involved in pre-sessional and in-sessional language courses. Selmous members are thus involved in ESP, more particularly EAP — which is often seen as being mainly concerned with study skills, but which also deals with academic reading and writing, as well as lecture listening, seminar skills and using the library. This EAP may be more or less general — with a common syllabus for students from all disciplines — or more subject-specific with students taught in subject-specific groups.

Every two years, the Selmous association holds an open conference. It was decided to make the theme of the 1985 conference Academic Writing, partly because this was seen as the Cinderella of EAP and in need of encouragement, partly because it was perceived that new ideas about writing in general were beginning to circulate and it was felt that these should be explored. Thus although the title of the conference refers to academic writing, consideration of the non-academic was not ruled out. Indeed there was a feeling that much can be learned both from non-academic writing, and from outside the domain of ESP. Further, it was felt that the teacher of non-native speaker students can benefit from the occasional scrutiny of what takes place with native-speaker students and children; and that the ESP teacher can benefit from a look at what subject specialists (native and non-native) do and what they expect.

'Process and Product' in the title refers to a current concern in ESP generally: a feeling that we should turn away from our preoccupation with the end product of a course of instruction and look instead at the psychological, social and intellectual processes that must be gone through on the way to that product. A process-oriented approach need not be confined to writing, of course, but recent research in the teaching of writing (from outside ESP and TEFL/TESOL) has focused on the study of process.

This relates to the widespread current interest in the learner and what he/she does and brings to the clâssroom. We shall see this interest reflected in the present volume.

Ronald V White's overview 'Academic Writing: Process and Product' sets the scene for the volume by charting the moves from a product-oriented approach to the teaching of writing to a process-oriented one, focusing on relevant research from mother-tongue education. Cyril Weir then picks up the theme of comparison of the performances of native and non-native speaker students and considers also the vital factor of the criteria for assessment used by the subject specialist lecturers: the final arbiters of the merit (or otherwise) of our students' writing.

Following this, several papers explore the topic of writing for examinations. Liz Hamp-Lyons and Tony Dudley-Evans consider the structure and meaning of examination questions and what implications exist for the writing of examination answers. Tony Lynch and Pat Howe review their own experiences with the teaching of examination answer writing. R R Jordan and Teresa O'Brien then look at some of the examination answers produced by students and relate these to the evaluation of subject tutors and of the students themselves.

The next four papers explore the teaching of other written genres, particularly essays and projects. Common themes are the need to give students greater personal involvement in what they are doing and greater autonomy. A point of discussion is the degree to which students require — and language teachers can provide — truly subject-specialist topics.

Following this, Joan Allwright explains an approach she has found valuable as part of the process of feedback and revision of writing. Evaluation and feedback to students form the topics of the next paper which derives from a panel discussion among a group of language teachers and one subject tutor, in which each member of the panel gave his or her comments on the same piece of student writing (reprinted in the appendix).

Finally in this more directly pedagogically oriented part of the volume, Florence Davies makes a number of suggestions pertaining to syllabus design for the teaching of writing. She echoes several concerns expressed elsewhere in this volume: the importance of genre study and the study of the language above the level of the sentence; and the importance of reading to writing: the writer, she points out, writes as an erstwhile reader and is writing to be read.

The final two papers consider the genres of the research proposal and the academic article and while both authors have been, and are, involved in language teaching, they are writing here more from the perspective of the sociologist and social psychologist. Their work reminds us that writing is a social act and that some of the constraints on it are not primarily linguistic, but are social.

A number of common themes run through the papers. A notable one is that the conventions of academic writing (indeed of any writing) form part of a game in which the writer is involved in a process of negotiation

with him/herself and with his/her potential assessor in order to create the final, often much revised, product. In this game the native and the non-native student are in the same situation and it is thus fruitful to explore the processes and the products of either in order to gain insights for the teaching of the other. Linguistic forms are not to be neglected, but perhaps relegated to the bottom of the list of priorities, with questions of genre and overall communicative intent at the top. Our pedagogic approach may be bottom up, top down, or perhaps more usefully a combination of these.

An important concern for ESP is the degree to which features at both the top and bottom ends of the scale are different for different subject specialisations. This issue is not fully resolved in the present volume, but there is a general consensus that it is vital for the language teacher and the subject specialist teacher to work together more. This is already happening at a number of institutions. It is our hope that this will continue.

Academic writing: Process and product

Ronald V White

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'I would not write — would not need to write — if I knew what I was going to say before I said it.'

(Donald M. Murray 1968)

'Education is concerned with unexpected outcomes.'

(Stenhouse 1975)

Introduction

Donald M Murray distils the problem facing any writer, including the present one, when faced with a writing assignment. In one sense I know what I have to write, just as the student faced with an assignment knows, sometimes in quite specific terms, what is required. And yet it is only by engaging in the process of writing itself that writers ultimately discover what it is that they want to say. Indeed, the final product may be a surprise. Similarly, education should arrive at unpredicted destinations. Thus, it would seem that both writing and learning are acts of discovery and that writing is potentially a powerful educational tool. It is with these thoughts in mind that both of us, reader and writer, may now embark upon our journey of discovery.

On this journey I propose to go by way of writing in general and the application of current theories of writing processes, to applications to ELT, and thence to ESP/EAP. Part of the journey will be through territory seemingly outside the domain of ESP. There is a good reason for this: much of the research into writing processes has either been within the American tradition of freshman rhetoric, or, more recently, has been concerned with children writing in English as a native language. Specialists in ELT writing have now become aware of the significance of this research for the development of writing skills among non-native writers in English (witness, for example, Freedman, Pringle and Yalden (1983), Raimes (1985), and Zamel (1976), (1984)). It is from this body of work on native English writing and the parallel research in ELT that we may hope to discover principles and practices relevant to EAP.

Predicted outcomes: The role of models

Until the advent of the communicative approach, language teaching was largely pre-occupied with the predictable, and EAP as a branch of ESP was likewise pre-occupied with leading the learner towards pre-specified objectives. This approach is exemplified in the work of Munby (1978) and others, in which learners' needs are carefully specified, and the work of the materials designer and teacher is to provide the means of enabling these needs to be realized.

Such a means-to-an-end basis for designing educational programmes (including ELT syllabuses) has come to be questioned, and recent thinking emphasizes the processes of discovery, adaptation and enquiry, based on the belief that education is concerned with unexpected rather than predicted outcomes. This view is especially significant when we come to look at the process approaches to the teaching of writing in the context of EAP.

Traditionally, the teaching of writing was language focused. Viewed essentially as secondary and in some senses inferior to the spoken language, writing was used as a means of reinforcing language which had already been dealt with in spoken form. The emphasis was on correctness and the adherence to and copying of models, both of language and text. Indeed, the provision of a model was seen as being very important. The teacher or the textbook was the source of language, and a good model was crucial.

This model-based approach was transferred to the more recent interest in rhetorical rather than language structure in written discourse. With such interest, there evolved materials with a focus on the organization of rhetorical acts and the manipulation of cohesive features. This explains the plethora of exercises in which the student is required either to add logical connectors to existing sentences or to join sentences with them.

In both the language-based and rhetorically focused approaches to the teaching of writing, the same basic procedural model is followed, viz.

Study the model ⟶ Manipulate ⟶ Produce a
elements parallel text
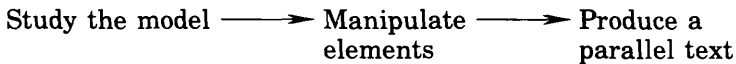
Among the characteristics of this parallel writing model are: the model text is taken as the starting point; the text is analyzed and studied for features of form, content and organization; linguistic items and rhetorical patterns are manipulated; then new input is provided as a basis for a parallel writing task. Ultimately, students may be required to produce a parallel text using their own information. (See White (1980) for a representative account of such a procedure.)

Within EAP such a model-based approach remains popular for one very good reason — much EAP writing is very product-oriented, since the conventions governing the organization and expression of ideas are very tight. Thus the learner has to become thoroughly familiarized with these conventions and must learn to operate within them. It would seem to

make sense, therefore, to adopt a model-based tradition when teaching students such conventions.

The concern in such an approach is with the organization of the text and the correct use of form. Obviously, the role of the model is important, as it provides an exemplar which it is the learner's task to replicate. Not only does the model come first in the teaching sequence, it also shows a finished text. In other words, the focus right from the start is on the product, which is, of course, someone else's writing. What the model doesn't demonstrate is how the original writer arrived at that particular product. In other words, it gives no indication of process.

Escholz (1980) and Watson (1982) have criticized the model-based approach both for mother-tongue teaching and for ELT. They point out that models tend to be too long and too remote from the students' own writing problems, while the traditional sequence of activities — Read, Analyze, Write — involves the questionable 'assumption that advance diagnosis of writing problems promotes learning'. Furthermore, such detailed analytical work encourages students to 'see form as a mold into which content is somehow poured', resulting in 'mindless copies of a particular organizational plan or style.' In general, Escholz views the imitation of models as being 'stultifying and inhibiting writers rather than empowering them or liberating them.' (1980:24)

Flowers and Hayes (1977), whose own model of writing we shall come to later, have also criticized this model-based approach to writing.

> In the midst of the composition renaissance, an odd fact stands out: our basic methods of teaching writing are the same ones English academics were using in the seventeenth century. We still undertake to teach people to write primarily by dissecting and describing a completed piece of writing. The student is (a) exposed to the formal descriptive categories of rhetoric (modes of argument — definition, cause and effect, etc. — and modes of discourse — description, persuasion, etc.) (b) offered good examples (usually professional ones) and bad examples (usually his/her own) and (c) encouraged to absorb the features of a socially approved style, with emphasis on grammar and usage. We help our students analyze the product, but we leave the process of writing up to inspiration.

Unpredicted outcomes: A process model
This concern with anticipated outcomes — with mimicking the model — has been challenged by the communicative approach in ELT, which takes as one of its premises that language teaching should be concerned with what the learner wants to say. The learner's intention or purpose becomes of paramount concern, and the learner is seen to have a role as initiator, not a mere responder or a mimicker of other people's intentions and expression. From being imprisoned by an obsession with correct form, the learner is now liberated by being encouraged to communicate by all means possible. Fluency rather than accuracy has become the order of the day, although it is as well to recall that such an approach

does not advocate the total abandoning of traditional concerns with form.

This change in priorities has led to the evolution of a new procedural model, which may be summarized thus:

Task specified $\longrightarrow$ Communicate $\longrightarrow$ Study $\longrightarrow$ Practise $\qquad \longrightarrow$ Recycle
as far as model as necessary
possible

In such a model, sometimes called the 'Deep End Strategy', learners make use of what they already know and what they can already do. Furthermore, the focus on task first means that neither the process nor the outcome is predetermined, while the introduction of the model after an attempt at communciation has been made places the model in a secondary position. It is not there to be mimicked, merely to be drawn upon as a resource.
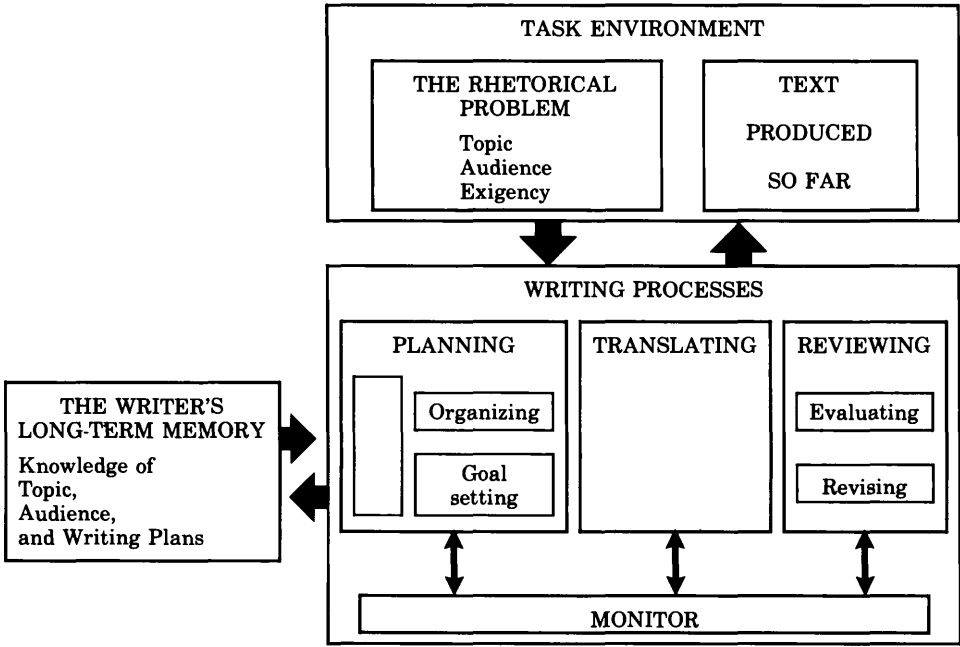
Writing research

The growing dissatisfaction with model-based approaches to the teaching of writing had coincided with a growing interest in discovering how writers actually do write. What, in short, are the processes which go on when a writer is composing? Unfortunately, 'process cannot be inferred from product any more than a pig can be inferred from a sausage' (Murray, 1980:3), so recourse has had to be made to other ways of finding out what is going on.

This has led to a number of studies based on protocol analysis as well as observation of how good and bad writers actually write. Apart from the work of Emig (1971) and Britton (1975), much of this work has been done with university students producing academic writing, and it is, therefore, directly relevant to our own interests. We should note, though, that protocol studies, which depend on subjective, self report data, are a somewhat controversial area, and the Flowers and Hayes studies have been subject to very pointed criticism by Cooper and Holzman (1983) on both theoretical and methodological grounds.

One of the first conclusions to be reached by such protocol-based research is that a linear model of writing is both inappropriate and unhelpful, since writing appears to be a highly recursive process. Furthermore, as writing is essentially a thinking process, reference to cognitive theories holds out some hope of providing a richer account of the writing process than a view which explains it in terms of habit reinforcement.

Of particular interest is the concept of schemata, originally proposed by Bartlett (1932) in his accounts of memory. Schemata are essentially expectations which enable us to understand and interpret the world. When we gain new information it is either related to existing schemata and assimilated by them or the schemata themselves expand to accommodate the new data. Rich schemata will enable us to develop more varied and adaptive behaviour and enable us to make sense of reality more easily.

The schemata are stored by — or are one component of — long term memory, upon which the writer draws during the writing process. In their model of the writing process, (see below) Flowers and Hayes (1977, 1980, 1981) incorporate long term memory as one of the three elements. The other two are the task environment and the writing process.

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┌──────────────────────────────────────────────────────────┐
│                    TASK ENVIRONMENT                        │
│   ┌───────────────────────┐   ┌─────────────────────┐      │
│   │   THE RHETORICAL      │   │        TEXT         │      │
│   │     PROBLEM           │   │                     │      │
│   │   Topic               │   │     PRODUCED        │      │
│   │   Audience            │   │                     │      │
│   │   Exigency            │   │      SO FAR         │      │
│   └───────────────────────┘   └─────────────────────┘      │
└──────────────────────────────────────────────────────────┘

┌──────────────────────────────────────────────────────────┐
│                   WRITING PROCESSES                        │
│  ┌────────────────┐ ┌──────────────┐ ┌─────────────────┐   │
│  │   PLANNING     │ │ TRANSLATING  │ │   REVIEWING     │   │
│  │   ┌──────────┐ │ │              │ │ ┌─────────────┐ │   │
│  │   │Organizing│ │ │              │ │ │ Evaluating  │ │   │
│  │   └──────────┘ │ │              │ │ └─────────────┘ │   │
│  │   ┌──────────┐ │ │              │ │ ┌─────────────┐ │   │
│  │   │   Goal   │ │ │              │ │ │  Revising   │ │   │
│  │   │ setting  │ │ │              │ │ └─────────────┘ │   │
│  │   └──────────┘ │ │              │ │                 │   │
│  └────────────────┘ └──────────────┘ └─────────────────┘   │
│  ┌──────────────────────────────────────────────────────┐  │
│  │                     MONITOR                          │  │
│  └──────────────────────────────────────────────────────┘  │
└──────────────────────────────────────────────────────────┘

┌───────────────────────┐
│   THE WRITER'S        │
│   LONG-TERM MEMORY    │
│   Knowledge of        │
│   Topic,              │
│   Audience,           │
│   and Writing Plans   │
└───────────────────────┘
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In explaining their model they say:

> The arrows indicate that *information* flows from one box or process to another; that is, knowledge about the writing assignment or knowledge from memory can be transferred or used in the *planning* process, and information from *planning* can flow back the other way. What the arrows *do not mean* is that such information flows in a predictable left to right circuit. This distinction is crucial because such a flow chart implies the very kind of stage model against which we wish to argue. One of the central premises of the cognitive process theory presented here is that writers are constantly, instant by instant, orchestrating a battery of cognitive processes as they integrate planning, remembering, writing and rereading. The multiple arrows, which are conventions in diagramming of this sort of model, are unfortunately only weak indications of the complex and active organization of thinking processes which our work attempts to model.
>
> (Flowers and Hayes, 1977,387)

Other writers also emphasize similarly complex interconnecting of elements and processes. Smith (1982: 118) says that

> Composition is not a matter of putting one word after another, or of translating successive ideas into words, but rather of building a structure (the text) from materials (the conventions) according to an incomplete and constantly changing plan (the specification of intentions).

And Smith, like so many other writers on writing, concludes that writing involves the discovery of meaning, of what it is that the writer wants to say. Indeed, Murray goes even further — he sees writing as taking on an existence of its own, and he talks about 'encouraging a piece of writing to find its own meaning.'

The model of the writing process that Flowers and Hayes have developed provides a framework for description and explanation. They also direct our attention to interesting areas of investigation, and it is to the research on writing that I will now turn. For the most part, I will deal with the good writer rather than with the bad writer. By implication, most of the things which the good writer does, the bad writer doesn't do. Also, for sake of convenience, it will be necessary to refer to stages as if they were separate entities, although as we have already seen, simultaneity and recursiveness are features of the writing process. I will review the field by taking a series of questions which cover most of the aspects of writing which are likely to be of concern to both teachers and learners.

What writers do

When looking at what writers do, we almost inevitably come first of all to the question, 'Do writers plan?' The answer is 'yes', but not generally in the form of detailed outlines or as a 'one off' process. As Flowers and Hayes (1981) have discovered and as Zamel (1982) in her more recent research confirms,

> planning is not a unitary stage, but a distinctive thinking process which writers use over and over again during composition.

Zamel's students spent a great deal of time thinking about the essay task at the outset, trying to figure out how to proceed. Stallard (1974) found that his good writer subjects also spent more time on pre-writing than the 'average' writers in his study. None of Stallard's students thought about form or organization of their papers during this pre-writing phase, but almost all of the good writers thought about the *purpose* of their paper.

Next, there is the question 'How do writers tackle the first draft?' The evidence seems to be that they usually deal with it with a sense of urgency and momentum, with little or no concern with accuracy of expression. The important thing seems to be to get ideas down on paper, with questions of organization and correction coming later.

If, then, first drafts are so rushed, writers must rewrite. And, indeed, this is the case. In fact, Murray has said that 'writing is rewriting' while Maimon et al., make it clear that 'successful papers are not written; they are rewritten.'

Rewriting is one thing; how to do it is another, and this is where learner writers appear to come unstuck. For instance, Sommers found that student writers saw revision as word-based — as cleaning up vocabulary. She observed that students lacked strategies for handling the larger elements in revision, or re-ordering lines of reasoning or asking questions about their purposes and readers. They tended to view their compositions in a linear way as a series of parts to be assembled.

Perl (1979) in her study of American student writers and Raimes (1985) in her study of foreign students have produced similar findings, which led the former to conclude that with less able students

> Editing intrudes so often and to such a degree that it breaks down the rhythms generated by thinking and writing. Premature editing can result in the writer losing track of ideas.

Furthermore, editing for such writers becomes primarily an exercise in error hunting.

What, then, do good writers do when they revise? In Stallard's study, the good student writers changed more words at a time — in other words, they didn't just change one or two words, but altered longer units, and they made many of the changes during the process of reading their papers at intervals during writing. Flowers and Hayes found that good writers described their primary objective when revising as finding the form or shape of their argument. Rewriting for them is a constant process. They are also concerned with their readership — they imagine a reader whose existence and expectations influence their revision process.

Indeed, Flowers and Hayes have drawn a useful distinction between *reader* based and *writer* based prose. They suggest that the first draft is *writer* based, being essentially egocentric. The ideas will be organized according to the constructs or schemata of the writer, since the ideas will have been encoded and stored and subsequently recalled according to the cognitive map of the writer, not the reader. What the writer does during revision is to turn the writer-based prose into reader-based prose by considering how the reader is to be affected by what is written.

During this revision process, writers may even conduct a conversation in which they react to their text as an audience. Zamel notes that

> These reactions to their texts, what Murray describes as 'a conversation between two workmen muttering to each other' seemed to enable the students to move on.

Good writers also show great variability in the application of the rereading and reviewing process. Sometimes they review one or two sentences, sometimes they reread whole paragraphs. Murray suggests that there is, in fact, no separation between reading and writing, which he characterizes by two combination verbs:

Writeread   Readwrite

Importantly, the good reader/writers distance themselves from what they have written, especially if there is an interval between drafting and

reading. As they read, the text takes on an independent life of its own, and

> the writer is constantly learning from the writing what it intends to say
> (Murray 1980:2)

Such reading seems to involve criticism, and as they read, writers evaluate their writing on all levels. Initially, the evaluation will be in terms of the global goals they have, but as they proceed, the evaluation will turn to local problems, such as the choice of words and syntax. The writer's purpose and audience will figure as important criteria in such evaluation.

Finally, writers seem to change direction and, if necessary, to abandon earlier ideas. In particular, they may reformulate the problem entirely, or discover new ones. Thus, revision is seen to be highly dynamic, multi-level and recursive, and

> Since writers are limited in what they can attend to during each cycle..., revision strategies help balance competing demands on attention. Thus, writers can concentrate on more than one objective at a time by developing strategies to sort out and organize their different concerns in successive cycles of revision.
> (Sommers op cit., 187)

Clearly, these successive cycles of revision are likely to be time consuming, and this brings us to the next question, 'How much time do writers spend on writing?' It seems that they spend most time on the first draft. Good writers also spend a lot more time on writing than less good writers. Stallard, for instance, found that his good writers spent on average over three times as much time on writing as the less good writers. He also found that the less good writers wrote more slowly than the others, at a rate of 8.73 words per minute compared with 13.47 words per minute for the good writers. So not only do good writers spend more time on writing, but they also work more quickly.

Is such speed and apparent facility accompanied by the incubation of ideas? The evidence here is that incubation seems to be an important part of writing. Good writers leave the text, put it 'on the back burner' and return to it later.

This brings us to the question of priorities: 'Do writers have a sense of priorities?' The answer is definitely affirmative. Zamel reports of her subjects that

> They all considered how to make meaning first, then how to order it, and finally how it can best be expressed. It should be kept in mind, however, that these considerations did not necessarily reflect the sequence of writing events, given the constant evaluation and formulation, but rather the writers' sense of priorities.
> (Zamel op cit., 180)

And what about the non-native writer?
Finally, with the exception of Zamel, all of the research has been with native language writers, so one feels bound to ask 'Is composing in a

second language a special problem?' Zamel, working with non-native speaking university students in the USA, concluded that her subjects did not view composing in a second language problematic in itself. Despite the fact that they did have individual difficulties with spelling and expression none of them viewed grammar and other mechanical considerations as areas of particular concern, although it should be noted that they were well beyond elementary level and, indeed, most of them would be classified as 'advanced' students of EFL.

Zamel suggests, rather tentatively, that there may be universals of writing:

> It seems that certain composing problems transcend language factors and are shared by both native and non-native speakers of English.
>
> (Zamel op cit. 168)

Since writing is viewed as a cognitive process, and since cognitive processes are, to an extent, considered universal, then it would seem logical that writing processes are, to an extent, also universal. Where the difficulties may occur for the writer in a foreign language are in drawing upon appropriate schemata as a basis for organizing ideas, and in having sufficient access to the foreign language to be able to encode these ideas in a form that is accessible to the intended readership.

As to the former — having access to appropriate schemata — there is some suggestive work on the influence of modes of organization on comprehension and recall. It appears likely that readers have difficulty in dealing with discourse which doesn't match their culturally formed expectations, i.e. their schemata. It seems equally likely that writers will have problems producing discourse according to schemata which are alien to them. Possibly, then, writers need to develop appropriate schemata, and it is here that the internalization of such model schemata might be helped by reading. Thus a place exists for a model, but of an abstract kind. The model is not to be mimicked, but is to offer a means of organizing ideas in a culturally appropriate manner.

What has become clear is that good writers have already worked out strategies for writing and that they control many of the processes which have been described and defined as being important in the process of writing. Rather than being controlled by the processes, good writers are in control. A problem remains, however; how can less proficient writers too, be equipped with some of these skills and so put them in control.

To begin with, it may prove to be impossible to teach some of the skills which the good writer employs. Second, it cannot be supposed that by learning about, or even by practising them, all students will become good writers. With these two warnings in mind, we shall now turn to looking at some of the procedures and at the kind of instruction which we might derive from the research and which we can apply in the writing class, keeping in mind, of course, that there are always dangers in attempting to take research as a blue-print for pedagogical action.

Procedures to develop processes

Flowers and Hayes (1980:27) have suggested a number of procedures for training writers. These they list as a series of imperatives, under several stages, the first of which is goal identification.

A. *Goal identification*

1. Set up a goal.
Goal setting is the force which drives the writing, and the writer should identify a purpose in writing. It is also important to distinguish between a purpose, which can be stated in terms of such verbs as to review, to report, to interpret, to persuade, etc., and a product, which will be a report, a dissertation, etc.

2. Find manageable sub-goals.

B. *Play your thoughts*

3. Brainstorm.
This is seen as a form of creative, goal-directed play. The writer can start in the middle, the end, or with any issues which are uppermost at the time. And it is important not to correct or to censor the ideas that appear on the page.

4. Dialogue.
The writer writes as though talking out loud, engaging in a conversation with an interlocutor, who is the writer's other voice.

5. Find analogies and contrasts.
The techniques here are similar to those suggested by Leason (1968), Hughey et al. (1983) and Spack (1984). What they all have in common is a link back to some of the strategies of traditional rhetoric.

— Describe it.
— Compare it.
— Associate it.
— Tell how it's made.
— Apply it.
— Argue for or against it.
— Look at your subject from a different point of view.
— Use a different vocabulary.

6. Rest and incubate.
Let your unfinished thinking simmer actively in the back of your mind and return to it from time to time.

C. *Push your ideas*

7. Find a rich bit, such as a cue word which stands at the centre of a network of ideas and associations that are unique to you.

8. Nutshell your ideas, by reducing them to two or three sentences in which the whole substance of the paper is laid out.

9. Tree your ideas, by producing an outline of the material you are generating. This may be done in the form of a tree, showing a hierarchy of relationships.

10. Test your writing against your own editor, including reading aloud what you have written.

D. *Construct for an audience*

11. Ends: what are you trying to achieve in this paper or this paragraph, and what effect do you intend to have on your reader? To define your ends, identify a mutual end you and the reader share. Ask yourself: why should the reader read your paper? What do you want the reader to know at the end of the paper? What conclusions should the reader draw from your paper? What do you want your reader to do?

12. Organize your ideas from the readers' viewpoint, e.g. go from overview to detail rather than from detail to overview.

13. Test the effectiveness of your rhetorical structure by using a live audience to get feedback. Conferencing and discussion are especially important, both with a teacher and with peers, a practice which, as Joan Allwright will show,[1] appears to be very effective in developing academic writing skills among foreign post-graduates.

What this catalogue emphasizes is that writing, above all else, involves thinking and only secondarily adherence to fixed models. Furthermore, these procedures involve active participation from students, which means that the writing becomes the focus of classroom activity instead of being relegated to solitary out-of-class work. Indeed, the tendency to treat writing as an arcane and solitary activity may be one of the reasons why for so many students (both native language and foreign), writing is surrounded by mystery. As Weiss (1980) has suggested, models of the process can help to demystify writing and he even advocates having teachers write themselves so that students can see how it is done, with all the false starts, choices to be made and the way in which the writer progresses toward a not-quite-clear goal. Thus, the teacher models the process and not the product in a joint act of discovery with the students.

The end: An unexpected conclusion?

And this brings us to where we began. I suggested at the outset that there is a parallel between education and writing in so far as both are concerned with unexpected outcomes. If, as I assume, we see our role as teachers of EAP as being concerned with education and not merely with

training students in set procedures, then I would suggest that an approach to writing which focuses on process rather than on product is of considerable interest to us.

While a model-based approach should by no means be abandoned, and although such an approach may be adapted, in an academic context students are soon going to find themselves faced with writing tasks for which such a kit assembly procedure will be a poor preparation. Above all else, academic writing involves the manipulation of ideas, and unless students have experienced such manipulation through writing process activities, they are likely to be stuck with little more than a set of fixed forms. So, we have to prepare our students for meeting with the unexpected. To do this, our attention must shift from product to process. In making this shift, we should be able to use writing as an important educational tool in EAP for, as Bereiter and Scardamalia (1983) have observed, 'we do not truly own our thoughts or experiences until we have negotiated them with ourselves and for this writing is the prime medium.'

Note
1. Page 109, this volume.

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Academic Writing — Can we please all the people all the time?

An examination of the writing problems experienced at tertiary level by home and overseas students, and the criteria applied by subject staff in their assessment of this academic writing

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As part of a wider investigation leading to the development of the Associated Examination Board's Test in English for Educational Purposes (T.E.E.P.), information was gathered through staff and student questionnaires on the problems experienced in academic writing at tertiary level. Completed questionnaires were returned by 940 overseas students, 530 British students and 559 staff.

In both staff and student questionnaires we sought to establish, through terms comprehensible to the respondents, where particular problems had occurred in the written work of British students as well as their non-native speaker counterparts. We also asked staff what importance they attached to various criteria in their assessment of written work in an attempt to put the difficulties experienced in some sort of perspective.

To investigate the standards desired of overseas students as compared to their British counterparts staff were also asked whether their expectations were the same for both groups, and, if they were not, what allowances were made? If staff made allowances, they were also asked whether they made different allowances for language in coursework to those they made for language used in examinations.

Only the findings from this part of the questionnaire survey are reported in this paper. The students under review had to produce a whole variety of different text types across the range of task dimensions. Whatever the differences existing from course to course, however, the majority of respondents had to produce written texts of a paragraph or more. It is at this coarse level of generality that the comments below are applicable. Students were asked in the questionnaire to indicate *how much difficulty* they had experienced in their written work with:

    (1) writing grammatically correct sentences.
    (2) using a variety of grammatical structures.
    (3) using appropriate grammatical structure.
    (4) using appropriate vocabulary.
    (5) using a wide and varied range of vocabulary.
    (6) the subject matter.
    (7) expressing what they wanted to say clearly.
    (8) arranging and developing their written work.
    (9) spelling.
  (10) punctuation.
  (11) handwriting.
  (12) tidiness.

The replies for the British and the Overseas students are summarized in Table 1 at the beginning of the tables section of this chapter (page 27). The key to Tables 1-3 can be found on page 26.

Staff were asked to indicate *the proportion of the British and the overseas students they taught* on their courses in the programme we had specified, who displayed the following characteristic defects:

    (1) grammatical error.
    (2) lack of variety in grammatical structures employed.
    (3) use of inappropriate grammatical structures.
    (4) use of inappropriate vocabulary.
    (5) limited range of vocabulary.
    (6) inadequate understanding of the subject.
    (7) inability to express themselves clearly.
    (8) poor arrangement and development of written work.
    (9) poor spelling.
  (10) poor punctuation.
  (11) poor handwriting.
  (12) untidiness.

Their answers are recorded in Table 2 in the table section at the end of the chapter.

It should be noted that whilst students were asked how much difficulty they had with each area, the staff were not asked about the degree of difficulty they felt students experienced, but how many of their students displayed each defect. It follows that a direct comparison, in quantitative terms, cannot be made between these two sets of responses.

We also asked staff what importance they attached to the criteria listed below in their assessment of written work, in an attempt to put the difficulties experienced into some sort of perspective. These criteria had been established on the basis of replies to an initial, more open ended, pilot survey together with data obtained in the interviews with staff and students.

(1) grammatical accuracy.
(2) variety of grammatical structures employed.
(3) appropriateness of grammatical structures employed.
(4) appropriateness of vocabulary.
(5) range of vocabulary.
(6) the subject content.
(7) clarity of expression.
(8) arrangement and development of written work.
(9) spelling.
(10) punctuation.
(11) handwriting.
(12) tidiness.

We summarize the staff's opinion on the relative importance of various aspects of written work in Table 3 in the tables section at the end of the chapter.

We will now consider each element of writing in terms of:

(a) the difficulties it caused for both British and overseas students (Table 1).
(b) the proportion of each group of these students the staff saw it causing problems for (Table 2).
(c) the importance the staff claim they attached to it in their assessment of a student's written work (Table 3).

In addition, the discussion is informed by the summary of difficulty and frequency data to be found in Table 4 on page 31.

1. Grammatical accuracy

Only a quarter of all the overseas students claimed that they had no problems here as compared with over half the British students. The bulk of the overseas students thought that they had 'very little' difficulty and the social science students as a group claimed they had the least problems. (Table 1. Question 1)

Staff considered that in the sciences and engineering, higher proportions of the overseas students had difficulty than their British counterparts (Table 2, Question 1). Only the British undergraduate engineers seem to have been really troubled. Social scientists in general were seen to have slightly less of a problem. It is noticeable that only a very small percentage of all students (overseas and British) were seen as having no problem with grammatical accuracy.

As regards the importance attached to this assessment criterion (Table 3, Question 1) the picture is varied: only the engineering undergraduate tutors attached any great importance to it, the majority seeing it as having 'medium' to 'low' importance.

2. Using a variety of grammatical structures

There is quite a difference between the amounts of difficulty experienced by the British and the overseas students (Table 1, Question 2) with over

half the British students claiming 'no' difficulty here at all. Only the overseas post-graduate social science students had as few problems.

The staff returns again to indicate a sizeable difference between the proportion of British and overseas students experiencing difficulty in this area (Table 2, Question 2).

On the whole the staff attached 'low' or 'no' importance to this criterion in assessment (Table 3, Question 2). It was considered the least important of all the criteria we sought information on.

3.   *Using appropriate grammatical structures*

Most overseas students admitted 'very little' or 'some' difficulty here, whereas most British students claimed 'very little' or 'no' difficulty (Table 1, Question 3). Of the overseas students the social scientists again experienced least difficulty.

Staff replies (Table 2, Question 3) indicate that they considered 'a lot' of overseas students had problems with the use of appropriate grammatical structures, more so than their British counterparts.

In general the staff attached only 'medium' to 'low' importance to this criteria in their assessment of written work (Table 3, Question 3).

According to the overall staff returns it was these three grammatical categories which caused difficulty to the greatest proportion of the overseas students.

4.   *Using appropriate vocabulary*

This seemed to pose a problem for many overseas students especially science post-graduate and science 'A' level students (Table 1, Question 4). All overseas students apart from a small number of engineering post-graduate and social science students experienced 'some' difficulty in using appropriate vocabulary whereas very large numbers of the British students claimed to experience no difficulty.

Staff on the whole estimated that fewer of their students had a problem with appropriacy of vocabulary than they had had with the grammatical categories. They still however saw a gap existing between the proportions of British and the proportions of overseas students who experienced problems here (Table 2, Question 4).

On the whole, staff thought this criterion had 'medium' to 'high' importance in the assessment of written work. It is noticeable that about a third of the staff claimed that they gave 'high' importance to this criterion in their assessment of written work (Table 3, Question 4). Noticeably fewer social science staff considered it of 'high' importance though.

5.   *Range of vocabulary*

This was the category in which the degree of difficulty experienced by the overseas students was greatest as compared with the British students, the majority of whom considered that they had 'very little' or 'no' difficulty (Table 1, Question 5). It seemed to be less of a problem for the overseas social science students, particularly post-graduates.

Staff considered there was a gap in performance between the British and the overseas students though they saw both groups as having less of a problem with this and the appropriacy of lexis employed than they had had with the grammatical categories (Table 2, Question 5). The problem was seen as being substantial for science 'A' level and science post-graduate students from overseas but not so much of a problem for the social science post-graduates.

Very few of the staff regarded this as being of 'high' importance, the majority considering it as of 'medium' or 'low' importance as an assessment criterion (Table 3, Question 5).

6. *The subject matter*
Very few students, either overseas or British, experienced 'a lot' of difficulty with this, most claiming 'very little' or 'no' difficulty. The British students seemed to have had only slightly less of a problem in this area (Table 1, Question 6). Of all the criteria listed this was claimed to be the lowest cause of difficulty by both British and overseas students.

In the staff questionnaire (Table 2, Question 6) the difference in the proportion of overseas as against British students experiencing difficulty in this area is very small, except for science post-graduate students where there appears to be quite a large difference. According to staff more overseas students had greater difficulty with their spelling than they did with problems arising out of the subject matter. This seemed to be at odds with our intuitions but the question does refer to the written work staff received.

Nearly all the staff claimed that this criterion was of 'high' importance (Table 3, Question 6) and overall it was claimed to be the most important criterion in their assessment of written work.

7. *Clarity of expression*
An increased number of British students particularly in science and engineering saw themselves as having problems here though the majority still considered that they had 'very little' or 'no' difficulty (Table 1, Question 7). The majority of overseas students claimed 'very little' or 'no' difficulty in writing clearly. Although there is still a gap between the relative amounts of difficulty experienced by the two groups it is smaller than was the case with some of the other criteria.

Staff teaching science, engineering undergraduate and social science undergraduate students thought a lot more of the overseas students had difficulty here than their British counterparts. Nearly half the staff teaching the overseas science post-graduate students thought 'a lot' of their overseas students had difficulty with this matter (Table 2, Question 7).

Clarity of expression was seen by the majority of staff as the second most important criterion of assessment next to subject content (Table 3, Question 7). Social science staff regarded it as of slightly lesser importance than the other staff groups.

8. *Arrangement and development of written work*

Very few students, overseas or British, saw themselves as having 'a lot' of difficulty here. The majority of overseas students felt they had 'some' or 'very little' difficulty (Table 1, Question 8).

Staff in general considered that 'some' or 'a lot' of their overseas students had difficulty in arranging and developing their written work. There are quite large differences in some cases between the relative proportions of overseas and British post-graduate students that they see as experiencing difficulty in this area (Table 2, Question 8). This is perhaps partially explained by the fact that post-graduate students are far more likely to have to produce longer pieces of extended writing than the undergraduate students and these organizational features become more important the larger the size of text that is being produced.

Next to subject content and clarity of expression, this feature was the one most commonly cited as being of 'high' importance, being judged so by almost half the staff who answered the questionnaire (Table 3, Question 8). Very few staff regarded it as having 'very little' or 'no' importance.

9. *Spelling*

On the whole, the majority of students claimed that they had 'very little' or 'no' difficulty with spelling (Table 1, Question 9). Overseas students usually admitted to having slightly more difficulty than the British students but in some cases less. The British students on the whole considered the spelling was their greatest cause of difficulty in writing.

Staff thought that more overseas than British students experienced difficulty with the spelling and, in the case of science 'A' level students and science post-graduates, a lot more (Table 2, Question 9).

Very few staff thought spelling of 'high' importance except at engineering undergraduate level. The majority thought it was of 'some' or 'very little' importance (Table 3, Question 9).

10. *Punctuation*

Most students, overseas and British, claimed that they had 'very little' or 'no' difficulty here, the overseas students admitting to only slightly greater problems in this area than the British students (Table 1, Question 10).

Staff thought that a large number of overseas students had difficulty in using punctuation correctly. The staff in post-graduate and 'A' level science and engineering considered that notably higher proprotions of overseas students suffered from this difficulty (Table 2, Question 10).

The majority of staff thought that it had only 'some' or 'very little' importance in terms of assessment (Table 3, Question 10). Very few staff considered that it had 'high' importance.

11. *Handwriting*

In the main British students admitted to having more problems with this than did the overseas students. The vast majority of overseas students

claim 'very little' or 'no' difficulty at all (Table 1, Question 11). Science post-graduates admitted to the most difficulties among the overseas students.

Slightly more overseas students than British were seen by the staff as having problems with this across most subject areas and levels except social science undergraduates (Table 2, Question 11).

Staff in general attached 'very little' importance to this criterion in their assessment of written work (Table 3, Question 11), though it did assume slightly greater importance for some engineering undergraduate and science 'A' level staff.

12. *Tidiness*

This is the only category in which British students clearly admit to having more problems than do the overseas students. Next to spelling British students claimed that overall this caused them the greatest difficulty. A greater number of overseas students than British claimed that they had no problems in this area (Table 1, Question 12).

The staff thought that few overseas students in general had problems here. They thought slightly more overseas than British students experienced problems in this category in general, except in social science and science undergraduates, and science 'A' level classes, where the reverse was true. (Table 2, Question C2/12).

A surprisingly large number of staff regarded this criterion as being of 'high' importance. The majority of the staff saw it as either of 'high' importance or 'medium' importance (Table 3, Question 12). It was considered to be especially important by engineering undergraduate and science 'A' level staff.

Variations in the allowance staff claim they make in marking the written work of overseas students

In general about two-thirds of the staff said that they expected the same standard from overseas students as from British students and a third said they did not.

About half of the science post-graduate tutors and two-thirds of the social science tutors said that they did not expect a similar standard. This unfortunately was a slightly ambiguous question in that 'expect' did not necessarily equate with them accepting lower standards of written work as it might be taken as meaning 'did they get it'. However the follow up question: 'If no, what allowances do you make?' should have helped to remove any misunderstanding here.

An interesting feature is the variation in allowances that were made by those who did not expect the same standards. Though one could gather from the comments on this that staff were generally prepared to make allowances as regards manner of expression, as long as this did not interfere with the meaning of what was being conveyed, the very variety of the allowances they were prepared to make effectively prevents further generalization.

We would argue strongly that this variety precludes the possibility of making any valid generalizations concerning tolerance levels that operate in the written medium on the part of staff and must bring into question the findings of both Carroll (1978) and Munby (1978). In practice establishing these tolerance conditions is by no means as easy as they had assumed.

We would argue that any attempt to specify these tolerance conditions is at best a specious activity when more than one lecturer is involved on a course and sometimes a single lecturer is by no means consistent in the application of these allowances. In any case, at least two thirds of the total staff consulted claimed they made no allowances at all.

Variations in the allowances staff claim they make in assessing the written work of overseas students, as between coursework and examinations

Staff were asked, if they made allowances, to specify whether these differed as between coursework and examinations. Of the staff answering the question the great majority said that they did not vary. The replies of the social science post-graduate staff indicated that they felt that there was some variation in the allowances that were made (See Table 5, page 33).

We have attempted to give an impression of the form these variations might take by categorizing the replies under the two groupings below.

Allowances made in coursework but not in examinations:

> Students must be relevant in exams — they don't get away with long rambling answers.

> More allowance in coursework, dissertations can be rewritten, exams cannot.

> Coursework provides an opportunity for correction of language difficulties as well as difficulties with course content. By the time of the exam these should have improved.

> One expects better performance in exams.

> Allowances made during the year in report writing but no allowance made in the exams.

> . . .do not always know who are overseas students in exam papers so cannot make allowances.

> Examinations are marked to the same standard.

> The standard in examinations is expected to be higher as no allowance will be made in external examinations.

Allowances made in examinations but not in coursework:

> Greater allowance made in exams where time is limited.

> Coursework does not have the same time and pressure constraints.

> Less attention is paid to grammatical and spelling error in respect of all examination work done at high speed.

In examinations the precise extent to which allowance must be made must be formalized. In particular one has to distinguish carefully between inability to express ideas and inability to understand ideas.

Overseas students go to pieces in exams. It takes them longer to read and to write. I do not expect the standard to be as bad in assessed coursework.

Poorer English is acceptable from overseas students in exams because under pressure they cannot be expected to perform as well as native speakers.

Content takes precedence over expression in exams.

In exams I assess the student's understanding of the subject as opposed to his presentation.

Allowances made in exams for students who have misunderstood the question.

Only rarely is one penalized for English in mathematics exams provided that one can understand what has been written.

I have with others been instructed to give overseas students a longer exam to allow for their inadequacies in English, 5 questions in three hours instead of 4 questions in two.

With *all* students, I think one makes more allowances with examination work, for obvious slips made under pressure of time (e.g. if a student says something which is incorrect, evidently due to hasty writing, while having shown elsewhere in his answer that he has perfectly well understood the same matter).

Thus there is also a sharp contrast between those who make allowances in coursework but not in examinations, and those who made allowances in examinations but not in coursework. This lends further weight to our earlier contention: it is an unrealistic task to speculate on the tolerance conditions that will apply in the assessment of written work.

Conclusion

There is obviously some variation in the criteria applied, as well as in the allowances made for the written work of overseas students from course to course. It is equally clear, however, from both the questionnaire returns and the views expressed in follow up interviews, that subject tutors are more concerned with content than with mechanical accuracy features. On the evidence we have available it is the relevance and adequacy of the subject content, the clarity of the message and the arrangement and development of written work which clearly stand out as the most important criteria in subject tutors' assessments of written work.

It is the uniformity of this pattern across the 559 staff participating that cautions us against an undue concern with accuracy in our E.A.P. writing classes. The message appears to be the medium for academic success.

Key

Overseas students' replies:
- • means 20% to 39%
- •• means 40% to 59%
- ⦙• means 60% to 79%
- •• means 80% to 100%

British students' replies:
- ★ means 20% to 39%
- ★★ means 40% to 59%
- ★★ means 60% to 79%
- ★★ means 80% to 100%

Staff replies:
- ◆ means 20% to 39%
- ◆◆ means 40% to 59%
- ◆◆ means 60% to 79%
- ◆◆ means 80% to 100%

- N: Never
- S: Sometimes
- O: Often
- N/A: Not applicable

- Eng. U. Engineering Undergraduate
- Eng. P. Engineering Post-graduate
- Sci. U. Science Undergraduate
- Sci. P. Science Post-graduate
- Sci. A. Science 'A' level
- S.Sci. U Social Science undergraduate
- S.Sci. P Social Science post-graduate

Table 1: Summary of returns from the student questionnaire indicating the amount of difficulty experienced by British and overseas students in various aspects of written work

H: a lot of difficulty   L: very little difficulty   M: some difficulty   N: no difficulty

Columns: Q.1, Q.2, Q.3, Q.4, Q.5, Q.6, Q.7, Q.8, Q.9, Q.10, Q.11, Q.12 (each subdivided into H, M, L, N)

Rows: Eng. U, Eng. P, Sci. U, Sci. P, Sci. A, S.Sci. U, S.Sci. P

Table 2: Summary of returns from the staff questionnaire indicating the proportion of British and overseas students the staff considered to have displayed various defects in their written work

H: a lot   L: very few   M: some   N: none

(Key at front of section.)

	Q. 1				Q. 2				Q. 3				Q. 4				Q. 5				Q. 6				Q. 7				Q. 8				Q. 9				Q. 10				Q. 11				Q. 12			
	H	M	L	N	H	M	L	N	H	M	L	N	H	M	L	N	H	M	L	N	H	M	L	N	H	M	L	N	H	M	L	N	H	M	L	N	H	M	L	N	H	M	L	N	H	M	L	N
Eng. U																																																	
Eng. P																																																	
Sci. U																																																	
Sci. P																																																	
Sci. A																																																	
S.Sci. U																																																	
S.Sci. P																																																	

Table 3: Summary of returns from the staff questionnaire concerning the importance the staff attached to various criteria in their assessment of students' written work

H: High importance   L: Low importance   M: Medium importance   N: No importance   (Key at front of section)

	Q.1				Q.2				Q.3				Q.4				Q.5				Q.6				Q.7				Q.8				Q.9				Q.10				Q.11				Q.12			
	H	M	L	N	H	M	L	N	H	M	L	N	H	M	L	N	H	M	L	N	H	M	L	N	H	M	L	N	H	M	L	N	H	M	L	N	H	M	L	N	H	M	L	N	H	M	L	N
Eng. U																																																	
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Sci. A																																																	
S.Sci. U																																																	
S.Sci. P																																																	

Summary of difficulty and frequency data from questionnaire enquiry.

Key

A) Difficulty
Col. 1 OS H + M:
 Difficulties encountered by overseas students ranked according to total percentages of those experiencing 'some' or 'a lot' of difficulty with certain activities and performance constraints.
Col. 2 OS-BR H + M:
 Rank ordering according to percentage differences between overseas and British students encountering 'some' or 'a lot' of difficulty with certain activities and performance constraints.
Col. 3 Staff OS:
 Staff estimates of the proportions ('a lot' or 'some') of the overseas students experiencing difficulty with certain activities and performance constraints, ranked in order of magnitude.
Col. 4 Staff OS-BR:
 Percentage differences in staff estimates of proportions ('a lot' or 'some') of the British and overseas students experiencing difficulty with certain activities and performance constraints, ranked in order of magnitude.
Col. 5 Staff Impt.:
 Staff estimates (where available) of the importance of a particular criteria ranked according to the percentage totals for 'high' and 'medium' importance.

B) Frequency
N: Never
O: Often

 ✴   20–39%
         of overseas students 'never' having to do the task.
✴✴ 40–59%

 Φ   20–39%
ΦΦ 40–59%
 Φ
ΦΦ 60–79%   of overseas students 'often' having to do the task.
ΦΦ
ΦΦ 80–100%

Writing

Table 4:

A) *The difficulty experienced in various attributes of writing and the importance of these for academic staff.*

	OS (H+M)	OS-BR (H+M)	STAFF OS	STAFF OS-BR	STAFF IMPT. (H+M)
Using a wide and varied range of vocabulary	(1) 61.9	(1) 41.2	(5) 66.9	(3) 30.1	(10) 41.3
Using a variety of grammatical structures	(2) 47.2	(3) 30.7	(4) 70.0	(5) 17.7	(12) 22.2
Using appropriate vocabulary	(3) 46.4	(2) 34.2	(7) 63.8	(1) 33.2	(4) 69.6
Expressing what you want to say clearly	(4) 40.8	(7) 14.5	(3) 70.2	(4) 21.5	(2) 90.9
Using appropriate grammatical structures	(5) 40.4	(4) 24.8	(2) 71.4	(2) 30.6	(8) 43.3
Arranging and developing written work	(6) 35.8	(8) 13.7	(6) 65.5	(9) 10.3	(3) 82.1
Writing grammatically correct sentences	(7) 33.5	(5) 20.7	(1) 75.3	(6) 16.3	(6) 46.9
The subject matter	(8) 29.9	(6) 18.8	(9) 60.6	(10) 10.2	(1) 91.8
Spelling	(9) 24.3	(10) 2.0	(8) 62.1	(8) 11.3	(9) 42.3
Punctuation	(10) 21.4	(9) 8.9	(10) 59.6	(7) 12.9	(11) 39.3
Tidiness	(11) 16.8	(12) −5.3	(12) 47.1	(12) −4.3	(5) 62.8
Handwriting	(12) 14.2	(11) −4.1	(11) 49.4	(11) −2.3	(7) 44.6

B) *Frequency of writing tasks of varying lengths*

		Eng. U		Eng. P		Sci. U		Sci. P		Sci. A		S.Sci. U		S.Sci. P	
		N	O	N	O	N	O	N	O	N	O	N	O	N	O
>paragraph in	coursework	ΦΦ		ΦΦ		ΦΦ			Φ	ΦΦ			Φ	●	Φ
	examinations	ΦΦ		ΦΦ		ΦΦ			Φ	ΦΦ				●	Φ
=paragraph in	coursework		Φ		Φ		Φ					Φ		●	Φ
	examinations		Φ		Φ	●	Φ					Φ		●	Φ
<paragraph in	coursework		Φ		Φ	●	Φ		Φ		Φ		ΦΦ		ΦΦ
	examinations		Φ		ΦΦ	●	Φ	●	Φ		Φ		Φ		ΦΦ

(Key as illustrated on previous page.)

The Standards Expected of British and Overseas Students

Staff were asked in the questionnaire:

1. Do you expect the same standards of written work from overseas students as from British students?

    * If no, what allowances do you make?

2. Do these allowances you make vary, as between coursework and examinations?

    * If yes, please specify in what way(s) they vary.

The staff replies to these questions are recorded in Table 5.

Table 5:
1 Summary of questionnaire returns concerning whether the staff expect the same standards of written work from overseas as from British students
2 Summary of returns on whether these allowances vary as between coursework and examinations.

	1								2			
	Y	N							Y	N		
Eng. U	♦♦♦	♦								♦♦♦		
Eng. P	♦♦♦	♦								♦♦♦		
Sci. U	♦♦♦♦									♦♦♦		
Sci. P	♦♦	♦♦								♦♦♦♦		
Sci. A	♦♦	♦								♦♦♦		
S.Sci. U	♦♦♦	♦								♦♦♦		
S.Sci. P	♦	♦♦♦							♦	♦♦		

Y: Yes
N: N0

Key on page 26.

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The product before: Task-related influences on the writer

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Introduction

The academic writing taught on EAP courses is designed to prepare tertiary education students for academic tasks such as assignments set by faculty, course and final tests and dissertation/thesis writing. In the academic world beyond the EAP course, such writing is closely prescribed stylistically and conforms to strict register conventions. This paper focuses on one type of academic writing, the essay test, and one element thereof, the essay question.

Houghton (1984) characterises the formal academic essay as 'a kind of game in which the writer, according to the extent to which he or she is familiar with the rules and is able to use them, seeks to satisfy the demands of the reader/marker'. This is equally true of the academic essay test, and the role of the EAP writing teacher is to prepare students to play this game and win. The game has rules at the syntactic, semantic, discourse and pragmatic levels, and for many EAP students the greatest problems occur at the discourse and pragmatic levels, which have tended to receive less attention in the EAP writing course until quite recently.

Current developments in the teaching of writing have emphasized a focus on writing as a process, with a de-emphasis of concern with the products of the writing process. There has, however, been surprisingly little consideration of what I have come to think of as 'the product before' — the essay question, and more specifically, the essay test question. In creative writing courses and in teaching young children to write, there may not be a 'product before', or it may have only the status of a starting-point, something to be discussed and written around. In academic writing, however (and therefore on EAP writing courses and on EAP essay tests) the essay question is a formal statement of what the student is required to do: it *is* negotiable, but only within strict parameters, as will be discussed later. The student's writing process will therefore be constrained by this 'product before', and a task of EAP writing teachers is to reconcile such product constraints with helping students learn to write academically using a process approach.

This paper does not discuss the relationship between the essay test

questions set by subject specialists and by EAP teachers, but essay test questions drawn from both sources were used to develop the model for analysis presented later.
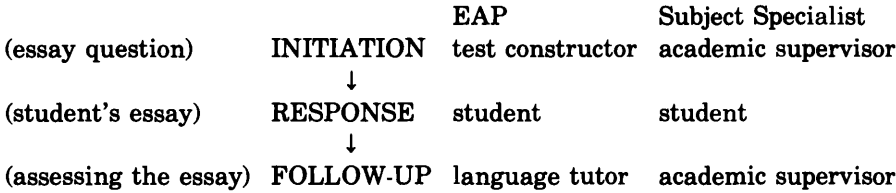
The essay test at discourse level

An essay test is, by its nature, a discontinuous discourse. In discourse analytic terms (Coulthard and Ashby, 1975) we can think of an essay test as a *discourse exchange* where the expected sequence is:
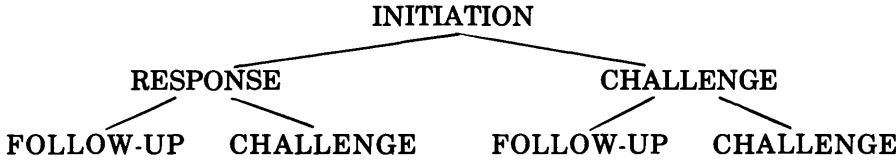
Figure 1

    INITIATION   (=the essay question)
        ↓
    RESPONSE   (=the student's essay)
        ↓
    FOLLOW-UP   (=the assessing of the essay)
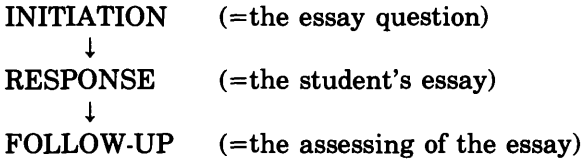
In EAP essay tests each *move* in the discourse exchange is usually made by a different person, whereas the subject specialist essay test is more likely to be a two-way exchange (see diagram below). Thus the EAP essay test is discontinuous, temporally and spatially, and often in terms of participants:

Figure 2

		EAP	Subject Specialist
(essay question)	INITIATION	test constructor	academic supervisor
	↓		
(student's essay)	RESPONSE	student	student
	↓		
(assessing the essay)	FOLLOW-UP	language tutor	academic supervisor

Sinclair (1983) adds to the discourse exchange structure a further move which he calls the *challenge,* a term used by Labov and Fanshel (1977) in describing a discourse function in sociological/psychological terms. The addition of this move to the discourse exchange expands the discourse structure significantly, as the following diagram shows:

Figure 3

                        INITIATION
          _____/_____
        RESPONSE   CHALLENGE
        /   \   /   \
  FOLLOW-UP   CHALLENGE   FOLLOW-UP   CHALLENGE

The significance of the challenge will be discussed in detail later.

The essay test at pragmatic level

In pragmatic terms an essay test is a highly restricted social act which operates according to a set of knowledge or beliefs. However, it is not always possible to know whether this set is shared by all participants in the discourse exchange. Many overseas applicants to British and American universities have very limited exposure to Anglo-Saxon academic culture and are quite unaware of the social context and expectations within which their tests are set. They are therefore handicapped in the pragmatic component of their linguistic ability. The student educated in the Aristotelian traditions of the English mother tongue countries understands that certain behaviours are expected on an essay test: they have a sense of the number of words expected; they are practised at judging the type and tone of answer the examiner expects; at treading that fine line between plagiarism and genuine creative thought implied by the kind of 'originality' we admire so much. For students from other academic cultures some of the highly conventional behaviours required for satisfactorily responding to an essay test question are not obvious;[1] further, it may be that the setters of essay test questions are themselves not conscious of some of the 'messages' they are sending out, or that they have failed to convey exactly their intended 'message'.[2]

The essay test: task variables

Research evidence shows that the topic chosen for the essay test is a significant task variable; Hirsch and Harrington (1980) found that the communicative effectiveness of compositions was based on the writer's familiarity with the essay topic. Rosen (1969), related the variability in communicative effectiveness he found to a 'mode of discourse' variable. His data showed that narrative/descriptive topics were easier than discussion/speculation topics. Kincaid had earlier (1953) suggested that the large variation in writing performance from day to day observed in his study was due to varying modes of discourse for the essay tasks. Crowhurst and Piché (1979) found significant interaction between the mode of discourse of essay tasks and the syntactic complexity of the writing of sixth grade and tenth grade children.

There is also evidence that the audience for whom the writer is asked to write is a significant task variable. Studies by Rubin and Piché (1979) found that eighth and twelfth grade children asked to write for audiences of high, medium and low intimacy displayed significant semantic and syntactic differences in their writing depending on the degree of intimacy. Their finding of no significant difference for audience in the writing of young children confirmed that of Smith and Swan (1977) and was confirmed by Crowhurst and Piché (1979). This evidence that audience adaptation is a late-blooming skill in the mother tongue makes the 'audience' variable potentially of considerable interest in the study of the development of L2 writing.

While the effects of the linguistic complexity of the test essay question

have been little studied in either the L1 or L2 literature, there have been indications that linguistic complexity is one of the task variables which does have an effect. We may feel intuitively that a linguistically complex question such as:

1. Describe the main types of volcano and indicate the varieties of rock that are formed in each case, illustrating your answer with sketches and examples.

poses more comprehension problems than a terse question such as:

2. Technology in modern life

On the other hand, (1) provides many more guidelines to content, organization and treatment than (2), which might well have been written to test the hypothesis that given enough rope, testees will hang themselves. Indeed, O'Donnell (1968) studied native speakers of English and found that they tended to avoid questions like (1) and opt instead for (2) type questions, doing poorly on them. Howe (1983) and Williams (1982) both usefully offer advice and teaching material for EAP students writing academic (test) essays, but neither offers a detailed linguistic analysis of the question, concentrating rather on teaching students to recognize the 'instruction word' (e.g. explain, classify) or implied instruction word (e.g. give reasons for; what are the main types of) and to know what answer structure is usually associated with each kind of instruction word. C.M. Johns (1976) and Henderson (1980) each developed simple linguistic analyses of essay questions in their teaching materials. Coffman (1971) skirts the area, without producing any data, when he points out that the more complex the structure of the question, the more time testees need to think about and compose a response, and also the more risk that the testee will misunderstand the question. Poetker (1977) and the New York State Education Department Bureau of Social Studies (no date) offer some general suggestions on the construction of essay questions, again without citing any research evidence. None of the work referred to above deals with the rhetorical and discourse/pragmatic features of the essay test question which my database has shown to be important.

The rhetorical structure of the essay question

There has been little reported research investigating the rhetorical structure of the essay examination question, as Swales (1982) discovered. There have been frequency counts of initiators (e.g. T.F. Johns; 1979) and studies of the meanings of individual initiators (e.g. Swales; 1982, Dudley-Evans; 1985) which have implications for rhetorical structure, but the generalizability of these is limited. As Swales himself points out, '...the full question-context is sometimes needed in order to make an appropriate categorization' (op. cit.), and this is because it is only by studying all the parts of the question and the relationships among them that the full meaning is retrievable.

Rosen (1969) is one of the few who has seriously addressed the structure of the essay test question beyond the level of linguistic categories. He suggests the following criteria to be taken into account: type of writing demanded; area of experience drawn on (personal/impersonal; emotional/rational); psychological factors (age and other affective factors; non-pre-empting of response); linguistic characteristics. Although Rosen was studying writing in the context of school children, affective and experiential factors are equally important in considering the structure of essay test questions in the EAP/ESP context.

The model of the rhetorical structure of essay test questions which I have developed for use in my research (see Figure 4) is intended to enable me to take account of these factors. The model has been tested and refined against a wide range of actual essay test questions, from both subject specialist and EAP/ESP sources.

Figure 4: model for analysis of the rhetorical structure of an essay test question

Components	Description
1. **Topic**	N or NP; assumed to be the old information for the writer; open set
2. **Comment**	instructional V or VP and other initiators; closed set each with closed sub-set
3. **Focus**	topic-narrowers; indicate illocutionary force intended for the speech act (i.e. the essay); large but finite set
4. **Perspective**	determines viewpoint to be taken; defines what can be accepted as 'true' by each participant in the discourse exchange

Figure 5 gives an example to show how the model can be applied in analysing an actual essay test question.

Figure 5

Example question	Components
DISCUSS	(2) comment
THE USE OF	(3) focus
NUCLEAR ENERGY	(1) topic
TO BENEFIT MANKIND	(4) perspective

The term 'topic' is used here as it is used in discourse studies, closely paralleling the concept of 'aboutness' in philosophy, and 'subject' in logic and formal sentence grammar. 'Topic' and 'comment' are a familiar collocation, having the same relationship as 'given-new' in text grammar.

Van Dijk (1977) uses 'comment' to parallel 'predicate' in logic and formal sentence grammar, but for the purposes of my analysis I have restricted 'comment' to the part of the essay question which instructs the writer as to how the essay is to be structured (for example, the 'what kinds of' comment requires an essay with a number of equally balanced paragraphs, one for each kind, while the 'explain (how)' comment requires one or more paragraphs taking events/actions in a logical sequence). My other two terms 'focus' and 'perspective' are also taken from van Dijk (op. cit.) and shaped to the purposes of my model. In cognition 'focus' denotes attention and is propositionally-based (that is, the focus is not on individual lexical items or concepts but on their function in a specific network of relations). Semantically it is, with 'comment', identified with new information rather than given information. Pragmatically it determines relevance, i.e. what of the possible new information which could be introduced about the topic should be selected: thus it also plays a part in determining how the topic should be treated. Thus in my model the 'focus' of an academic essay question is that part which tells the writer how 'topic' and 'comment' are to be combined in a proposition sufficiently limited to be treated within the logistic parameters set.

'Perspective' is both a semantic and pragmatic concept: semantically perspective is part of the model structure by which the individual defines her or his world, and therefore it determines the possible ways in which that individual can act, think and speak. In English, some structures can only express the perspective of an observer, e.g. "You look angry" while others can only express the perspective of the agent, e.g. "I picked it up" while others are ambiguous, e.g. "He looked angry". In some languages, for example, Japanese, there are specific morphemes which express difference in perspective. Pragmatically perspective determines the appropriateness of discourse and is defined in terms of context, i.e. the point of view, attitudes and so on of all speech participants. This means that what is asserted must be seen as appropriate to the intentions and goals of the speaker/writer. However, the hearer/reader also possesses an individual perspective which may not be the same as that of the speaker/writer. The identification and interpretation of a speech act, such as an academic essay question, may not be the same for the initiator and the respondent. Appropriateness depends on perspective, and in the context of the academic essay test two factors lead to problems over 'perspective': firstly, as we saw earlier, the academic essay is a discontinuous discourse, both temporally and spatially, and may involve three rather than two speech participants; secondly, when the participants in the discourse exchange do not share the same native language/culture there is increased likelihood that they will not share a perspective. Clearly, in my model of the rhetorical structure of the question, the 'perspective' identified is that of the initiator, i.e. the question setter, which in the rules of the academic essay test game is imposed upon the respondent, i.e. the testee.

Conventions of essay test discourse and the student's perspective

It was stated earlier that when a student approaches an essay test she or he treats it as a discourse exchange, and that she or he may be unaware that in this type of discourse special rules apply: for example, if a single sentence could provide an adequate answer to the question, she or he may write only one sentence, unaware that the suggested length usually referred to in the test rubric is in fact a fairly strict requirement. Reid (1985) investigating L2 learners, found that certain essay questions generated shorter answers than others, but that the shorter answers received lower grades. It may be that this results from a mismatch between the perspectives of the question setter and the student.

To write a successful academic essay test answer requires pragmatic competence of a specific type, a type which many postgraduate students do not have when they embark on a course of study in Britain or the USA. Success requires such students to accept other views of appropriacy, i.e. to alter their perspective. Some students are not equipped to perceive the need to alter their perspective (a perception which requires a certain level of linguistic competence and of general pragmatic competence); others perceive the need but reject it for a variety of reasons (many of which have been discussed in cross-cultural literature, some of which may be specific to the individual). Rosen (op. cit.) found that school children faced with essay topics which did not 'fit' them in terms of areas of experience to be drawn on, age group appropriacy, direction of response, and other extra-linguistic characteristics tended to 'replace' the topic with one of their own. Weaver (1973), studying graduate students, suggested that a writer needs to go through a process of replacing or transforming the topic. If the writer is able to accept and value the topic (that is, to see it as appropriate from within her or his own world-view) she or he will *transform* it from (in Weaver's terms) a teacher-initiated task to a learner-initiated one; if she or he is unable to accept it she or he will *replace* it with a self-initiated one. Such research indicates that non-native postgraduate students are in no way unusual in needing not only to comprehend but also to value the essay topic before they can respond to it as the question-setter intended.

Challenging the question

My own database shows that the perspective of an academic essay test question can cause real problems for the testee. Books such as those by Williams and Howe referred to earlier do not deal with 'perspective' at all, and I have not found it referred to at all in the literature on EAP writing. This is not surprising, since my data show that these problems arise almost entirely with fairly sophisticated learners (in terms of linguistic command, subject knowledge, and intellectual and emotional maturity), and also since my corpus of essay questions suggests that EAP

teachers avoid (probably subconsciously) questions which have a 'perspective' component.

My data suggest that when a sophisticated respondent to an academic essay test question encounters a specification of 'perspective' which is not appropriate to the way she or he thinks and feels about the world, she or he challenges the question. As was shown in Figure 3, the question answerer, as a participant in a discourse, albeit a discontinuous one, always has two options open: the predicted, or unmarked response ('response'), or the marked, unpredicted one ('challenge'). Challenges may be unconscious (that is, the writer may be unaware that she or he has replaced the question intended by the question setter with one more acceptable to herself or himself) and as such will almost certainly be covert: the writer will not provide any evidence in the surface text that the answer challenges the question, and only by directly comparing question and answer will the mismatch be seen. A smaller number of challenges will be conscious but remain covert: although the writer is aware that she or he has replaced the question with one she or he finds more acceptable, no reference to the replacement is made in the text. This category is impossible to distinguish from the first category after the fact, except by relying on self-report data (as Weaver (op. cit.) did).

Overt challenges are relatively infrequent, as one might expect — how many people, after all, complain when they receive poor service in a shop or restaurant? However, like the customer relations department of the shop or restaurant, we can assume that the frequency of overt complaints is roughly proportional to the level of general satisfaction or dissatisfaction. An overt challenge, i.e. one which is clearly identifiable because the surface text is marked by an intrusive or disgressive challenge to the question, is always conscious, although the challenger may not be aware of the pragmatic and discoursal significance of the challenge strategy she or he has adopted. Appendix 1 contains two examples of challenges by sophisticated students: in the first challenge, the testee overtly rejects the direction of response she or he is instructed to take, and makes it clear that this is not a perspective she or he is prepared to take up, even for an examiner's convenience. In the second challenge, the testee first objects to the lack of focus for the question, and then to the perspective implied for the answer. We must assume that there are also some sophisticated testees who object to the perspective determined for the question but whose sense of what is expected of them in a test essay is sufficiently strong that they consciously decide not to challenge: we can only guess at the effect this denial of the self might have on the quality of the essay answer produced.

There is another type of challenge, which is more familiar to EAP teachers: there are some testees who cannot approach the question which was intended because they do not have the necessary content or language knowledge. Testees who do not have the necessary linguistic command may interpret the question wrongly and challenge it as unsuitable for them because of their miscomprehension (in my database this is very

rare); testees who do not have the necessary content knowledge may challenge the question, rightly or wrongly, as unsuitable for them. Although my corpus of answers consists only of EAP/ESP answers, experience suggests that challenges of this type are relatively frequent in the EAP/broad-spectrum ESP context but unknown in the subject specialist essay test — where the student either *does* know the content area, or accepts blame for inadequate preparation if she or he doesn't. Appendix 2 contains some examples of challenges of this last type, i.e. challenges due to lack of content knowledge.

What these two groups of challengers have in common is that both respond in ways not foreseen or desired by the initiator, with implications for the follow-up.

Importance of the 'challenge'

There are two reasons why studying 'challenge' data is important. First, it offers us a means of evaluating the question's success in eliciting the desired range of responses and in not eliciting any unsought responses, i.e. its perlocutionary success. By investigating the frequency of overt challenges to any question and identifying the component(s) of the question which is challenged, we can change its illocutionary force to make it more purpose-successful, that is, a better communicative act.

Second, we can study the effect of the challenge on the third move in the academic essay test discourse exchange, the follow-up (see Figure 2). In discourse terms, the challenge is a valid element of a discourse exchange, but it causes practical problems for the follow-up, i.e. the assessment. The third participant in the exchange, the assesser, also has two options open: to 'respond' or to 'challenge'. An assesser who 'responds' accepts the essay answer on its own terms. When the question intended the answer to be related to a specific input, problems occur for the assesser in relating the content of the challenge answer to input or protocol content. Here the assessment would be relatively unreliable since the assesser has neither criterion nor norm to which to relate the assessment. On the other hand, if the assesser challenges the challenge answer, that is, if it is not treated as a valid response, we must expect that the student will pay a penalty for 'not answering the question' or 'irrelevance'. We might expect this to result in an assessment which does not reflect the full level of the student's language ability. If the purpose of an EAP writing test is to learn about the student's language ability, an assessment which obscures this is unhelpful.[2]

Conclusion

Study of 'challenge' data offers a way of looking in two directions: at the 'product before, that is, at the structure and content of the question and its effectiveness as a test item; and at the 'product after', that is, at the

reaction of markers to an answer, the ratings they assign and their reasons for doing so (not treated in this paper [3]).

Challenge data also offers a way of looking at aspects of the writer's process, at how a writer comes to terms with the task, or fails to do so, and how she or he handles such failure if it occurs. But the focus of this paper was on product; an essay *test* is a product-oriented activity. The ultimate aim of an essay test is reliable products in terms of grades. Anything which detracts from that should be out of place, and thus the presence of challenges in essay test answers is cause for investigation of the essay questions. In this area, construct validity comes together with reliability when the constraints on the testees conform to what is known about the product and process of academic writing within the initiation→response/challenge→follow-up paradigm.

Notes

1. This topic is explored in another paper, 'Writing in a foreign language and rhetorical transfer: influences on markers' evaluations', presented at the BAAL Conference, Edinburgh 1985, and available from the author in mimeo.
2. See the report in this volume of the panel discussion chaired by Dianne Wall, page 117 ff.
3. This and related questions forms part of the author's doctoral research currently being completed at the University of Edinburgh in the Department of Applied Linguistics. Reports will be published, but in the meantime information can be obtained from the author at the above address.

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Appendix 1

CHALLENGE (1)

'I don't think any wise scientist — and wise and responsible is what a scientist ought to be — would defend the use of nuclear weapons.'

'This question makes no sense unless related to some defined interest of study. However, given the open choice of the two, I would choose to read the former. The main reason is because I am not interested in concentration camps, and so, if *I had to* read a book on them, I would prefer a more personal account.'

Appendix 2

CHALLENGE (2)

'I have no idea about "Green Revolution" but I think it is how to increase 'food supply'.'

'My field of work is a computer science, so I'm afraid I can not exactly and rightly discuss the advantages and disadvantages of nuclear energy.'

'I have to recognize I don't know exactly how a factory is organized and then I cannot give a well opinion.'

A consideration of the meaning of 'discuss' in examination questions

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The teaching of overseas postgraduate students to understand examination questions and to write appropriate answers forms an important part of the team teaching work carried out by the English for Overseas Students Unit at the University of Birmingham with various subject departments (Johns and Dudley-Evans 1980). Students doing an MSc by coursework are helped to understand the conventions of examination questions and the expectations of the examiner about the organization and content of the answer in sessions taught jointly by a language teacher and member of the subject department. The procedure followed in these sessions may be summarized as follows:

Stage 1 (before class)	The subject teacher selects an examination question
Stage 2 (before class)	The subject teacher and the language teacher discuss the meaning of the question and the expected answer
Stage 3 (in class)	Students discuss the meaning of the question prompted by the language teacher. The subject teacher comments.
Stage 4 (in class)	Students suggest a plan for the answer prompted by the language teacher. The subject teacher comments.
Stage 5 (in class)	Students write an answer based on the plan
Stage 6 (in class)	Both the subject teacher and the language teacher mark the answer

An important part of Stage 3 is ensuring that students understand the difference in meaning between the various instruction verbs used in examination questions, ie the difference between 'describe' and 'explain', 'describe' and 'discuss' etc (for a very useful analysis of the use of the various instruction verbs in examinations for Chemistry Laboratory Technicians see Swales; 1982). The need for teaching the meaning of these verbs is clear: there are particular conventions about what is expected

in an answer to the various types of question and the answer to, for example, a 'describe' question will have a different emphasis and pattern of organization from a 'discuss' question. British students at tertiary level are, on the whole, aware of these conventions; overseas students may not be.

The importance of an understanding of examination questions has been recognized in ESP work and two textbooks have paid attention to this area, *Panorama* (Williams; 1982) and one concerned exclusively with examination questions and answers called *Writing Examination Answers* (Howe; 1983). Both textbooks adopt a 'common-core' approach and make general statements about the meaning of instruction verbs that are meant to be applicable to any subject, whether arts, social science or science and technology. These textbooks have undoubtedly made a useful contribution to the teaching of the writing of examination answers, but we believe that there are dangers in assuming that the meaning of these instruction verbs does not vary between disciplines, and that there is a danger in misleading students with over-generalizations. This is particularly the case with 'discuss', which has been shown in the team teaching sessions described above to have a wide range of meanings. In this paper I wish to suggest that a 'common-core' approach to the teaching of the instruction verbs of examination questions is inappropriate, and, to support this argument, I shall present a short analysis of the use of 'discuss' in various MSc examination questions taken from the department of Plant Biology at the University of Birmingham.

A 'common-core' approach to ESP is one that isolates particular skills related to the tasks that the student has to carry out as part of his academic course and develops these using a variety of contexts not specific to any particular discipline on the assumption that these skills are common to all academic disciplines. It also teaches semi-technical or academic support vocabulary common to all academic disciplines. Textbooks such as *Reading and Thinking in English* and *Skills for Learning* are good examples of this approach and much of the work with overseas students in Britain of SELMOUS members is based on this approach.

There are, I would suggest, two main dangers of a 'common-core' approach to ESP. One is that there may be a gap between what is taught in the ESP class and the actual tasks that the student has to carry out as part of his academic course, and there may therefore be little transfer from one to the other. The second danger is that a common-core approach, based essentially on linguistic analysis, does not and cannot take into account the conventions of conduct that organize academic life, and the interface between language and subject. We need in fact to 'seek the skull beneath the linguistic skin, the conceptual structure of the subject and the conventions followed by different disciplines' (Swales, 1985).

The teaching of the meaning of 'discuss' in examination questions is a good example of these dangers. One can make useful statements about the general meanings of the verb, but, if one is not to run the risk of misleading students, this needs to be supplemented by a consideration

of its meaning in actual examination questions set by the student's department.

In the two textbooks that deal with examination questions mentioned above, the analysis of a discussion question is as follows. In *Writing Examination Answers* we have:

> The discussion is the commonest type of question at undergraduate level and it often has to begin with a definition of the subject or the term used; it is not a very profitable discussion if we are not sure what we are arguing about. Discussion always demands some independence of thought and the ability to look at a situation from different viewpoints. It is rather like a trial or debate where both sides have to be heard and a judgement has to be made. A discussion answer should have two points of view. They do not have to be balanced equally. You may feel that the disadvantages far outweigh the advantages.

The key points seem to be that the answer to a 'discuss' question needs

  i) independence of thought;
  ii) at least two points of view.

It does not state whether the writer should include in his answer his own point of view, but in the model answer which follows the above explanation, the writer's opinion is stated.

Panorama gives the following explanation:

> Discuss questions usually present a debatable statement (sometimes in the form of a quotation). You should examine the whole statement from a number of angles, some of which may support the statement, while others are critical of it.

Again the key features are seen to be different points of view and personal judgement about the balance between them. Neither is clear about whether the writer should give his own opinion, though the implication is that he should.

When, however, one looks at 'discuss' questions in MSc papers set in the Department of Plant Biology one finds that there is a much wider range of meaning for 'discuss' than that given in the two textbooks. There seem to be three types of 'discuss' questions. The first type requires the writer to present various opposing points of view and to conclude by giving his own opinion. At the other extreme certain 'discuss' questions require the writer only to describe a theory, or process, and give some further explanation. The purpose of using the instruction verb 'discuss' signals that something more than just description is required, but this type of 'discuss' question deals with established theory or processes, and, therefore, there is little or no room for presenting opposite points of view or the writer's personal opinion. We shall call this type two. The third type of 'discuss' question has a meaning which lies between the first two. It requires the writer to present points in favour of the argument and points against. It is not, however, a full 'discuss' question, and it is unlikely

that there will be established viewpoints that the writer can refer to. Certainly there will be no room for personal opinion.

Various examples of questions considered in the team taught sessions in Plant Biology will exemplify the three types described above.

> "Cultivated plants and their ancestors are, from one point of view, nature's misfits." (Hawkes 1969) Discuss this statement.

This is an example of Type 1.

The expression 'nature's misfits' suggests that cultivated plants are natural, and that artificial selection picks out the more abnormal variants.

This question requires a discussion of various points of view and the writer would need to conclude by presenting his own opinion. Questions which present a quotation for discussion usually require full discussion of this type.

> Discuss the importance of hybridization and polyploidy in the evolution of one crop plant.

This is an example of Type 2.

In answering this question the writer would have to choose a crop plant for which he knows that polyploidy and hybridization are important. Hexaploid wheat would, apparently, be a good choice. Given this, it is assumed in the answer that hybridization and polyploidy are important, and it would be quite inappropriate to present opposing viewpoints, or, the writer's personal opinions. The use of 'discuss' signals the need for the writer to say why hybridization and polyploidy are important. It might be argued that the use of 'describe' rather than 'discuss' would have been more appropriate in this question. Certainly the answer required is rather more of a description than a full discussion. However it appears that the use of 'discuss' is more appropriate as rather more than just a description of hybridization and polyploidy is required, and 'discuss' seems to collocate more naturally with importance.

> Discuss the value of biochemical evidence for discovering the evolutionary origins of crop plants.

This is an example of Type 3.

In answering this question, the writer would need to say how biochemical evidence is obtained, and to suggest that it may be of use in discovering the evolutionary origins of crop plants. There are as yet

relatively few examples that can be referred to, and the main element in the answer needs to be caution. There are points that can be made in favour of the value of biochemical evidence and points against. But, as it is a new area of study, there are not opposing viewpoints as yet, and there is certainly no room for personal opinion.

> Critically discuss the value of genetic resources in the control of plant pests and diseases.

Type 1

The use of 'critically discuss' tells us that the answer requires a full discussion with an evaluation of established viewpoints and a conclusion giving the writer's own opinion.

> Discuss, with examples, the ability of some populations of plants to grow on poisonous soils.

The writer would assume that the plant populations to be discovered in the answer do have the ability to grow on poisonous soils but would need to add an explanation of why they have this ability. This question is similar to example 1 in that the answer required 'descripton' + 'explanation'. It is therefore Type 2.

> Discuss how fundamental studies on the physiology and bio-chemistry of host parasite interactions may assist in the development of resistant cultivars of crop plants.

Type 3

The key word here is 'may'. The fundamental studies referred to in the question have not yet been applied in the way they may be in the future. In an answer points can be made for and against the value of the studies mentioned, but, as with example 3, there are not yet established viewpoints that can be quoted.

Conclusion

In this paper we have suggested that there are three types of discuss question in Plant Biology MSc examinations at the University of Birmingham. Clearly much more research is needed to see how far these three types apply to other science and engineering disciplines but there is already enough evidence to suggest that generalized descriptions of the meaning of 'discuss' overemphasize the importance of the questions requiring a full discussion in the answer. It is not suggested that those

that set the questions quoted are at fault; on the contrary, the choice of 'discuss' in each of these questions would seem to be valid. This is borne out by the relative ease with which the students grasp the variation in meaning, once it has been pointed out to them. There does, in fact, seem to be something akin to the 'co-operative principle' in conversation suggested by Grice (1975, 1978) between those who set the questions and those who answer them whereby much of the basic subject content is assumed to be known and does not need to be stated in the answer, and as a result of which the student is able to judge which of the three types of discussion is required in the answer. The purpose of this paper is rather to suggest that ESP teachers and materials writers need to be much more concerned with relating statements made in 'common-core' ESP classes to what actually happens in students' departments and to argue for much more 'small scale' ESP research of the type described in the paper.

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Teaching examination answer writing: Process, product or placebo?

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Introduction
Speakers at conferences often give presentations with titles like the one above: divided into two halves, separated by a colon, and followed by a question mark. They then set out to provide an answer to the question they have raised. This paper will be slightly different, since I am asking a genuine question to which, in the best tradition of communicative language teaching, I do not have a pre-cooked answer. What I propose to do is to describe my recent experience of organizing an in-session course that included a component in examination answer writing and to report consumer reactions to it. These suggest that students had widely differing perceptions as to what the course component was about — process or product, in the terms of this seminar.

Outline of University of Edinburgh WEA course component
The University of Edinburgh requires a number of its overseas post-graduate students to attend an intensive fifty-six-hour language course in the Christmas vacation, run by the Institute of Applied Language Studies.[1] The Christmas In-Session Course (CISC) lasts for eight days and focuses principally on academic writing skills, which occupy approximately seventy-five per cent of course classroom time. The daily course timetable is shown below:

Figure 1: CISC timetable

9.00-10.30	11.00-12.30	13.30-15.00	15.15-16.45	16.45-17.45
Writing (mode 1)	Writing (mode 1)	Writing (mode 2) Writing examination answers *or* Research assignments	Reading efficiency	Listening and Note-taking *optional*

As the diagram indicates, the thirty-six hours' work on writing is divided into two modes. Mode 1 involves use of one of three academic writing courses — Glendinning and Mantell (1983), Johnson (1981) and Jordan (1980), with students grouped according to their most recent ELTS writing sub-test score.[2] For mode 2, students opt to work either on a written research assignment or on practice in writing examination answers; for this, they are grouped according to academic specialism.

The reason for offering alternative options in writing mode 2 — WEA and research assignment work — rather than running WEA for all CISC students is that, firstly, some of the students are doing research degrees that do not involve written examinations of the Diploma/M.Sc. type and, secondly, a number of students joining the course from other universities, e.g. Glasgow and Birmingham, have been set vacation assignments and prefer to work on those.

WEA: preparation

Students who had enrolled on the 1984-85 CISC were sent a letter explaining the options for writing mode 2 and asked to discuss with their supervisor which alternative would be more appropriate in their case. Supervisors were sent a separate letter, setting out the WEA and assignment options, and were asked to provide their students with a suitable topic for a research paper or examination question titles. The question types for WEA were specified in the supervisors' letter — and appear in the schedule for the WEA component (below):

Schedule for *Writing Examination Answers* (WEA)
Session 1   General advice:
        The 'rules of the game'
        The components of a question
        The instruction *describe*
Session 2   The instruction *discuss*
Session 3   The instruction *contrast*
Session 4   The instruction *to what extent*
Session 5   The instruction *outline*
Session 6   The instruction *compare*
Session 7   The instruction *write notes*
Session 8   Writing under examination conditions.
        General discussion on exam techniques.

WEA: materials

The component is based on Williams (1982), for two reasons. Firstly, the book has been used on summer pre-sessional courses at the Institute since 1983 and previous students have found its examination answer guidance particularly useful. Secondly, the number of instruction types covered in *Panorama* conveniently matches the number of sessions in the CISC course. (To allow use of the *Panorama* WEA materials on the 1984-85

CISC course, the examination sections were omitted from the 1984 summer pre-sessional course).

WEA: classroom procedure

The intention was for these WEA sessions to be process-oriented, in contrast to the mode 1 classes, where the principal focus was on formal accuracy, cohesion, sequencing and clarity of expression. The classroom procedure was designed to allow the initiative to pass from the tutor, as language expert, to the students as subject experts. To this end, we adopted the following sequence of five stages:

Figure 2: Session plan for WEA component

Stage	Activity	Source	Level	Tutor's role
1	Introductory notes on instruction type	*Panorama*	class	leads introduction presents ideas clarifies doubts
2	Discussion of question; negotiation of answer plan	*Panorama*	group	monitors discussion intervenes on request
3	Comparison of answer plans	Stage 2 group plan	class	guides evaluation of alternatives
4	Discussion of specialist-field exam question; negotiation of answer plan	Supervisor/ past papers	group	monitors groups' discussions responds to appeals for help
5	Writing-up of individual answer	Stage 4 group plan	individual	supervises/advises individual writers helps during writing or corrects after writing

It can be seen from the session plan that what students concentrate on at stages 2-4 is the negotiation and evaluation of a plan (or plans) for an answer. Here, students are concerned with high-level decisions about the necessary content and about the best way to organize the answer on paper. They are not yet concerned with the lower-level mechanics of sentence/paragraph construction — the area covered in the complementary mode 1 work.

It is at the final stage that the individual writers face the problems of expression in English; the tutor is available for consultation either at the time of writing, i.e. to help on-line, or after writing-up, in the traditional correction role.

To sum up, the five stages in the classroom procedure allow a movement (vertically in the session plan diagram) from common-core to subject-specific material, and from class-level work through group-work to individual writing. The tutor is initially a presenter of ideas and information on how to frame an examination answer to a particular type of question, and then moves into the background, as the responsibility for negotiating suitable answer plans shifts to the students with their subject expertise.

Reactions to the WEA component from Edinburgh overseas students

Students' views
Students were asked to complete an anonymous questionnaire on all the CISC components. Their views were elicited in their own words, rather than through the marking of a numerical scale or the ticking of boxes. Among the 22 students taking the WEA option in writing mode 2, only two comments could be termed negative; they were both to the effect that the work had been useful but would have been better if there had been greater emphasis on grammar.

Tutors' views
Tutors were asked to submit written reports on the CISC course as a whole and to evaluate the various components they had taught. Their reactions to the WEA work were rather different from the opinions expressed by the students — and it was this difference of view that led me to offer this contribution to the workshop.

The three tutors involved in WEA sessions all commented that they felt the students had appreciated the work and found it helpful, but that they themselves had three main reservations about the WEA approach and material:

1. The implication of the *Panorama* exercises — or any WEA material — is that there are hard-and-fast rules for decoding examination questions. They run the risk of making the world appear a neater and simpler place than it really is. (This is, of course, a danger in *any* teaching material, but the tutors found it particularly true of WEA). Furthermore, if the effect of using WEA materials is that students believe there is necessarily a one-to-one relationship between a question instruction and a particular ideal answer, then they may be doing students a disservice.
2. Learners may infer from the one-instruction-type-per-day format of the CISC course, (i.e. the one-instruction-per-unit approach of *Panorama*), that the seven instruction types are equally common,

whereas in fact 'discuss' questions are much more frequent than any other type — at least in the subject-areas represented by CISC students.

One reason for the frequency of the 'discuss' question was suggested by Tony Dudley-Evans in his paper at this seminar (page 47): that there are actually three types of question carrying the 'discuss' label. A similar point was made to me by tutors on the 1984-85 CISC course, who had found students at stage 4 of the WEA 'discuss' session trying to fit what were really 'describe' answers, (e.g. 'Discuss the role of organic colloids in soil capacity') into 'discuss' questions by following the *Panorama* guidelines, looking for points for and against, and coming to a personal conclusion after balancing the pros and cons.

3. At a more detailed level, the tutors commented that the *Panorama* material treated 'contrast' and 'compare' as separate instruction types, whereas all the specialist-field past papers brought by CISC students showed that the two instructions appear together. It was suggested that a future WEA component might spend two days on 'discuss' and a single session on 'compare and contrast', taking into account tutors' comments on points 1 and 2.

Follow-up to the WEA questionnaire

In the light of the apparent contrast between the tutors' comments and the very positive findings of the questionnaire completed by their students I wondered if the discrepancy might be ascribed to a placebo effect. In other words, might it be that *any* course of sessions entitled 'Writing Examination Answers' would have been equally well received by students? It seemed to me important to get more information on *why* students thought they had benefited from eight days of WEA practice. I therefore arranged individual informal interviews with a number of CISC students approximately one month after the course and asked them to say what they felt had been the purpose and the effect of WEA.

The responses from the interviewees might be represented in the form below, although I should stress that the labels are short-hand terms and for convenience only.

At the 'cultural' level, some individuals saw the WEA work as essentially to do with the interpretation of the academic conventions in question rubrics. For example, one student said, 'It is useful to get the meaning of some questions such as "discuss" and "describe". This was helpful. But some other things, like us writing and the teacher correcting the exam answer, are not useful'. (This was, incidentally, the comment of one of the two students who had requested more grammar).

Still at the 'cultural' level, one point that was *not* appreciated by all students was the importance attached in the Western academic tradition to individual synthesis, rather than reproduction and rote learning. Some students had clearly expected to gain a greater advantage over

Figure 3:   Perceived levels of WEA component

CULTURAL	interpretation of academic conventions, e.g. the question-instruction 'code' assumed value of intellectual synthesis and abstraction, rather than reproduction of rote-learned answers
SUBJECT-SPECIFIC/ COGNITIVE	judgment as to what constitutes a valid and sufficient answer application/presentation of relevant knowledge from course
RHETORICAL	conformity to patterns of factual presentation and logical argument; development of writing 'flow'
LINGUISTIC	mechanics of formal accuracy (grammar and spelling) sentence/paragraph-level focus

their colleagues on subject courses (by attending the CISC course) than simply the improvement of their ability to write English. One wrote in his questionnaire, 'Indeed give me a good chance to understand and analyse the quastons. But I hope the enswering had availble to compare my answer with the right answer'.

As far as the 'subject-specific' level is concerned, two students commented on a problem of the timing of CISC in the academic year. 'I think we cannot write full answers because until now we have not read through all our books. We cannot have a good, complete answer to the exam questions. We *can* make a plan or an outline, but it is hard to fill in the content of the answer'. This is obviously a practical difficulty, as far as the provision of in-session teaching is concerned. The Christmas vacation course takes place when students have finished less than half their year's course work; yet past experience has shown that many linguistically weak students are unwilling to spend Easter vacation time on a language course, when they feel the need to concentrate on assignments or revision.

On the question of 'rhetorical' and 'linguistic' levels, I asked the students to say whether they saw WEA as basically about the organization of ideas or the improvement of their written English. One of the interviewees gave this answer:

> Sometimes it's not easy to distinguish between the two things when you are writing in a foreign language. You don't know when it's a language problem and when it's something else. But I thought the course was more on how to structure answers. The discussion with the other two students helped me to organize my ideas to make a good answer, and the teacher helped me with the structure of my sentences when I found a problem.

On the other hand, there was also the view that WEA was about planning and logical argument:

> I think what is needed from us is an answer plan. A plan that we discuss and then write out as notes or headings. I think that is really enough; writing out the whole answer is not necessary.

Finally, there were the reconstructed grammarians, who saw the linguistic product as the proper domain of the CISC course and the WEA tutor:

> I am rather good at writing exam questions in Arabic. This is why I can now study an M.Sc. in Edinburgh. I do not need to practise how to organize my answers. I want better grammar and vocabulary to express myself well.

and, similarly, another student commented,

> What is written inside the question — grammar errors and other mistakes — is what I needed to improve in the course. So, getting corrections from the teacher was the most useful part.

Discussion

Given this evident range of individual learner perceptions as to the purpose and focus of the Edinburgh WEA component, the question arises: Does it matter that the students on the course ended up without a common view of what the component was 'about'?

It could be argued that it is inevitable and, in learner-centred terms, a good thing that people from varying cultural, linguistic and academic backgrounds will approach and leave a course with different assumptions and perceptions.

We can state some things with reasonable certainty. Firstly, there would seem to be value in raising global issues for students to react to and discuss, such as attitudes to and preparation for examinations, and in generally defusing their natural anxiety. Secondly, there are clear advantages in being able to simulate real examination writing — planning outlines and creating polished final products — by using the students' academic course content as the basis for class activity. Thirdly, WEA should not be treated as if it were a totally separate process from 'normal' academic writing; there is some risk that a discrete course component in WEA might imply just that.

More generally, it might be argued that in some ways the WEA component is a microcosm of *all* study skills teaching; it brings into play not only linguistic proficiency *per se*, but also clarity of thought, subject competence and underlying cultural assumptions as to what academic activity entails. All these elements are present to some degree in other sub-fields of study skills tuition, but the particular constraints of the examination game make heightened demands on overseas students' linguistic and other resources. To return to my title, is the benefit that students claim to derive from a WEA course really a placebo effect: a

reflection of the fear inspired by course examinations, rather than a response to the form and content of the particular course?

Notes

1. I would like to acknowledge the contribution of Rosemary Baker, course director of the 1984-85 Christmas in-session course, to the planning and organization of the course. Particular thanks are also due to her and to our IALS colleagues, Gibson Ferguson and Ross Graham, for their part in the teaching and evaluation of the WEA sessions described in this paper. (TL)
2. The test referred to here was developed by the English Language Testing Service of the British Council, London. It is intended for use in the assessment of the linguistic proficiency of non-native applicants for study places at English-medium universities and colleges, particularly in the UK. It consists of five sections: two common core subtests in reading and listening, and three further subtests of study skills, writing and interview, based on the students' academic subject area.

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Teaching examination techniques at Buckingham

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Each EFL study skills course seems to be a practical response to the needs of a particular group of students at a particular time, so that the teaching of examination skills at the University of Buckingham is different from that at Edinburgh. Our students are almost all taking undergraduate courses, though many already have degrees, and the overseas students usually take Law or Business Studies courses. Every precaution is taken to ensure they enter the University with a near-native level of English, as the two year degree leaves very little time for remedial language classes. However we do provide classes and information on study skills which include sessions on examination techniques.

Students are often unwilling to ask for help or are unaware that they might need it, so we present information in several ways. First, study skills handouts are available at the library desks and two of these are concerned with examinations: 'Preparing for Examinations' and 'Coping with Examination Stress'. Then the Listening Centre has tapes both on examinations and advice on stress and relaxation. Lastly seminars are held, often together with a teacher of the subject concerned, and these take place about six weeks before important examinations. In tapes, leaflets and seminars the general ethos of examination is pointed out and then specific information is given on such topics as the methods of revision, the importance of obeying the rubric and allotting time correctly, the vocabulary of questions and the discourse of answers. The allotment, or rather misallotment, of time is emphasized since it has been observed that this is a major cause of examination failure. The discourse of answers is briefly described, but it is questionable whether this is of much use only a few weeks before the examination. Making students appreciate the various essay or answer structures that are expected by the invitation to 'Discuss' often means a change of learning behaviour, and can take a long time. It is better dealt with in an essay writing class on a pre-sessional course, or in a one to one tutorial. Finally, warning is given to students of the tendency for the more serious ones — and that means the older overseas students especially — to overwork and overworry. When this happens the symptoms of anxiety are often mistaken for those

of some disease, which adds further anxiety, and a spiral of psychosomatic illness can occasionally ensue, with disastrous effects on the student's performance in the examination.

Tony Lynch has suggested that teaching WEA (writing examination answers) is a placebo. This is a pejorative term and a more accurate one could be 'reduction of anxiety'. Anxiety can damage any kind of performance and a student who normally writes reasonably error-free language can, under stress, make serious linguistic and cognitive errors. While nervous native students may produce howlers, mis-spell, omit words and make factual errors, the second-language student seems to revert to a previous language level strongly influenced by the mother tongue. The following extract is taken from halfway through a test paper written by a student who already has a first degree in Economics from an English-medium university.

> In a decided case where the driver of a man claimed that he was possessed by demons when he drove other people's vehicle but if drive his own his is possessed by god. He can still stopped for the pedestrian and let the pedestrian crossed the road but went through the traffic lights. He was charged with insanity as his mind is of not normal in nature.

The linguistic errors of agreement, tense and omission are obvious (though spelling does not seem to be affected), but more serious to the subject tutor marking the paper is the cognitive error which makes insanity a crime which the driver is charged with, rather than the defence he can make.

To emphasize the deterioration of language under stress, here are the two *worst* sentences from an essay written by the same student three weeks later. Here minor errors, usually of tense, amount to about two a page.

> If Henry, Lennie and all the party had been arrested, then they may be searched for any evidence relating to the offences. The search by both these officers on those people were therefore unlawful as they were not arrested before the two policemen searched them.

This student subsequently passed the examination held a term later.

It follows that anything that can be done to help anxiety-prone overseas students is likely to improve their ability to write coherently in an examination. One of the commonest methods of reducing anxiety is familiarization with the object feared. This means that any teaching on or about examinations has a two-fold effect. The first of course is that the student benefits from being reminded, or taught, the importance of obeying the rubric, allotting time wisely, understanding the vocabulary of the questions and so on, and this is valuable, necessary help which should not be underestimated. But the second major effect is the reduction of anxiety or if you wish to name it so — the placebo effect.

The introductory paragraph in economics essays and examinations

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The following is an analysis and a commentary upon the introductory paragraphs in essays and examinations written by overseas postgraduates studying on a one-year postgraduate diploma course in economic development. A subject tutor's description of what, to him, constitutes the 'ideal' introductory paragraph, is looked at in the light of the data collected in the Department of Economics, University of Manchester, from among overseas postgraduates.

One of the main difficulties in writing for native-speakers of English is clearly the process of 'getting started' (Hartley & Knapper, 1984). Academics in both Britain and Canada, in responding to a questionnaire, mentioned two main sources of difficulty: firstly, *writing the first paragraph* i.e. getting started; secondly, the actual physical process of writing (physical strain, cramp, etc.). If writing the first paragraph presents difficulties for native-speakers of English, the problems for *non-native* speakers of English must be larger still.

One notable ELT practitioner (Swales, 1983) has written that 'scholarly introductions have suffered from ELT neglect... difficult areas, such as writing introductions, continue to be ignored in the hope that the problems they create for non-native speakers will disappear. However, gaining usable insights into such 'difficult' communicative events is a laborious process.'

At this stage it is pertinent to ask 'why is the introductory paragraph important?' Doubtless there are numerous answers to this, but high on the list of possibilities must be that the introduction sets the frame of mind of the reader for the remainder of the writing. If the introduction is long, rambling or incoherent, the reader's reaction may be incomprehension or irritation, which may prejudice views on the remainder of the writing. Consequently, it is to the writer's advantage to start well, to create a favourable impression, and not to antagonize the reader.

One subject-tutor in the Department of Economics was asked to describe 'the ideal introductory paragraph', bearing in mind the essays and examinations that his overseas students have to write. He was quite precise:

— It should indicate that the student has understood the question and that he/she can interpret it.
— It should indicate the structure of the answer.
— It should indicate the way that it is to be answered with regard to content (and possibly some indication of the conclusion).
— It should be not more than 4-5 sentences long, about 15 lines maximum. (In the examination students have one hour to write each question. The students' essays are similarly short as they are geared to match the examination answers.)

In order to see how far the writing of overseas students in the Department of Economics matched the ideal described above, data were collected in the form of 137 answers to examination questions (Summer 1984). 11 essays (Winter 1984/85), and 20 answers to a practice exam question (Spring 1985). My expectations of the introductory paragraphs were as follows:

— in exams: short paragraphs with very little 'signposting' of the structure or content of the answer.
— in essays: long paragraphs with reasonable 'signposting' of the structure or content of the essay.

The reality is shown in Tables 1-4. The length of the introductory paragraph in exams was 11 lines (3 sentences), and in essays it was also 11 lines (3 sentences). I was proved wrong! The following was the 'signposting': in exams 20% indicated the structure of the answer while 40% indicated the content; in essays none of the students indicated the structure or the content of the essay. Again I was proved wrong! The situation improved in the writing practice for examinations (Table 4) which was an integral part of the English classes (43% indicated the structure and 86% indicated the content).

It would seem that some of the students brought with them from their own countries and cultures different concepts of what constitutes an appropriate introductory paragraph or, in some cases, no concept at all. It was also clear to me that many subject-tutors did not inform students what was expected or required of them; nor were they shown model introductions, essays or examination answers.

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Table 1: Length of introductory paragraph

Type of writing / Length	Examination questions (Summer 1984; 3 questions in 3 hours; 137 answers)	Essays (Winter 1984/85; 11 essays)	Examination practice (Lent Term 1985; 1 question in 1 hour; 20 answers)
Number of lines			
range:	2–45	8–18	3–24
average:	11	11	9–10
comment:	63% of students wrote 11 lines or fewer	73% of students wrote 11 lines or fewer	75% of students wrote 10 lines or fewer
Number of sentences			
range:	1–15	2–8	1–9
average:	3	3	4
comment:	64% of students wrote 3 sentences or fewer	63% of students wrote 3 sentences or fewer	80% of students wrote 4 sentences or fewer

Table 2: Examinations questions: Introductory paragraph structure

I.   20% indicated the structure of the answer.
    40% indicated the content of the answer.
    60% indicated *neither* the structure *nor* the content.
    100% gave *no* indication of the conclusion.

II.   28% commenced with a description.
    ('In a two-sector model a process of migration occurs...')
    26% commenced with a statement + intention.
    ('First we will look at a closed economy...')
    20% commenced with a definition.
    ('The Urban Informal Sector is that sector that produces...')
    17% commenced with an assumption (+ explanation).
    ('Let us assume that the majority of population is...')
     9% commenced with an analysis/comparison.
    ('According to orthodox static economic theory LDCs should...')

Table 3: Essays: Introductory paragraph structure
(11 scripts)

I.   100% gave *no* indication of the structure *or* the content *or* the conclusion.
    The main tendency was to plunge straight into the answer with no prelim-
    inaries.

II.   45% commenced with a description (including historical reference).
    27% commenced with a statement + intention.
     9% commenced with a definition.
     9% commenced with an assumption.
     9% commenced with a discussion.

Table 4: Examination practice: Introductory paragraph structure
(A detailed look at 7 scripts: February, 1985)

I.   43% indicated the structure of the answer.
    86% indicated the content of the answer.
    100% gave *no* indication of the conclusion.

II.   71% commenced with a statement + intention (+ description + assumption)
    14% commenced with a description.
    14% commenced with an assumption.

Writing for continuous assessment or examinations — A comparison of style

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Students who are native speakers of English frequently comment that under examination conditions their writing deteriorates. In a small-scale survey of 80 new graduates at Manchester University, 72 per cent expressed a preference for assessment being carried out by coursework as well as by unseen examination. Only 8.6 per cent, if given the opportunity, would opt for assessment by examination only. 28 per cent of those who expressed a preference for assessment by coursework specifically mentioned their weak linguistic performance in examinations.

The following are comments from the questionnaire:

> Far too rushed — became sloppy in style in order to put over all the information.

> Style went by the wayside — it was an effort simply to get down known facts.

> ...constant anxiety that reached panic levels due to time constraint; unable to think clearly — SEVERE ORGANIZATIONAL PROBLEMS; general feeling of under-achievement and dissatisfaction; embarrassment at style produced and lexical simplicity...

Those responsible for evaluating students' work, however, usually claim that examination papers are assessed on academic content only. Interestingly, this is borne out by C.J. Weir's research, reported elsewhere in this volume. It would seem useful, then, to attempt to discover whether there are significant differences in the written product under these two conditions and if there are, whether they influence the assessor.

This is the eventual aim of the present research, which is based on data from native-speaking Psychology undergraduates at Manchester University. In their final year these students are asked to write an essay on their special subject. The essay has to be handed in after the Easter vacation. Half of the final mark for this part of the course is awarded for the essay while the other half is allotted to the final unseen examination, taken six weeks later, on· the same content area. Thus, within a short space of time the students produce a piece of work on a similar

topic under the two conditions. There are, of course, differences in the topics set but these need not concern us for the moment.

The papers and essays which represent the data have already been assessed but the analysis is being carried out in ignorance of the allocated grades. It has been ascertained, however, that approximately half of the sample obtained upper second-class degrees, while the other half obtained lower seconds. (It is interesting in this context that several of the graduates surveyed mentioned having received II(i) grades for their coursework and II(ii) grades in their final examinations.)

A great variety of special subjects is offered to the Psychology students. Samples from four of these are being considered but in this brief paper I will report some of the findings from a preliminary analysis of a group of five essays and examination answers in one of these areas: Educational Psychology. As the most popular topic among the students was behaviour modification, the analysis has been performed on the work of five students who answered on this topic. This means that they wrote a long essay on one of the following:

> With reference to the literature, discuss the ethical issues concerning the use of behaviour modification as a technique to change children's behaviour.

> Critically evaluate the advantages of using behavioural approaches in the teaching of mentally handicapped children. Give examples of possible behavioural programmes to illustrate your answer.

and answered the following examination question:

> Outline the steps you might take in planning a behaviour modification program for an eight-year-old who has temper tantrums at bedtime.

Here it is necessary to stress that the research is in its early stages and this paper represents an attempt to investigate measures which will eventually be of use in describing possible differences. Until such differences have been defined we cannot, of course, begin to answer the second question referred to above, that involving the influence on assessors.

Since the analysis was an exploratory one, it was performed on only the first 500 words of each piece. The continuous assessment essays are on average 2,000 words long and the examination answers range from 552−1408 words, three of them being under the 1,000 word level and two above. It is, of course, probably the case that, because of time constraints there are likely to be more differences at the ends of examination answers and the final analysis will take account of this.

Students seem to feel anxiety about two particular aspects of their linguistic performance: organization and style. A question that offers a ready-made organization, as is the case with the examination question quoted above, will therefore appear more attractive. Although both aspects will be considered in this research, there is not space in so short a paper to do more than consider one. I shall concentrate, then, on the

stylistic area and endeavour to find evidence that could account for the students' dissatisfaction with their performance.

The hypothesis under investigation concerns levels of formality. An initial reading of scripts seemed to suggest that examination writing bears a closer relationship to the writer's own thought processes than the term-time writing. There seems often to be a better flow. During examinations writers can refer to nothing but their own thoughts and memories. It is possible for them to commit other writers' material to memory but it is far more likely that such material has been processed and it should and will emerge in some sense as their own. Because they are working at speed we can hypothesize that the expression of those thoughts will be closer to their own personal everyday style than to that of formal academic discourse, unless, of course, as is sometimes the case, they have been in the habit of thinking, speaking and writing in that style for some time.

In looking for evidence of formality and informality in both conditions, the following measures were chosen:
1. The occurrence of the passive
2. Length of noun groups functioning as subject in the clause
3. Incidence of other features of formal English
   (a) interrupting constructions
   (b) advanced relative clauses
4. Incidence of informal features
   (a) incompleteness or change of direction
   (b) informal vocabulary
   (c) note-taking conventions
   (d) length, 'loose' sentences

Preliminary results

The occurrence of the passive
The frequency of the passive in impersonal writing is well attested (Leech and Svartvik; 1975:25). Would it occur as frequently in the examination as it did in the continuous assessment writing? Bearing in mind the framing of the question 'Outline the steps *you* might take...' it was possible that students might answer somewhat personally. The table shows that although three out of five students used fewer passives in the examination, only one candidate (No.1) used them significantly less. This is explained by the fact that this student did indeed choose to respond to the 'you' in the question by using 'I' throughout. There is therefore an unusually high number of personal pronouns in this answer, a feature not normally typical of academic writing and, indeed, sometimes frowned upon. This will obviously be an interesting candidate to look at in relation to assessment. All things being equal, i.e. all necessary points being included in the answer, did the personal style make any difference to the assessment? In general, however, this measure does not seem to be

Figure 1: Writing on behaviour modification: Some differences

Candidate	No. of words analysed CA	Ex	No. of sentences CA	Ex	Mean no. of words per sentence CA	Ex	No. of paragraphs CA	Ex	No. of passives CA	Ex	No. of 'heavy' NPs at subject CA	Ex	No. of 'formal' features	CA	Ex	No. of 'informalities' CA	Ex
1.	523	532	18	23	29	23.1	3+	3	17	1	19	8	a.	1	0	1	•7
											4.5	3.7	b.	0	0		
2.	518	526	21	25	24.6	21	7+	8+	17	15	16	14	a.	2	0	1	10
											6.5	4.1	b.	0	0		
3.	513	521	25	20	20.5	26	3	5+	15	21	18	13	a.	2	0	2	15
											6.2	4.9	b.	4	0		
4.	526	540	19	20	27.6	27	5	6	18	10	14	9	a.	1	2	0	4
											7.5	7.0	b.	2	1		
5.	516	518	28	27	18.4	19.2	3	5	12	15	14	7	a.	0	0	1	3
											3.8	5.7	b.	3	0		

very useful. It may be that a further classification of passives into 'personal' and 'impersonal' may tell us more. The first group would include those which occur with a human subject, often used to maintain the topic of the sentence and the second those with an inanimate subject more usually seen as typical of academic writing. Examples from the data are the following:

Personal
The child may have to behave well for longer periods in order to achieve the reward, and he may not be rewarded every time he doesn't have a tantrum, but may be reinforced only intermittently.

Impersonal
In view of this it is essential that the teaching objectives are clearly defined and not liable to misinterpretation and ambiguity.

Noun groups functioning as subject in the clause
Working on a corpus from the survey of English usage at University College, London, F.G. Aarts (1971) divided noun phrases into two types: 'light' and 'heavy'. 'Light' items are those realized by pronouns, names, nouns, neither pre- nor post-modified and nouns premodified by determiners only, whilst 'heavy' items are those realized by all other pre-modified noun phrases and all postmodified noun phrases. Aarts found that, overall, 'heavy' noun phrases are far less common in subject position than in other positions in the sentence. However, he also found that although they are rare in informal spoken English and in fiction they are somewhat more frequent in formal spoken and written English and even more so in scientific writing. This might then serve as a useful measure of formality.

The table shows that in every case students did use more of the 'heavy' subjects in the continuous assessment writing. Here is an example from candidate 4's essay:

> 'One aspect of a behavioural approach that is particularly beneficial in teaching mentally handicapped children is that of graded demands...'

The difference, however, was not always very great (see candidates 2 and 3). But closer examination revealed that quite often the 'heavy' items in the examination pieces were no more than det.+adj.+noun and that often these were set phrases, e.g. 'the target behaviour', for example. The length of the 'heavy' noun phrases was then compared and the figure showing the mean length appears underneath the figure showing the number of 'heavy' noun phrases in the table. The results were interesting: three candidates wrote noticeably longer noun phrases in the CA essay, one noticeably shorter, and one, the one who wrote the longest, maintained their length under both conditions.

There are several possible reasons for the difference:

(a) The examination task did not call for heavy NPs. This seems to be contradicted by the fact that two of the candidates used them almost as much as they did in the essay.

(b) The CA writing is influenced by source materials which themselves contain a high number of 'heavy' NPs. (It should be possible to check this to a certain extent by reference to the most commonly used sources.)

(c) In the examination students just do not have the time to compose their information in this condensed way unless they are already practised at it. (It is worth noting that the candidate who maintained the longest NPs under both conditions happens also to be, in the view of this writer, the most accomplished writer in this group).

The measure seems promising.

Other features of formal English: (a) interrupting constructions (b) advanced relative clauses

The third measure involved two elements. Again these are features of formal written English. They occur less frequently in informal contexts. The first was what can be called an 'interrupting construction' (Perera, 1984: 196). This is one way in which writing can compensate for the lack of a prosodic system. The interruption often adds emphasis to an element in the subject. It is also a device for packing more information into the sentence in a concise way. Here is an example from candidate 2's CA essay:

> 'Adults, who to small children are figures of authority in our society, have...'

The instances of this feature appear in the upper part of the box at 'a'. The table seems quite revealing. Four out of five candidates have used the device at least once in CA writing, but only one has used it in the examination. Note that it is candidate 4, s/he of the long noun phrases, who has done this.

The second feature in this category, represented by 'b' in the box, is the 'advanced relative clause'. Under this heading are included relative clauses which are introduced by whom, whose and a preposition plus a relative pronoun, (Perera, 1984:146). These are known to be quite late acquired and are also associated with formality. Two of the candidates (and we note that it is two who score highly in the informality column,) have not used these under either condition. Of those who have used them only one has used them under both conditions and again it is the candidate who writes long noun phrases. Candidates 3 and 5 have used them only in the CA essay. The fact that there are so few instances of these in the examination pieces leads me to feel that, further refined, this could be a promising measure of difference.

Informal features

The fourth measure looked at the writing from the other side of the coin. How many features of informal language could be found? Did they occur under both conditions?

Four features were examined:

(a) incompleteness or change of direction (of the kind we associate with speech behaviour). Here is an example from candidate 2's examination paper:

'Next, there would have to be an observation of the behaviour — find out what its consequences are.'

(b) vocabulary choice more towards the informal than the formal end of the spectrum. This, at the moment is a subjective measure. An example from candidate 2's examination writing is the following:

'An egg-timer could be used and such THINGS as — 'Let's see if you can get your pyjamas on before the egg-timer runs out.'

(c) a use of written conventions that is more appropriate to note-taking than formal academic writing. Here is an example from candidate 3's examination piece:

'The deficit behaviour ie compliance may be rewarded intermittently ie variable ratio schedule. Eg the child may have to go to bed, without temper tantrums or do as he is told a certain number of times before he is rewarded.

(d) lengthy sentences made from phrases and clauses strung together with simple conjunctions. Candidate 3 wrote a sentence of this type in the examination:

'The type of reinforcement to be used in the program and the frequency and timing of the reinforcement should be specified and the outcome if the required behaviour does not occur eg time out may be used to initially control the temper tantrums, and token reinforcement may be continued and used on a variable ratio schedule.'

Although it is obvious that these features must be more carefully defined, a measure of this kind should help us to explain what it is in their examination writing that students feel uncomfortable about. There were very few of these informal features in the continuous assessment writing. Candidate 4, almost predictably, had none. But all candidates used some of them in the examination.

Any conclusion based on so few individuals can only be extremely tentative. It does seem possible, however that differences of style will be measurable by paying close attention to carefully defined formal and informal features.

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E.A.P.→E.S.P.→Self-sustaining growth

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The problem can be stated quite simply: how can the teacher develop special subject writing ability in a class of extremely busy post-graduates who possess various levels of English and who study a wide number of disciplines? The time available for such work is two class hours per week over two terms, with the possibility of a small amount of additional tutorial work. Motivation is generally high, expectations as to improvement frequently unrealistic, and language learning aptitude is very varied indeed.

The most important task in tackling such a problem is to set realistic and relevant aims. These may be determined by seeking out the answers to two questions, namely:

   (i) what are the characteristic functions of the language of research and

   (ii) what are the major areas of difficulty that such students experience in writing it up?

It is worth reminding ourselves that there is no necessary symmetry between the answers to questions (i) and (ii), i.e. it is wrong to argue that simply because a language function occurs very frequently therefore a student is likely to experience difficulty in realizing it.

It will, however, not be possible in the scope of this paper to present the evidence — such as it is — for my selection of language functions nor for my choice of major areas of difficulty in the course I am about to describe. Those interested in an exploration of some of the issues involved may find it helpful to consult The Writing of Theses by Speakers of English as a Foreign Language (James; 1984)

I shall limit myself here then to specifying the characteristic functions of the language of research that I have judged it most useful to include in a developmental course of this kind, indicating by asterisks those which seem to cause most difficulty in a wide range of disciplines. (See Figure 1).

The language functions listed in Figure 1 provide the focus for the work covered, while the methodology employed aims to produce a course which is flexible and sensitive to student needs.

Figure 1:   Language of research

Characteristic functions selected for study

```
                        aims
     stating          *views
                        findings
    describing  <      procedures
                       events
   *defining  <        briefly
                       in detail
    evaluating <       comparatively
                     *critically
   *reasoning <        speculatively
                      definitely
   *signposting <      between small chunks of discourse
                       between large chunks of discourse
[classifying and exemplifying are treated incidentally]
```

Admired Stylistic Features
*simplicity
*economy
*symmetry

Five elements go to make up this methodology, each one of which will be briefly introduced. A more detailed description then follows.

The first of the five elements, then, centres on the *model paragraph*. These paragraphs are taken from various academic sources, i.e. from sections of university level text-books, from theses and research papers, from publisher's information sheets, from academic book reviews etc. The subject matter characteristically deals with an aspect of the social sciences, on the principle that such material is accessible to the widest range of students. The paragraphs are selected as common-core English for Academic Purposes material which exemplify the language functions listed in Figure 1 above and which may through their subject matter stimulate the interest of the student; they are then studied intensively in ways to be described later.

The second main element is based on the classificatory table of key language items. These are compiled, completed or arranged as a joint exercise by student and teacher. One such table that we shall examine in greater detail is the 'verb phrase in research literature'.

The third element consists of the systematic collection by the students from their personal reading of examples of key language functions and important items of vocabulary. These are written down in pocket-sized notebooks specially purchased for this purpose.

For the fourth element, an occasional class essay is set. This is introduced as a method of obtaining systematic feedback on how effectively the writing course is working; as an opportunity of exploring certain issues raised in the model paragraphs; and as an opportunity to practise using certain discourse features of language (e.g. macro-level sign-posting)

which requires a longer length than the one or two paragraph exercises that characterize most of the course.

Fifthly and finally there are short fortnightly tutorial sessions (normally about forty-five minutes) for those members of the class who request help with their personal academic writing or who wish to consult me about various points covered in the class sessions.

As will perhaps now be evident, the five elements of the scheme have been designed to complement and reinforce each other. Thus the model paragraphs focus the students' attention on key language functions, which they are then encouraged to seek out and record in their own special subject reading. Particular areas of difficulty receive formal and quite rigorous attention in functional grammatical sessions where the grammatical expressions covered in the model paragraphs are extended, classified and analyzed through class exercises based on teacher handouts. The class essays enable attention to be given to a student's individual style and provide in their feedback role useful information as to any gaps which need filling in the remainder of the course. And the tutorial sessions inform the teacher very clearly as to where the students experience difficulty in their special-subject writing and how far the work covered in class meets their individual problems. Again, such information can be employed to re-shape the class sessions or to introduce new elements of language for formal teaching.

So much then for the scheme as a whole. We have now reached the point where we can analyze each component in some critical detail.

First then the model paragraphs. These are studied in two ways: in class with paragraphs selected by the teacher; at home with paragraphs selected by the student. The handout (Figure 2 on page 78) given to each student at the beginning of the course explains how the system works and how in particular the more general EAP work done in class links with the more intensive ESP work done at home to produce the self-sustaining growth so boldly claimed in the title.

The handout on page 78 is read silently by the class after which certain comprehension checks are made. Preparations are then made to apply the method suggested in the handout to the text itself by submitting it to intensive analysis. In the first paragraph, for example, the selection of 'I should like' rather than 'it is argued', the function of 'so' (in sentence 2) and 'it' (in sentence 3), and the possible reasons for the avoidance of the active tense (in sentence 2) are all covered. In the second paragraph the use of 'as follows' and the choice of the modals are discussed. Linguistic comment normally tries to start from the writer's intention to convey a precise meaning and proceeds to his reason for selecting the form which appears in the text. Analysis does not preclude excursions into matters of pure structure, however, as will have been noted in the examples selected for illustration above.

The analysis once completed, the student is then subjected to a modified and extended *form of the very technique that is being urged on him:* extended in the sense that a *mixture of items* (rather than one type of item

Figure 2: HANDOUT — Self-help in developing academic writing

In this short paper, I should like to argue that it is possible to develop academic writing *outside* the language classroom. The technique for doing so will be described below. Basically, it consists of making use of special subject reading in order to develop a wider *range* and a greater *accuracy* in writing.

The method, then, is as follows. First, the student should mark certain key paragraphs, or short extracts, from his special subject reading. He may already do this anyway, as part of his preparation for taking notes. These key paragraphs should generally be chosen for either, or both, of the following reasons:

(a) they are crucial to the understanding of the subject i.e. they express central concepts or vital information

(b) they are characteristic of the way in which certain common communicative elements are expressed i.e. they illustrate an introduction, a transition, or a conclusion.

Once the extracts have been marked the student should copy them into his language notebook. On the first occasion that this is done the student should miss out all the verbs. Next day he can then write these verbs in, and once this task has been completed, he can check his answers against the original. This type of exercise can then be repeated for units (or combinations of units) of increasing length and complexity, i.e. for pronouns, relative pronouns and connectives; for predicates; for subordinate clauses. As a final step the student can make very brief notes on the extract and can then reconstitute these — aiming at a finished reproduction.

Of course, the student will sometimes produce alternatives to the original piece and will need advice as to whether these are acceptable or not. Such advice can often be given by colleagues in the space of a few minutes, and all the time the student is focussing his attention on the original.

— as suggested in the handout) are omitted from each paragraph; modified in the sense that in this case (and indeed for nearly all *class* as opposed to *home-based* paragraph exercises) the teacher has made the selection rather than the student.

A brief example of a paragraph, treated in the way advocated above, follows:

> In this short _____, I _____ like to argue that it is possible to develop academic writing outside the classroom. The technique for _____ _____ will be described _____. Basically, it consists of _____ use of special subject reading _____ _____ to develop a wider range and a greater accuracy in writing.

Though the technique is basically simple and straightforward, some of the issues that arise in putting it into practice are rather less so, as the following comments will make clear.

The first point to make is that in the class blank-filling exercises, the blanks have not always been selected through what has previously been commented upon in the analysis-&-discussion-session prior to this exercise. Testing untaught items keeps the students alert and prevents (or

goes some way to preventing) them from mindlessly learning odd items of language.

'Mindlessly learning odd items of language'. Are there not, though dangers that this is precisely what such a methodology encourages? One has to concede that the more linguistically vulnerable, particularly those from an educational background that makes a strong use of rote learning, may all too quickly fall into this trap. They are, though, quickly disabused. Principally because they find that such an approach does not work: the only way they stand a chance of satisfactorily completing the text is by fully understanding it, and by being able to match an appropriate grammatical form to a meaning which contributes to the sense of the whole passage. The sheer difficulty of rote learning, in fact, seems to force the students into more productive strategies. Secondly, there is the welcome given to 'reasonable alternatives'. Thus it is very clearly explained to the students that providing they convey the basic meaning of the original, it does not matter how they fill the blanks. Which then raises the question as to how reasonable is a reasonable alternative. Discussion of this will often lead the class into an exploration of quite subtle shades of meaning and style, producing insights into how various language forms are employed to communicate them.

Feedback from students strongly suggests that they enjoyed their model paragraph work. They particularly liked the wide-ranging analysis of many different types of item (especially important perhaps in a class so linguistically heterogenous). Questions of communicative intent, of semantic choice, of stylistic appropriacy, of choice of grammatical form, intermingle and interlock, at least to some extent, in a way that they must do when the student is engaged in writing up a piece of work from his own subject area, the content of which he has already planned.

Other features which the students claimed to like were the problem-solving aspects of such work. They appreciate that their efforts can be, indeed *are,* checked by themselves; and that if they do poorly on an exercise or fail to complete it, they can take a duplicate exercise sheet (or several) home with them, and do the same exercise again, possibly several times more (puzzling over why they get things wrong) until they are satisfied they have fully grasped and can adequately reproduce the original.

However, feedback also suggested that the students did not apply the model paragraph technique to their own special subject work to anything like the extent that the scheme envisaged. A very serious problem that students found themselves having to face in this respect was a shortage of time. It was clear for instance that more work on special-subject model paragraphs (i.e. work done outside the classroom) was completed in the earlier part of the two terms when the students were fresh and had fewer deadlines and commitments. Other possible reasons for such a weak application of the scheme to the student's personal reading were:

    (i) the fact when (special-subject) text is easily understood there is a tendency to think it can be easily 'reproduced' in writing:

    and

(ii) conversely, the efforts to understand difficult special-subject discourse can often be so exhausting that little energy is left for language analysis and practice.

But this raises a further and, for this teacher at any rate, fascinating question as to how far in certain cases it may be precisely the *language* employed in the special-subject text-book (or article etc.) rather than the level of conceptual difficulty, that impedes understanding. Intuitively, one knows that this must be the case *sometimes*. Following an argument is always made harder when a writer employs a complex sentence structure, or an inadequate system of referencing, or an intricate set of negation patterns, or a paucity of discourse markers. Where such features occur in academic writing then an important task of the EAP/ESP teacher must be to warn the student off imitating them.

Two paragraphs which I present to the students as being examples of how NOT to write are given in Figure 3.

Figure 3:   Definitions which are complex and difficult to understand

(I) *Social psychology* is the branch of psychology which studies the psychological conditions underlying the development of social groups, the mental life, so far as it manifests itself in their social organization, and their institution and culture, and the development of the behaviour of the individual, in relation to his social environment, or generally all problems having both an individual and social aspect.

(II) *Psychology* can be defined in various ways, according to the particular method of approach adopted or field of study proposed by the individual psychologist. A comprehensive definition, which would include all varieties, so far as they can rightly be said to represent aspects of the original and historical meaning of the word, would run in some such way as this: a branch of biological science which studies the phenomena of conscious life and behaviour in their origin, development and manifestations, and employing such methods as are available and applicable to the particular field of study or particular problem with which the individual scientist is engaged; the differences between psychologists are generally theoretical rather than scientific differences, and in any case are far fewer, and scientifically far less important, than the points of agreement.

Penguin Reference Books:
(*'A Dictionary of Psychology'*)

These extracts and others like them, are read and discussed and an attempt is made to assess how far, precisely where, and for what reasons, their meaning is difficult to recover. The students are then asked to re-write the two pieces more clearly, *while keeping to the exact meaning of the original*. A hand-out suggesting various techniques for such clarification is afterwards given out, and various attempted versions are compared with each other.

Students are also encouraged to mark any obscure passages of their special subject literature and to bring them to individual tutorial sessions where they can receive help in sorting out the meaning. Of course there

are difficulties here: sometimes insuperable ones. The problem may lie primarily with the subject matter itself and may therefore be more appropriately referred to the special subject tutor. But even in these cases it is possible to help a student to define more exactly where his difficulty lies and thereby help him to prepare more precise questions for a subsequent special subject tutorial.

Blank-filling then is not the only form of exercise applied to these model (and non-model!) paragraphs. The student is further required on occasions to reproduce or reformulate one of the paragraphs from a set of very brief notes (either given by the teacher or produced by the student in an earlier exercise). The rubric for such an exercise, namely 'reproduce *or* reformulate' is chosen with care. Students need to be able to exercise such a choice. Some — often the weaker — aim at a reproduction, whereas the more linguistically able use the opportunity to try out alternative versions. Such versions are later the focus of much profitable discussion when they are compared with the original: subtle shifts of meaning and emphasis often being revealed through the changes made. Weaker students — who because of inadequate linguistic resources try to *reproduce* the original — can also have several attempts at improving their performance at home if they do not succeed on the first occasion.

Other exercises employed are to:
- (i) extend a re-produced or re-formulated model paragraph by adding personal (evaluative) comments,
- (ii) examine various drafts of the same paragraph and place them in their correct order (showing how the linguistic changes have led to an improvement) and
- (iii) unscramble a jumbled-sentence paragraph, so that it is written up with all the required items of cohesion.

Normally after every fourth or fifth class involving such model paragraph exercises, various features of language are analysed in grammatical sessions which recapitulate and extend what has been the linguistic focus of the previous two weeks or so. This is, then, the *second component* of the integrative methodology, explained in the overview of the beginning of this paper: namely *the construction and analysis of classificatory tables which exemplify key language items.*

For this the students receive at various stages of the course handouts which cover such areas as:
- — characteristic verb expressions in research literature
- — methods of avoiding sentence complexity
- — information focus and information prominence
- — cohesion and coherence
- — common errors of style

While the teacher normally produces guidelines and contributes a substantial amount of information, the student is often called upon to help in the process of collection and classification. Examples of the sort of work undertaken in this respect may be seen in Figure 4.

Figure 4:   Characteristic Verb Expressions in Research Literature

Origins: acknowledging prior work.
　　Complete the verb phrases below:

	has dr..n on	
This research	o... much to	the work of
	arises ... of	
	has de....... out of	

　　Add any other verb phrases that you can think of, or that you find in
　　your own research literature.

Figure 5.   Reporting other workers' views

Put the verbs from the box in their appropriate column in the table below:

> asserts
> writes　　states　　believes
> contends　says　declares　argues
> claims　　　　　　holds
> maintains

Reporting		
neutrally	by emphasizing	
	the force with which the view is held	the fact that the view is not necessarily shared
writes etc.	asserts etc.	argues etc.

　　But such exercises, valuable though they might be in pulling together,
in systematizing, and perhaps in extending the student's knowledge of
key functional realizations are merely a prelude to the more vital task,
namely *the collection of similar items from the student's own special subject
literature.* And this brings us on to the *third element* in the overall
methodological design.
　　In this element the students are encouraged to keep pocket-sized note-
books in which to enter significant and unknown language items as they
come across them. On various occasions throughout the course they are
also asked to bring into the classroom their special subject text-books
or research articles and to identify, copy out and classify from this litera-
ture those language items which have previously been studied. Quite
a lot of material may be gathered together in this way and much valuable
discussion can be undertaken which often clarifies for the student the
exact communicative purpose of the use of an item that he had selected
from his special subject literature. Occasionally class members are
encouraged to contribute to a blackboard display of language items from

their special subject areas, all of which focus on the same language function. We can then see for example how 'recapitulaton' and other discourse markers are handled in sociology, medicine, physics and engineering. Such exercises occasionally brought out quite sharply the differences in expression between the different disciplines (and by implication, the differences between the social science model paragraphs we had been using, and the English of the students' advanced text-books). The similarities, however, proved to be more common than the differences, thus lending support to the idea that an EAP common core exists for a range of special subject disciplines.

The *fourth methodological component* of the system — the class essay — aims to involve the students in creative rather than imitative or analytical work. Half of the six essays which are set (three in each term), relate to the students' special subject work. These essays require them to describe various aspects of their research (or course) work and thus involve them in the creative use of language explored in previous parts of the course. They also provide a welcome variety and allow the teacher to deal with an individual student's typical mistakes. The students are taken through two or possibly three drafts before their work is finally 'accepted', a process which mirrors what happens in their special subject research and essay-writing work. Longer essays also give the students an opportunity to judge whether to introduce appropriate discourse markers, something which is frequently neglected in conventional writing courses.

The three non-special-subject essays on the other hand aim to give feedback on the course itself and provide the students with an opportunity to state any help they would like to receive which has not been catered for in the classroom.

Many of the students are of course engaged on special subject writing tasks while the language classes are taking place, though such work tends to come more heavily in the second term. For these, the *fifth element* of the course, i.e. the *individual tutorial*, in which samples of special subject work are examined, often proves particularly useful. Opportunities occur to tackle those faults, described in detail elsewhere, which cause communicative breakdown and communicative blur (James 1984), and which seem to occur so frequently in the drafting of more lengthy and complex pieces of academic writing. Profitable reference can then appropriately be made to the exercises covered in the EAP writing course which relate to those mistakes which the student still makes in his personal ESP writing. Thus the chain of activities is complete, each link in it creating a virtuous circle of reinforcing and improving activities. The student, in short, has been able to move from EAP to ESP to self-sustaining growth.

Before euphoria carries us away, however, a few cautionary words would not come amiss. The method in order to be *fully* effective makes considerable demands on the student: demands on his self-discipline and on his willingness to set aside sufficient time to enable learning to take place. Above all it requires detailed organization, considerable patience

and great determination. But then language learning at this level is never easy. It was after all a *native* speaker reflecting on his *own language* who said: 'stuff that's easy to read is damned hard to write'.

For an overseas student, though, knowing *how* to learn is surely half the battle.

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Project writing: The marriage of process and product

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Introduction

Project writing of various types (including dissertations and theses) is undertaken by students in most departments of British universities. Robinson (1978) discussed the importance of preparing language students for project work and emphasized the motivating factor of project writing for students on pre-sessional courses. In this article, we describe our experiences of using project work similar to the type she suggested and take up certain theoretical issues in ESP which relate to this experience. In particular, we argue that project writing is an example of an activity which is directly relevant to target needs and yet provides the opportunity for process-oriented language learning. We also argue that there are advantages to the learner in using language which is subject specific rather than merely engaging in activities designed to develop general competence.

The teaching situation

The work took place on various intensive English courses at the Universities of Aston and Warwick, where students of English have been required to produce Project Reports and Oral Presentations on topics related to their subject fields.[1] The length of the projects has varied from three thousand to eight thousand words, the requirement depending on the length of the course.

Courses which have included project work have been as short as eight weeks and as long as a full academic year. In all cases students are proceeding to postgraduate study. For individual projects each student has always been allowed to choose his/her own topic and title related to the specific field of study. Students are roughly intermediate in level and have come from a number of countries, but mainly Algeria, Venezuela, France and Germany.

Project patterns

Three types of project have been tried, the choice of project type depending on the students and their needs.

In the first pattern, a *Group Project*, a piece of real research is undertaken by the whole group, with each individual student taking one aspect for detailed study. This is only suitable for homogeneous groups where all students are working in similar fields. An example of this type was a descriptive and evaluative study of the university postal system, which was undertaken by seven management and economics students on a pre-sessional course, and which was planned and supervised by our colleagues Phil Skeldon and John Swales. The techniques for this type of project involved a great deal of planning and discussion, followed by interviews, fact finding, more discussion and analysis, and finally written production.

The second pattern is a *Mini-research Project* where individual students engage in social-studies type research involving, for example, question-naires, survey techniques and interviews. Such projects also involve spoken interaction in the primary tasks, but in addition engage the learner in project design skills and considerable background reading of previous and similar research, which, incidentally, provides models for the written form of the project.

This type of project is suitable for students whose later research will necessarily be person-oriented, as, for example, in some types of sociology, psychology, education or management. Titles of projects of this type have been 'Student Attitudes to the Personal Tutor System' and 'Amnesty International: Its Organization and Finances in the West Midlands'.

The third project pattern is based on selective reading on a topic of interest, what we might call a *Literature-based project*. This is by far the most common type and the easiest to administer. It is suitable for individual work where the object is to encourage students to read selec-tively in their subject field with a specific purpose in mind. It is excellent for extending both process vocabulary and specific technical vocabulary. It requires the student to absorb ideas gleaned from reading in a variety of genres (journal articles, textbooks, encyclopaedias, and so on), sift them, reorganize them and present them in the new genre of the 'project'. This type of project is suitable for those students of science or engineering who cannot engage in empirical research while in the language teaching environment or students of subjects where reading research is the normal type of research, as in History or Literature.

A list of project titles from students who have worked on the last type can be seen in Figure 1. The rest of this article is concerned, in the main, with literature-based projects of this type.

Organization

Project writing is not merely a writing activity. The *writing* aspect is only the culmination of a series of related processes that involve both

Figure 1: A selection of topics chosen for literature-based projects

Subject field of student	Project title
Psychology	Factors in the Development of Workers' Motivation and Productivity
	Defense Mechanisms and their Uses
	Client-centre Therapy
Mathematics	A History of Western Mathematics
	An Introduction to Measurement and Integration
	Modern Mathematics and Its Applications
Engineering	Transmission and Distribution of Electrical Energy for Mines
	Cutting Processes and Cutting Tools
	The Venezuelan Metalwork Industry
	Electro-plating
Bio-chemistry	Cancer
Ecology	Weathering and Weatherability
	Rapid Detection and Estimation of Low Numbers of Spoilage Fungi
History	The Suez Crisis
	British Attitudes to the Algerian Revolution
Ophthalmic optics	Colour Vision
Economics	Monetary systems
	The Middle Class
	The Venezuelan Economy
Physics	Solar Energy
	The Evolution of Electro-Magnetism
	Quantum Optics: The Laser
	Photo-electric Cells and Solar Energy
	Einstein's Life and Times
	Particle Accelerators

the receptive and productive use of language: reading, reference, discussion, summarizing, etc.

Figure 2 presents, in chart form, the processes which we take to be involved in project work. The first column shows the *Stages* in the production, the second column shows the *Activities* the students engage in at each stage and the third column lists the *Skills* that we expect the students to learn.

Initially, the lecturer outlines to the class the five *Stages* of the project (Planning, Preparation, Drafting, Writing-up and Presentation) and sets deadlines. When time permits, a project may take up to three months to produce, but it is important to break down the work into small, clearly defined tasks each with its own deadline and to make sure that the students understand the requirements at each stage.

Thereafter, each student is assigned a tutor as project supervisor. This

Figure 2:   Project writing: Stages, activities and skills for literature-based projects

Stages	Activities	Skills
Teacher's introduction	Specifying the task	Discussion
Planning	Finding relevant literature Selecting interesting texts Making a proposed reading list Establishing topic Outlining proposals	Library reference skills Speed reading/skimming/scanning Basic bibliography preparation Writing: headings/note form
Consultation and revision	Presenting written proposals to group/supervisor	Consultancy skills/discussion
Preparation (Tutor Consultation)	Reading on the topic Summarizing literature Organizing ideas Taking a position	Intensive reading Note making/paraphrasing "Realization of schemata"
Drafting (Tutor Consultation)	Writing the body of the text Checking message Revising and rewording Re-ordering	Advanced writing skills Use of dictionaries/reference books/notes
Writing-up (Tutor Consultation)	Writing introduction, conclusion, contents, index, bibliography Layout Checking for accuracy	Advanced summarizing Research skills Proof reading
Presentation	Binding, titles, acknowledgements Oral presentation to group	Seminar skills

simulates the situation pertaining in the real research mode and gives the students the opportunity to arrange meetings with their tutors, provide material for discussion and keep notes of the comments and decisions made during the meetings.

The responsibility for all the *Activities* (second column Figure 2) lies with the student. The student has control over the process, which individualizes the rate and nature of the learning, under the direct guidance of a tutor. This enables each student to use English in a context related to his specific field even though he may be in a heterogeneous group.

The lecturer's responsibility lies in providing input and instruction related to the *Skills* (listed in the third column of Figure 2). The lecturer must see that appropriate models and resources are available and teach and advise as necessary. This is discussed further below.

Objectives and methodology

In all cases, the decision to include project work in a course has been based on consideration of the students' target needs. For some time now EAP course designers have attempted to prepare students for their subsequent studies by incorporating activities from the target situation into the English course. This was the position taken, for example, by Dudley-Evans in his paper published in 1977 'Planning a Course for Science and Engineering Students' where he selects course components on the basis of need. 'Ideally', he writes, 'one would have the students do a real experiment and then co-operate with the science teacher to show how the experiment should be written up'. This still represents the ideal: the learners would be engaged in work exactly replicating the target situation, but with the guidance and support of the English teacher and the subject teacher.

Some theoreticians have suggested that there is a dichotomy between course design based on an analysis of target needs and course design which aims to activate language use. This is sometimes expressed as the difference between product-oriented and process-oriented teaching. Widdowson (1983), in particular, rejects needs analysis of the target situation as a basis for course design since it is concerned with 'eventual aims' rather than the more desirable 'pedagogic objectives' (page 107), which he defines as 'what the learner has to do in order to learn'. In the case of courses like those described by Dudley-Evans (mentioned above) and the project work discussed in this paper, no such dichotomy exists. The process of preparing and writing the report is a communicative activity (within which a series of smaller communicative activities are embedded) which fulfils the requirements of procedural work; the product (the report itself) is directly related to the specific target needs of the individual learner, and in order to complete it the student has to master the micro-skills associated with the task. The course designer or teacher needs to be able to recognize those micro-skills in order to assist the learner to understand and overcome his communicative problems. Thus,

needs analysis of the traditional type (for example Munby (1978) is not redundant — although of course linguistic analysis of relevant discourse types is also valuable.

In his criticism of current ESP course design, Widdowson complains that 'the emphasis has been on *what* ought to be taught' rather than on '*how* it ought to be taught'. We cannot agree, however, that 'methodology has been generally neglected in ESP', for over the years there have been a number of reports of procedural methodologe in ESP, most of which relate classroom activities to target needs and which are similar in some respects to the project work reported here. As examples we can cite the work of Robinson mentioned above, Herbolich's (1979) proposals for teaching the writing of technical manuals by having his students design and make box kites, Edge and Samuda's (1981) ambitious attempt to devise a procedural methodology suitable for learners at all levels, and Dudley-Evans' (1984) work on the team-teaching of writing skills. Published ESP textbooks have been less ambitious, but even here procedural work is evident, particularly in Business English courses (see, for example Brims' *English for Negotiating*).

Project work as part of the language programme aims, therefore, to be both process-oriented and product-oriented. It is concerned with target needs in that it 'shadows the reality of project work in the student's subject discipline (Swales 1985) and, moreover, provides a means whereby students can engage in the process of acquiring the language and those aspects of language use that are taught (as part of formal education and training) even to native speakers.[2] Such aspects of language use (from the conventions of capitalization to the construction of bibliographies) are extremely important in project writing and the students usually realize that these are areas where they need guidance.

In our experience, most students are more frightened of project writing than of any other language activity, and the prospect of writing a lengthy piece of work in a foreign language is especially formidable. In an interesting case study, James (1984) discusses the problems an overseas student had in writing a PhD thesis which came from 'a training in writing that was very different from that which a British student might have received'. While not all our students have had such restricted experiences in their own languages, they welcome the opportunity to try out their skills and to take risks in the sheltered environment of the language course.

Nevertheless, there is no doubt that project work still comes as a difficult challenge to most students. We understand that it is beyond their linguistic competence when it is introduced. It employs what Johnson (1982) calls the 'deep end strategy' in that the student is placed in a situation where he is required to use language that he has not yet learned. But if necessity is the mother of invention, so need seems to be the precursor of acquisition. This is particularly apparent in the case of preparatory reading. The project provides a purpose for each student to read (often difficult books and articles) in their specific field. Purposefully

directed reading is that which is most 'authentic' since it accords with real life reading. (See Farnes 1973 for evidence that 'ineffectual and superficial reading' can be related to lack of purpose in the reader's consciousness). Thus the methodology can be said to be said to be 'procedural' in the sense in which the term is used by Johnson: the first objective is for the students to perform a task and the language is acquired while 'the students' attention is focused on meaning' (Prabhu, quoted in Johnson p.135).

The lecturer's role

Apart from the administrative tasks, the first job of the lecturer or project supervisor is to ensure that the students choose topics with which they feel relatively familiar and then to see that they read so thoroughly on their project topic that they have no shortage of ideas or information on which to write. One of the main advantages of project writing over ordinary class writing exercises is that the students can be released from the problem of worrying what to write about. When they come to the writing stage, the production of ideas should not be a stumbling block. They should be ready to concentrate on the production of text. The lecturer, therefore, must make sure that the content is properly prepared.

The lecturer's concern is not only with the preparation of content, however. The lecturer also has a role in making the student aware of all possible means of improving his or her communicative skills. The lecturer not only acts as an advisor or consultant but is, from time to time, required to teach quite explicitly the conventions of project writing, such as layout, rhetorical organization of the paragraph and larger sections of text, as well as helping with problems of expression in English.

Initially, the students are likely to be deficient in the language required to realize the concepts they wish to express and most of them also lack an awareness of the possibilities open to them in terms of text organization. Although some students have written extended academic reports in their own language as part of their first degrees, few of them have considered the overall purpose and structure of their writing. For this reason, we arrange support classes at the Preparation and Drafting Stages (see Figure 2) on the organization and wording of texts from the level of the paragraph up to the level of the whole project report.

In devising materials for this aspect of the course, we draw on the research of such people as Winter (1976) on clause relations in information structure, Swales (1981) on the structure of article introductions, McKinlay (1983) on the structure of article discussion sections, and Hoey (1983) on problem-solution texts. This work has all contributed to our understanding of how academic writing is organized and how the organization is signalled lexically and grammatically.[3] Work on textual cohesion is also necessary, and for this we apply aspects of Halliday and Hasan (1976). (For discussion of this type of application see Williams; 1983) For the teaching of such matters, it is necessary to acquire and

present models of academic writing for reading and analysis in class. Sections of published articles, research reports and projects written by successful native-speaker undergraduates can all provide good models for classroom use.

The lecturer also has to help the student increase his awareness of how to produce a text that is reader-oriented. An understanding of one of the major differences between speech and writing can assist the student here. Whereas in spoken English the negotiation of meaning is facilitated by immediate feedback from one participant to another, and clarification, exemplification, and so on, can all be requested as required, in written English the author has to express his or her meaning and then attempt to stand back, interpret and judge whether the message has been accurately conveyed or not. That is to say that we need to train each student to be both reader and writer, coder and decoder. It seems to be the case that in the course of general education most students (and even many native-speakers) do not become aware of the need to pay such a degree of consideration to the reader. Here, the work of Huckin and Olsen (1984) has proved valuable. In discussing ways of improving the technical writing of professional people, they emphasize the need to make writers aware of their potential audiences and to encourage them to develop 'effective rhetorical strategies' to handle such audiences.

Huckin and Olsen also stress that writers should be prepared to present information orally as well as in writing. This is certainly true of our students who will find it necessary (both as part of their postgraduate work and in their future academic lives) to present and discuss in the spoken context the issues that are included in their projects. For this reason we consider the Oral Presentation to be essential — and authentic — final stage of project work. Furthermore, it provides additional motivation and is an enjoyable and communal way to round up the work. The lecturer has a major role in preparing the students for the task of Oral Presentation, of course, although this often forms part of a different course component.

Process and product

In conclusion, we would like to return to the question of process and product. We believe that our methodology satisfies Widdowson's criteria of engaging the learner 'in activities he would normally engage in when putting language to use for particular purposes' (1983: p.88) and, moreover, involves 'meaningful use of language' in the sense that 'the procedural activities are purposefully directed towards realization of schemata.' (p.89).

However, where we part company with Widdowson is on the questions of *level* and *content*. Widdowson concedes that the learners should be able to accept that the schemata involved have 'some connection with their own concerns', or specific purposes, but he always holds back from a position which expects the learner to engage in language use of the specialist type. He thinks that

> It does not actually matter very much...what language the learners are presented with. What does matter is how they can put it to effective use. Even in the case of the more narrow angle course, the more cogent reason for specificity is not that the language corresponds to aims, but that it is more likely to be realized as meaningful by the learner. (p.91)

We think this view is wrong both practically and theoretically. Theoretically, we believe that the language used within specific subject fields, *is* the appropriate language for that field and if we provide lesser models the activity will be less purposeful and less acceptable. We do not believe that the best way to learn extensive writing is to be asked to read passages of a few hundred words and to write isolated paragraphs, although these may, of course, be useful supporting activities for training in the control of certain limited aspects of language use. At a practical level, the minimum essential requirements for developing writing on any specific subject are for students to read material on similar related subjects, to understand appropriate meaningful linguistic input (written and/or spoken), and to engage in the activity of writing. Widdowson argues that the design of courses for students from heterogeneous subject fields (the so-called wide-angled approach) can focus less on 'specific competence' (by which he means subject-related competence) and more on 'general capacity', the important factor being that the language should be used in 'purposeful activity'. (p.107) Since in our view 'specific competence' and 'purposeful activity' are intrinsically linked, we feel that students on a wide-angled course must ultimately be given the opportunity to perform subject specific communicative tasks. Project writing is one of these.

Notes

1. The work on project writing at Aston University was very much a team effort. Colleagues who worked with us included Philip Skeldon, John Swales, Sandy Urquhart and Ray Williams, who all contributed to making the various courses successful. The inadequacies of this article, however, are entirely the responsibility of the authors.
2. For further discussion of the differences between acquired language and language use and the importance of this difference for syllabus design see Bloor (1984)
3. For further discussion of the contribution of discourse analysis to ESP see Robinson (1981). The relationship of grammatical features to rhetoric in written discourse is discussed in Bloor and Bloor (1985), a paper given to the British Association for Applied Linguistics Seminar on Learning Grammar as an Instrument for Communication.

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Individualizing academic writing tuition*

George M. Blue

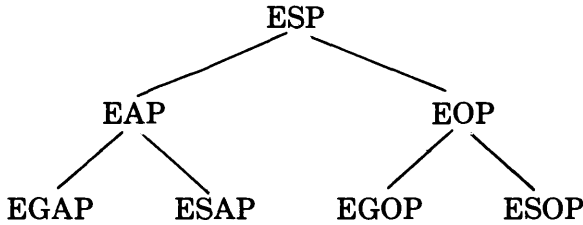*Language Centre, University of Southampton*

One of the most enjoyable features of teaching English to overseas students in the UK is the diversity of the job and of the students one comes into contact with. On a recent pre-sessional course at Southampton University there were forty-nine students drawn from nineteen different nationalities. The forty-four staying at Southampton University were destined for thirteen different departments in the University and for a total of twenty-two different courses (three undergraduate and nineteen postgraduate). By far the largest group was enrolled for the MSc course in Irrigation Engineering (sixteen). Apart from this group, though, no more than four students were enrolled for any one course, and a relatively large number (nineteen) were either the only pre-sessional course members enrolled for a particular instructional course (eight) or hoping to pursue research in their individual field of interest (eleven). This presents considerable challenges if we are to attempt to help students develop the language skills, and in particular the precise writing skills, that they will need in their future studies.

Of course, many of the skills required in academic writing will be substantially the same across disciplines, and 'common core' materials therefore have a very important part to play in developing the appropriate skills. This is why courses like Johnson (1981), Jordan (1980) and Williams (1982) have met with such success. However, although the exercises are taken from a range of academic disciplines, they are not necessarily perceived to be relevant by the surprisingly large number of overseas students who tend to see their subject specialization in very narrow terms. This problem of perceived relevance (or lack of it) applies to academic writing materials of all kinds — even to certain types of project work, as we shall see later. The attitude of many students is 'aggressively instrumental' (James, 1984, p.59). They need to see immediate benefits if they

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are to spend time and effort on something. Otherwise, they may inexplicably and sometimes, it seems, quite subconsciously, fail to understand what is required of them or hand in work which is well below the level they are capable of.

It seems that, however enjoyable and educationally enriching such work may be, it is generally perceived as English for general academic purposes (EGAP) rather than English for specific academic purposes (ESAP). Traditionally, we think of two main branches of ESP: EAP (English for academic purposes) and EOP (English for occupational purposes). However, one is sometimes left feeling that EAP can often be more general than ESP, as the terms are commonly used. It therefore seems useful to make this additional distinction, as follows:

```
                        ESP
                      /     \
               EAP             EOP
              /   \           /   \
          EGAP    ESAP     EGOP    ESOP
```

Similarly, we can take the more limited area of writing for academic purposes (WAP) and distinguish two main approaches: writing for general academic purposes (WGAP) and for specific academic purposes (WSAP):

```
            WAP
           /   \
       WGAP     WSAP
```
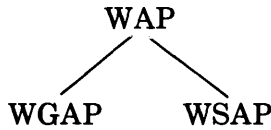
Another factor that needs to be considered is that students need some training in writing longer pieces of work. Although we encourage most of our pre-sessional course students to attend some in-sessional classes, we have to recognise that probably not more than half will actually do so. Consequently, we need to deal at least partially at this stage with the skills required for report writing and the preparation of an extended essay or dissertation. In common with other institutions we have therefore considered various types of project work as a means of achieving this goal. However, neither group projects nor mini-research projects (see Bloor and St John's paper in this volume) necessarily appeal to students whose motivation is highly instrumental. Whilst many students do enjoy this type of work, invest a great deal of effort in it and consequently derive a great deal of benefit from it, there are others who consider that since it is so far removed from the language of their discipline it is only of limited interest and therefore only deserves limited effort.

In the search for an activity that is perceived as relevant by *all* the students we have arrived at the fairly obvious solution of asking students

to do some writing within their own subject area. In this way the study skills and language skills that are taught on the pre-sessional course are put to immediate practical use. Another important aim in setting up this activity is to encourage students to take the initiative for a substantial part of their learning activities and to develop their ability to work independently.

This work is similar in many ways to Bloor and St John's literature-based projects (discussed in this volume pp.85-94), but there are two significant differences. Firstly, we have discarded the term 'project', partly because it seemed to lead to a certain confusion in other departments, but more importantly because it suggested to the students something rather more substantial than was required. Some students have in the past spent a great deal of time and nervous energy on this writing task and one of our aims has therefore been to reduce the scope of the essays. One of the essays that I marked in 1983 was twenty-seven pages long! We have therefore set a limit of two thousand words and tried to make it clear that nobody is expecting scientific perfection.

The second difference is that, as students do not always have a very thorough knowledge of their subject area, we feel that it is not normally realistic to expect them to define the precise subject that they will write about. Nor do we normally have the expertise ourselves to set essay titles. Topics like 'Pollution' or 'Nuclear Energy', whilst of some interest, do not bear very much resemblance to the kinds of subjects most students will be expected to tackle when they start their courses or embark upon their research. In our essay writing component, therefore, the essay titles are set either by or in conjunction with the receiving departments. This is not a new idea. It was suggested by Robinson (1978; p.78) and may well have been current before that. It is something which we are particularly well equipped to do at the University of Southampton, since nearly all our pre-sessional students have been offered places at the University, and since the Language Centre has good links with most of the receiving departments.

It should be stressed that setting up essay work in this way involves an enormous amount of work. Colleagues in other departments often need to be reminded (sometimes frequently) to suggest a title. Sometimes the topic that they suggest turns out to be unsuitable, either because it is not sufficiently precise or because it requires too much work to be tackled in the time allowed. Sometimes they give no references, sometimes they give too many. In some cases the references suggested are not available in the library, and we have to request alternative references, or sometimes an alternative title, for which the references are available. The whole procedure is considerably complicated by the fact that it takes place in the summer vacation, when many colleagues are either away from the University or are expected to pursue their research without interruptions.

Essay work has been a part of the Southampton pre-sessional course since 1983. It takes place in the final four weeks of the course and occupies four afternoon sessions a week (eight hours) for three weeks. The first

two days are spent discussing the approach required, planning the essays in general terms and finding the references in the library. The essay has to be completed and handed in by the Friday of the third week. Each tutor is responsible for supervising about ten essays — usually, but not always, from broadly similar subject areas. They meet their group for a short time most afternoons and give some general guidance on organization and presentation. This work is based mainly on exercises from Wallace (1980). They then make arrangements to see each student individually every two or three days.

There is no doubt that essay work of this type makes considerable demands on the tutors. They must have an intelligent approach to the varied subject matter that they are dealing with, and ideally they should have some general background knowledge or be very quick learners, although of course they can also draw on the students' knowledge. In fact, it is a very good exercise to ask students to explain the subject matter to someone who makes no claims to be a specialist in their subject.

In order to illustrate the demands made upon the tutors, we shall look briefly at one example of a topic that has been set:

> Look at each component and process embodied in the hydrological cycle and explain how each might locally be affected by a large irrigation project (say 40k ha) in a semi-arid zone, such as the Sahel.

In order to help the student to tackle this, the tutor would not need a detailed knowledge of the components of the hydrological cycle, but would need to understand the question in broad terms. A reasonable approach might be firstly to identify the components of the cycle and to distinguish the processes whereby water is transferred from one zone of storage to another and secondly to identify the processes/components which might be affected by irrigation practices and to discuss the ways in which they might be affected.

Having discussed what is required and how the essay might be tackled, the tutor is then available on a regular basis to help students think about organization and language. Models of language can be provided as the work progresses and some help given with expression — both in terms of enriching style and in terms of improving accuracy. Students are encouraged to rewrite as they go along. This may of course hinder the process of getting ideas down on paper, but at this stage it seems to be more important to concentrate on the organization of ideas and the ways of expressing them effectively than to focus primarily on the ideas them-selves, which students will in any case be doing once the pre-sessional course is over.

The tutor will normally try to look at a part or possibly the whole of the final product before it is submitted. There are two extremes to avoid. On the one hand it is possible to give too little guidance at this stage. One then runs the risk of students submitting essays that miss the point completely or that contain very serious gaps or flaws that could easily have been remedied. On the other hand, it is possible to give too much

guidance and to correct everything the students have written, so that the final product is not really the students' work at all. This does not help the student or the receiving department.

Finally the essays are submitted. Two photocopies are taken of each essay. The original goes to the receiving department. One copy is corrected and is given back to the student. One copy is retained in the Language Centre. Tutors correct the student's copy and then make comments on a separate sheet of paper, focusing on content, presentation, organization and language. Copies of this sheet go to the department and the student and again, one is retained in the Language Centre. Each essay is also read by another student, who makes comments on a separate sheet of paper in the same way as the tutor. The reason for the departments receiving an uncorrected copy of the essay is that they get a better idea of the standard of writing their students are capable of. On the other hand, it is clearly useful for them to have our comments on the finished product and to see if they agree. The fact that the essays are sent to departments is in fact an extremely motivating factor. The students want to make a good first impression and they have a genuine task to accomplish.

During the final week of the course each student gives a short (maximum fifteen minutes) oral presentation, where he explains the main ideas presented in his essay to the other students in his group. This is very valuable for the cohesion of the groups, and it also serves as a fitting conclusion to the essay writing work and indeed to the pre-sessional course.

We gather (in an informal way) that departments appreciate receiving these essays and seeing what their students are capable of. This is particularly true of the departments which are only taking one or two pre-sessional course students, where the staff can spend some time discussing the essays individually with each student.

The students' reactions are slightly mixed, but in general are very positive. Analysis of the end-of-course questionnaires shows that this is by far the most popular component of the pre-sessional course. Although it is only part of an overall approach to the teaching of writing, it does enable us to focus on the writing process in a way which most students find both very motivating and very useful.

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Activating the learner's contribution in the development of academic writing skills

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There is ample evidence in the EAP field of the importance of needs analysis in helping to define in detail the product towards which academic writing is directed. This paper suggests that the stress on the importance of occupation-related needs analysis, which is often used to justify the assertion that EAP, as well as other types of ESP teaching are learner-centred, also in practice typically validates a methodology in which the teacher thinks first of the subject matter as specified in the needs analysis and only subsequently of the student as a language learner. We argue for the integration of traditional needs-analysis based academic writing courses with a more humanistic view of language learning. Outside the general field of ESP, there have been two important shifts of emphasis in a learner-centred direction. The first has been to replace, or attempt to replace, the notion that language teaching is about offering models of language to learners by a set of person-related approaches to language learning. The second, recognizing the learner as the true language resource, attempts to build on the language the learner brings to the learning context. We believe that both of these approaches can be applied to the teaching of writing for instrumental purposes in the EAP classroom, and that they are particularly relevant to academic writing at a time when the focus has shifted from the *product* to the *process*.

The workshop activities we tried at the Reading Conference illustrated some ways of working towards a more learner-centred EAP. We conclude our paper with four of those exercises as examples of a more learner-centred methodology in action.

Recognising learner needs — Two perspectives

EAP has always been characterized by a product-oriented needs analysis, and this approach, as is well known, was given a very considerable impetus with the publication of Munby's *Communicative Syllabus Design* (1978). But there may be other ways of recognizing learner needs besides those entailed in a product oriented needs analysis. In recent years, for example, the recognition of another type of learner need has led to a

liberalizing of the language teaching curriculum, fostered particularly in Britain in a number of the more progressive language schools. Much of this newer thinking has been concerned with whether the syllabus should be essentially subject-matter centred (as in the Munby model) or whether it would be more appropriate to think much more in terms of language learning *processes* and of the learner as person, and much less in terms of syllabus content. Applied linguists such as Krashen have concentrated on the spoken form rather than the written, while the so-called newer methodologies typically associated with humanistic language learning concentrate on the learner him/herself and on enabling him/her to express meanings in the target language.

So there are two parallel developments which do not always interact fruitfully with each other. The dichotomies are further increased by the tendency to put personal/integrative English and instrumental English in separate compartments, rather as, from another perspective, General English and ESP are often seen as definitions of what the other is not.

The exercises attempted in our workshop approach at the Selmous Conference, which will be described in the latter part of this paper, were an attempt in some measure to bridge the gap.

The human perspective — Four critical areas

Before moving on to a detailed consideration of ways of helping learners to write more effectively, we wish to explore the idea of what it is to involve the whole person by personal as well as intellectual stimulation. We may be able to analyse this personal stimulation into a number of types, and in this way reveal a variety of aspects of the learner's make-up not always readily enough drawn on in EAP work.

There is first the intense interest in the subject specialism combined with the desire to write acceptably about it. This may well have an affective element/drive that can be harnessed in language teaching. Indeed, there are some learners for whom this is such an overwhelming drive that any activity which does not have this kind of face validity will tend to be despised. In such cases, the language tutor will need to tread very carefully when introducing materials not immediately perceived to be of direct relevance to the student's subject area.

Secondly, there are overt interests and knowledge which fall outside the student's particular field of study and which the learner is anxious to share with others. There are surprises here. Some learners have a deep political awareness and a real concern over a political situation they know well. Others may have such overt feelings over race, religion, student conditions, etc. At a less intense level, they may be genuine interests in sport or cooking or child-rearing. It is important not to make assumptions: women are as likely to be interested in political questions as men, for instance, even when they are expected to spend most of their time in the home.

Thirdly, there are many elements of our common humanity which are

of interest to all. One feature of our workshop activities was connected with the form and function of hands. There are also often hidden depths of feeling which can be tapped less directly. For instance, simulations and role play can be more effective than we might expect. Writing in role, as an example, has many possibilities. Before examining the direct links with EAP, it may be of interest to comment on the experience of one of us going through as a 'learner' one of the exercises in the *Alls Well* drama-based language learning course. We were invited to imagine ourselves as a creature from space looking through a kind of telescope at a group of people in a public place. One of these was a lady traffic warden. We then had to put on the board as a group all the terms of endearment in any language we could think of and provide rough trans-lations. We then had to write an imaginary love letter to the lady traffic warden. Looked at in the cool of reflection afterwards, many of these letters, including our own, were written with an ease and freedom scarcely conceivable in real life. Our central interest is in finding a way of harnessing such a liberating methodology to the whole process of academic writing. Of course, at its simplest, most teachers have methods of relaxing a group before getting down to work. But this loosening up process is not always made an integral part of the whole lesson. Writing in role is a technique that can be made to work even for quite humdrum EAP activities.

Fourthly, it is important to recognize the need to address overseas students in general and postgraduates in particular at their own intellectual level. Because there is a behaviour gap in the English language performance of ourselves as native speakers and our non-native speaker students, it is all too easy to overlook the fact that such students are at the very least our intellectual equals and will not be truly engaged in any classroom activity which does not challenge them intellectually. We do not under-estimate the difficulty of producing language teaching materials that genuinely meet this requirement, although we hope that the activities which we describe at the end of this paper do require at least some degree of intellectual intensity.

We are suggesting, then, four major ways of utilizing student interest, knowledge and personal involvement. Firstly, in tapping the genuine interest in the subject. Secondly in discovering and using overt interests and knowledge apparently unrelated to the field of study. Thirdly, in reaching some of the less conscious interests, and particularly in drawing on interpersonal interests and feelings. And fourthly, in meeting the students as intellectual equals. Thus any classroom activity should satisfy or relate to the professional, social, personal and intellectual commitment of the learner.

We will give an example to demonstrate how these ideas might work in practice in a very preliminary way before exploring them more fully towards the end of the paper: Most of us are interested in injustice at a personal or political level. By talking through what we think injustice is, with examples to illustrate our points (or, perhaps more interestingly,

the reverse, i.e., talking about examples and then extrapolating the general principles from them) we are able in an easy way to show how we need both illustrations and general abstract points to make something clear, and this can then be applied in both analysing the writings or lectures of others and in utilizing them effectively ourselves.

Learning to write — The learner's contribution

In a product oriented writing course it is all too easy to forget that writing is fundamentally a process of struggle to express a full meaning, in which we constantly refine, reshape, and, indeed, re-write. In his seminal book, *Writing and the Writer,* Frank Smith considers the role of an intelligent and sympathetic teacher, or 'collaborator', in the learner's struggle to express a meaning in the written mode:

> It has been argued that writing is learned by writing, by reading, and by perceiving oneself as a writer. The practice of writing develops interest and with the help of a more able collaborator provides opportunity for discovering conventions relevant to what is being written. The practice of reading may also engender interest in writing and provides opportunity for encountering relevant conventions in general... None of this can be taught. But also none of this implies that there is no role for the teacher.[1]

Smith is of course concerned with teaching children writing in their mother tongue, but his apparently simplistic generalizations are a useful corrective to any sense of writing being merely a fitting in to a model, and they serve to remind us that it is the *process* rather than the *product* which is problematical for the writer.

Our learners are not, of course, naive learners since they have considerable linguistic and technical skills in a language, even if they don't have such skills at a very sophisticated level in English. Just as a writer operating in his own language tries out rough versions of what he wishes to say in his own mind, and then, even when he has got as good a set of sentences as he can on paper, still tries out further changes, so the foreign speaker keeps moving from where he is at *towards* where he wants to be. He is, in some sense, in Smith's terminology, his own 'collaborator'. The more relaxed this gradual approximation to the *norm* and the more the 'teacher' is in the role of consultant *alongside* the learner, as in Community Language Learning, for example, the better. Moreover, a truly learner-centred academic writing course will seek to replicate this natural learning process by constantly challenging the student to reformulate, either by increasingly sophisticated revision of the output of each stage in the process or, and most interestingly, by inviting the student to reformulate in an academic mode what he/she has first learned to formulate in some other human area. Precisely how this second possibility can be achieved is explained in the examples of activities at the end of the paper.

Two kinds of norm — The product as norm and the input to process as norm

In the last paragraph of the previous section, we referred to the product as *norm*. In point of fact, Munby's kernel phrase 'the derivational relationship of syllabus specification' to the learner's needs together with much detailed work on syllabus specification seems intended to establish a norm-like *input to process*. It is precisely the argument of this paper that Munby's contention that

> ESP courses are those where the syllabus and materials are determined in all essentials by the prior analysis of the communication needs of the learner

fails to recognize fully the notion of the learner as a whole person with a whole person's contribution to make to a *process* of gradual exploration and reformulation. We are arguing that the product-related norm which constitutes *input to process* typically fails to satisfy fully all the areas designated in the 'Human Perspective' section of this paper. For this reason we argue for a person related input to process, an input to process whose 'derivational relationship' is principally to the wider notion of learner as a whole person rather than to the narrower concept of the subject of study.

Person-related input to process

In some sense all of us know unconsciously more about language than we do consciously, and in bringing the everyday language around us to consciousness we can be fellow-explorers with our learners. That exploration is often best achieved when the content is in the first place of a personal nature. When language behaviour is looked at, the wider the context of the English in the environment that forms the *input to process* the better. At the 1985 Selmous Conference, each member was asked to do a tutor's 'homework', which involved observing language behaviour at the Conference. This homework was directed both to the Conference proceedings (e.g., 'Pick out a number of illustrations to general points speakers were making and point out where possible the language that signalled they were illustrations'), and to interaction not directly related to Conference proceedings (e.g. 'Eavesdrop on a conversation and listen for an interruption. Note how all the participants in the conversation react/behave'). Other homework tasks were directed to very specific language items (e.g., 'Note two or three uses of *actually* in someone else's talk'). These items were picked up in the workshop that followed and treated as *input to process*.

There are many different ways in which such input may be used in academic writing classes. At Reading, conference members were asked to opt to work either on macro- or on micro-skills. Those in the macro-skills group took turns at describing their homework, each member of the group being required to make reference to one or more preceding

descriptions, thus practising a linking technique similar to that required in academic writing. In the micro-skills group, each of us wrote down a single predicate word (adjective or past participle) of response after each homework description. When all the homeworks had been described, we formed a phrase with each of our response words in the form *Response word and preposition and 'what he/she said'* (e.g. 'I was amazed at what she said') By making the *NP* in the *PP* semantically empty, this exercise draws students' attention away from the syntactic tie between *Prep* and *NP* and directs them to the semantic tie between *Pred* and *Prep*, a tie of critical importance if they are to make the quantum leap necessary for complex writing tasks requiring an extension from syntactical control to semantic control in the target language.

The atmosphere engendered by this type of activity in language learners is the positive one of exploration rather than the negative one of always falling short of reaching the standard in the mind of the teacher. 'Homework' — so important in EAP work — takes on a different role. Actual language is being constantly explored out of class, each student provides him/herself with something to bring and invest in the class, and more formal end results can be pursued collectively amongst many 'collaborators' in the class.

This type of approach means that the considerable differences between written and spoken English can be worked on in stages. It is sometimes forgotten that written conventions differ greatly from one task to another and there is a gradation from the most informal spoken language through different stages of formality at the various linguistic levels to the written conventions. The movement from speaking to writing is also partly a movement from the language of description to the language of comment, from *referential* to *metalinguistic* function in the Jakobson terminology. With this realization comes the parallel realization that, as far as writing is concerned, since it is largely a metalinguistic function that is to be practised, the subject matter is, strictly speaking, irrelevant. Thus the actual practice of working on written English, whether in the area of micro skills (writing complex sentences, nominalization, etc.) or in the area of macro skills (writing structured paragraphs, ordering material, etc.) does not, contrary to Munby, depend on a particular subject matter. Indeed, the apparently general assumption that particular writing skills uniquely match academic subject matter may in any case be misplaced. The subject matter of a street survey, for example, and the language in which the findings are related have no necessary connection, a fact we use to justify a considerable degree of non-academic input in our more learner-centred writing classes.

Academic writing exercises

We are concluding this paper with a sample of four writing tasks for overseas students as presented at the Conference workshop, two attacking micro- and two attacking macro-skills. For simplicity's sake, we have

set each of these out in the form of instructions to the teacher conducting the class (who we would also expect to be a participant in the activity). We attach a short comment to each of the four exercises.

Micro skill (1) — *Desired product: a sample of nominal style*

1. Ask each student to close eyes and recall to mind a time when he/she quite consciously decided to experiment (preferably successfully) with a changed life-style. Or perhaps formed a hypothesis about life which held.
2. One student describes this hypothesis/experiment in three or four sentences.
3. Each member of the group writes down a response in the form: *a/an*...(supply modifier/s)...*experiment/hypothesis which*... (complete relative clause only, i.e., you end up with an incomplete sentence)...
4. Repeat steps 2 & 3 with other students, until each person has four or five *NPs* in the *a/an*...*experiment/hypothesis which*... format.
5. Each student replaces all the initial *a/an's* with *the* or *this*
6. Each student reads aloud the *NP* he/she now has with which he/she is most pleased.

Comment: This activity demonstrates how complex subjects are constructed. The change from indefinite to definite determiner indicates the function of the definite determiner in presupposing the existence of what is referred to/described in the *NP*. Thus the whole unit becomes *given*, an appropriately structured *topic* for an academic sentence which can now continue with the COMMENT that may assert something new or original. It's worth pointing out to students how the structure of an academic paper mirrors such a sentence structure in moving from the *established* to the *original.*

The *input* is person-related, there's a lot of *process,* the *product* is academic writing.

Micro skill (2) — *Desired product: a single sentence containing a hypothesis relating a general and an individual finding in respect of a particular data set*

1. Each student completes the sentence starters in the figure below to form a questionnaire.

	Y	N	%
1. Would you tell a lie...			
2. Do you agree that religious belief...			
3. Marriage...			
4. Given absolute freedom to do as you wished, would you...			
5. Would you keep quiet if...			
6. Do you think... is funny?			

The purpose is to invent a questionnaire, the answer to whose questions require careful consideration.

2. Each questionnaire is passed one place round the circle.
3. *Step 1* — Answer the question on the questionnaire you now find in front of you. Tick the *Yes* or *No* box depending on how/what you think.

   Step 2 —Now decide what percentage of the general public would agree with each of your answers and write the figure in each of the percentage boxes on the right.
4. Choose any one of the 6 questions and form a single-sentence hypothesis based on the question and the answers to it. In all probability you will need to use the language of proportion and/or contrast to relate the question, your response, and the likely response of most other people.
5. A student shares his/her hypothesis with the rest of the group, who are free to comment/request elucidation/disagree etc. The purpose is to reformulate the hypothesis collectively until everyone is agreed.
6. Repeat (5) with another student and his/her hypothesis.

Comment: The *input* is person-related, the *process* very extensive (it can easily take half an hour to deal with a single hypothesis) and the *product* truly academic in form/structure. There is the added spice of hanging on in to see how your colleague has answered your testing questionnaire. This activity would clearly be impossible with a subject-centred content unless the group were totally homogeneous. It always proves to be an intellectually challenging activity.

Macro skill (1) — *Desired product: classification of functions*

1. Choose a personal topic. We suggest 'hands and their functions'.
2. Get each student to close his/her eyes and imagine any pair of hands in as much detail as (s)he can.
3. Discuss the appearance of those hands in some detail in pairs and what they may have been used for.
4. Then look closely at one's neighbours hands and guess some of their functions.
5. Supply any other input. (We looked at photographs in the *Impact* series published by Macmillan).
6. As a whole class make a random list of functions using, *inter alia,* ideas formulated in pairs.
7. Discuss as a group ways of organizing these into groups of related functions (e.g. constructive functions vs destructive functions; or instrumental functions vs affective functions).
8. Individually do the same thing for any relevant set of functions in one's subject of study.
9. Discuss these in pairs and then share problem areas in the class as a whole.

Comment: This topic proved to be of personal interest to almost all the group. It led to considerable discussion about ways of classifying functions in binary or hierarchical form and also the relation between form and function. Furthermore it served to clarify ideas in a crucial area of EAP both generally and in relation to the particular area of study. This proved to be half-way towards the *expression* of these ideas in suitable English, the nature of the topic forcing us to talk through some of these.

Macro skill (2) — *Desired product: a written report in a particular style*

1. Play the tape of the talk about which the report is to be made. (The tape should be about a topic of general interest. In this case, the general views of Tariq Ali about society).
2. Complete multiple-choice questions about the content of the talk and then discuss the answers, arriving within the group at a consensus.
3. Read EITHER a set of instructions about how to present these facts in report form OR read carefully a model report to imitate.
4. Write the report.

Comment: The tasks involved in report-writing are separated into presenting the material on which the report is to be based, making sure that the material is understood, and writing the report in the correct format. The results of comparison between teachers who tried one or other of the two methods under section 3 (above) confirmed past experience that a shortened model report (with notes or discussion) was a better method of eliciting a very good *product* than a set of instructions, however detailed and explicit. The general interest of the original material proved crucial; and awareness of detailed conventions that are often taken for granted was shown to be important.

Notes
1. Quotation by permission of Heineman Educational Books Ltd.

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Don't correct — Reformulate!

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Introduction

Like many contributors to this volume, I am involved in trying to help non-native speakers of English, who are, or intend to be, enrolled as undergraduate or postgraduate students on courses where their written academic assignments will be judged alongside those of native speakers. In this paper, I am particularly concerned to discuss the problem of feedback to such students and to describe a novel and promising form of feedback — reformulation.

The teaching of academic writing skills has become a regular part of my work only in the past three years. My search for a new approach in these writing classes was prompted by the apparent shortcomings of traditional ways of giving learners feedback about their writing. Too often, it seems to me, we teachers conform to students' expectations that we are wholly responsible for correcting language and evaluating text quality. Too often, we spend long hours simply identifying and/or correcting surface errors of syntax, lexis, spelling and punctuation, which we then follow up in class by drawing students' attention to such problems and providing them with remedial exercises. The more central issues of composition — overall organization, signposting, cohesion, information-packaging, and clarity of meaning are too inconsistently dealt with by marginal notes on student texts — notes that are frequently too cryptic to be meaningful and helpful. Where meaning, particularly, is unclear, teachers are tempted to impose themselves in an intrusive, overbearing way by offering a model sentence in place of the original — a model that too often substitutes their own ideas for those the non-native was originally trying to express. In fact, too many of us are doing all those things recently and rightly criticised by Zamel (1985).

However, what worries me most is not only that such feedback procedures are inefficient in themselves, but that they constitute a large quantity of 'spoonfeeding' with the teaching taking virtually all the responsibility for error detection and correction. Such spoonfeeding militates against the development of writer autonomy, which in my view must be an essential aim of an academic writing course, given my

leaners' need to graduate from EAP writing classes as fast as possible in order to concentrate on producing independent writing for their subject tutors, without having to rely on further help from me. My view is that, in order to develop such writer autonomy, my learners have to be able to accept responsibility for editing, correcting and proof-reading their own texts. For this, they need to develop their own criteria for judging the quality of their writing, and a major prerequisite for this seems to me to be that they should accept that their responsibility as academic writers is to avoid making their reader's/subject tutor's task any more difficult than absolutely necessary.

Reformulation as an alternative form of feedback

The method of feedback I have been exploring is reformulation, suggested by Levenston (1978) and developed by Cohen (1981, 1982) and Allwright (R.L.). Reformulation is an attempt by a native writer to understand what a non-native writer is trying to say and then to rewrite it in a form more natural to the native writer. This rewriting may necessitate making changes of many kinds and at all levels, involving syntax, lexis, cohesion and discourse functions, but the point of any such changes must be to respect and bring out the original writer's probable intentions, and not to deliberately replace them with a new set. A reformulation therefore is intended to offer a sympathetic reader's interpretation in acceptable English, of the original writer's text.

Reviewing Cohen's work on reformulation, it appeared to constitute an attractive source of feedback and a promising alternative to the unhelpful procedures referred to above. A reformulator, in trying to make sense of a text, is likely to make the sort of changes that supply order and cohesion if these features are absent in the original. Since organizing and creating a cohesive text are aspects of writing that students find difficult to master, and ones that traditional feedback procedures often, as has been suggested by Zamel (1985), miss or fail to stress adequately and convincingly, I was hopeful that studying reformulations with students would enable me to focus on this issue more effectively.

To show what a reformulation looks like, the first two paragraphs of an essay entitled *Why I Have Enrolled In ESL Classes*, written by a student in a polytechnic in the Far East for his ESL tutor, are shown on page 111 along with a native writer's reformulation of that text.

A traditional correction of the original version might draw the student's attention to such issues as tense, verb omission, article usage, ordinals and cardinals, vocabulary and spelling, punctuation and the use of upper and lower case letters. An examination of the changes made by the reformulator, however, could perhaps draw the writer's attention not only to the problems mentioned above, but, in a rather powerful way, also focus on the need for such features as clarity of time reference, explicit 'signposting' of intrasentential and intersentential relationships,

Non-native original version

I am _____ a student from HOLY INNCENT'S HIGH SCHOOL.
the school that I came from is a christran school. I like it very much,
unfortunately I have to leave it. I am 16th years old, a very tall
boy. I am a boy who born on the farm. My farther is a farmer,
therefore I have to tend protree every moning before I came to
school.

The reason I want to come here is because of my family economic is no
so good to send me to the university if I passed Pre-U, and another reason
is that I have no much confidant to pass the Pre-U, therefore, I decided
that the batter way is to come to _____ Polytechnic. So that I
am able to earn money earler in order to help my family after I had passed
Poly.

Native writer's reformulation

My name is _____, and I was previously a student at
Holy Innocents' High School. It was a Christian school and I liked it
very much, but unfortunately I have had to leave it now I am sixteen years
old. Studying has not been easy for me because, as a farmer's boy, I have
had to attend to the poultry every morning before leaving home.

The basic reason I decided to study here at the Polytechnic was that
my family could not afford to send me to the university even if I passed the
Pre-University examinations. In any case, I was not very confident of passing
these exams. So, I decided it was better to come to _____ Polytechnic,
where I would be able to complete my studies, and start earning money to help
my family, earlier than if I went to university.

avoidance of redundancy, overall structure and organization, removal of irrelevant material, and word choice and collocation.

Cohen's explorations with reformulation as a form of feedback involved pairing his ESL students with native speakers, usually fellow students or research assistants, who reformulated the ESL text and then discussed the changes with the students concerned. In my situation there were no research assistants available and I felt unable to rely on the goodwill of native peers in a pairing system. Yet it was clearly out of the question for me to provide regular and individual reformulations and discussion for *all* the students in my writing classes. I began therefore to develop a pedagogical strategy involving class discussions of one reformulation of one representative non-native text.

Bearing in mind my wish, as mentioned in the introduction, to develop writer autonomy as quickly as possible, I was hopeful that these discussions would bring to the students' attention fundamental issues affecting text quality and would help them acquire criteria to enable them to identify their own strengths and weaknesses and eventually to edit and refine their texts by themselves.

How reformulation is used as a feedback strategy in writing classes

The classes for which this strategy has been used are, typically, relatively small (not more than twenty students), fairly homogeneous in general proficiency level but rarely by subject matter, background or academic level. They are generally of ten weeks' duration. The starting point is a common writing task for which the basic content of the eventual writing is provided by me in the form of notes, graphs, diagrams and flowcharts or basic propositions in scrambled order. Although this is a form of spoon-feeding and may appear to be unduly restrictive, I have found it useful to adopt tasks of this nature. Supplying the basic propositional content helps students to accept writing tasks that are not central to their subject matter and for which they might be unwilling or unable to do very much preliminary thinking or time-consuming library research. In this way the different specialist backgrounds prove less of a problem than we would normally expect. More importantly, however, every student will have to struggle with the same task and may encounter similar problems in the course of creating a cohesive and intelligible text. This means that feedback comes not just from the teacher but also from peers.

In the first stage of the procedure, which usually lasts an hour, the class is asked initially to decide what the essay title or task means, what it requires the writer to do and what the target reader will most probably expect to find in the text. The students then split up into small groups for a brainstorming session to decide how to use the information provided. This involves reading the basic information, working out how to use it, understanding how the facts relate to each other and discussing the implications behind the information. Students are strongly encouraged

to develop and add to these basic ideas and to discard any material they think is irrelevant. They then group their ideas under sub-headings and order them sequentially. Next the whole class discusses the ordering and sequencing. Consensus may be reached at this point, but it generally becomes clear that there can be several legitimate, alternative ways of organizing a text and I will stress that individual preferences are, of course, acceptable and even desirable as long as they can be explained and justified.

The text, or part of it, is then written up by the learners out of class. Students are urged to give priority initially to organizing, developing, sequencing and linking ideas and are advised to attend to grammar, word choice, spelling, punctuation, layout and handwriting later. They are encouraged to accept the necessity for several draft versions before they have a final one that would be acceptable for a subject tutor's eyes. It is explained that the writing process, for natives as well as non-natives will often begin with scribblings which are private and personal attempts at imposing order on ideas. They are told that the draft they hand in to me should represent an advance on such first scribblings, and should be their best first attempt at solving the problems involved in the particular writing task, but they should not look upon it as something they could not possibly, with help, improve upon.

When I have collected and read all these drafts, one learner's text or part of the text is selected for reformulaton by a native speaker of English. Ideally, reformulators are people who are competent writers of academic papers — colleagues or students. Often I have to do the reformulating myself! In choosing a text for reformulation, I need to take into account several factors. Firstly I consider the writing quality. Something in the middle range is usually easiest to handle and will often contain interesting problems common to the group. I never intentionally choose anything *so* bad that the writer will be humiliated, or anything so good that there is little left to change and which will make the rest of the class depressed about their own writing. I also look for a text which will probably raise issues above the sentence level. Initially I tend to choose texts which exhibit poor organization and sequencing and which will have cohesion problems. Later on, I will select texts which will focus attention on appropriate register, word choice and collocation. I may choose extracts from more than one student's writing. I must consider too the personality characteristics of the writer, particularly in the early part of the course. It must be someone with a robust and altruistic personality who will not react too defensively or aggressively and who can cope with a public discussion of his or her work.

The original non-native version and the reformulated version are then typed to avoid the potentially disturbing effects of handwriting, and copied for the whole class. The anonymity of *both writer and reformulator* is preserved on paper and I nowadays insist on maintaining this anonymity because I have found that the quality and tone of discussion are better when people do not know whose writing they are discussing.

In the next stage of the procedure, I begin by distributing the non-native text and ask people to read it and decide whether or not the meaning is readily apparent. The class is then given the reformulation and is asked to split into groups or pairs and to inspect the two versions, noting the similarities and differences and considering the probable reasons for and the effects of the changes the reformulator has made. This detective work can last for as long as forty-five minutes even for a text of no more than a dozen lines. In the second part of the session when the students report their ideas in a plenary discussion, I confirm their understanding of the reasons for the changes and help them understand those they have not been able to account for. This discussion session is the cornerstone of the whole reformulation strategy. It provides an opportunity for the particular non-native writer under scrutiny to reflect on his or her writing and consider the implications for future writing. My experience suggests, however, that these discussions are also important to the other members of the class because they too have the opportunity to reflect upon their own writing, especially since they have also done the task, and they must decide whether their texts contain similar problematic features and if so, what changes it would be appropriate to make. This discussion is a consciousness-raising device which can help students and teacher to identify more clearly the features of a good text. As a result, clear and explicit criteria for editing and refining a text will eventually emerge.

After this session everyone is asked to revise and edit their drafts, incorporating in them what they have learned from the discussion. I will then collect them in and return them with comments and the few remaining corrections. I also provide a native writer version of the same task (not a reformulation) to permit private or group comparisons with a native speaker's writing.

The class then moves on to the next writing assignment and the cycle is repeated. Very soon, the class is able to do their own reformulations of their fellow students' texts, thus beginning to exhibit the writer autonomy that I am concerned to develop in them. We are able then to explore variations of the reformulation procedure just described.

What problems arise?

No strategy is without its problems, and it would be dishonest not to acknowledge those I have encountered. Some non-native writers, often those who have over-estimated their writing abilities, have reacted defensively to the reformulation feedback strategy and refused to recognize their problems. Others learners may be unable to accept that they can learn from studying other learners' problems. Others again have felt that a comparison of their own writing with that of a native writer reformulation carries the implication that the teacher expects native writer competence from them. They have quite rightly felt that this was an unreasonable and unrealistic demand and I have had to spend time convincing them that their worries are unfounded. Some of these people

have never become convinced of the usefulness of reformulation. Many have come round to it when I have been able to talk to them about their doubts and fears and explain my purpose in using it as a strategy.

How well does reformulation live up to my expectations?

In my introduction to this paper, I gave my reasons for worrying about the efficacy and overall effect of traditional feedback procedures, and went on to describe my hopes that reformulation would provide some sort of a solution, particularly to the central problem of fostering writer autonomy. there is, though, little value in fostering writer autonomy *per se*, unless the learner has a good grasp of the relevant issues and has useful ways of approaching them.

The peer group discussions of the non-native texts and their reformulations provide an opportunity for learners to work out for themselves that surface-level accuracy is not their major problem — that good organization, signposting and cohesion are more vital ingredients of a good text. Discovering this for themselves through discussion, rather than being told, seems to help them accept and eventually adopt such criteria. These discussions lead students to examine publicly not only what constitutes good expository writing in English, but it also prompts them to talk about cross-cultural differences and similarities in academic writing, thus adding another dimension to the criteria they are in the process of acquiring.

A further significant contribution of the peer-group discussions is that they confront writers with readers' interpretations of their writing and generally succeed in convincing writers that it is their responsibility to facilitate the reader's task, and if they are unable to find ways of doing so, they run the risk of being seriously misinterpreted or not understood. This point is made in a particularly dramatic way wherever the reformulator has not managed to capture the writer's meaning, and when the learners cannot themselves agree on an interpretation of the writer's original intentions. It then becomes transparently clear that the writer concerned must rethink his or her text.

Through these discussions, learners make the reassuring discovery that their peers have similar problems to their own, that writing is difficult for almost everyone, and that it requires persistence and a willingness to keep on rewriting until they have a text which goes as far as it possibly can towards meeting the criteria they have established for themselves. They learn also that talking about composition with peers can be positively useful.

To sum up, reformulation offers an excellent way of promoting student discussion on the key issues of academic writing and these discussions promote the autonomy that is the necessary aim of the sort of writing course my students need.

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Developing student writing — A subject tutor and writing tutors compare points of view

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Joan Allwright, *University of Lancaster*
Diane Houghton, *University of Birmingham*

Essay writing is traditionally regarded as the most difficult of academic skills. The essay requires of students not only an understanding of their subject matter but an ability to express and arrange ideas so that it is clear to a teacher that what was meant to be learned has been learned and can be applied in new situations.

Reacting sensitively to what students have written is just as challenging an academic task for subject teachers and language teachers alike. In addition to deciding what is to be rewarded and what is to be penalized, teachers need to think about how best to give feedback. What kinds of comments and exercises will make a difference, not only in the students' perceptions of what should have been done for any given assignment but in their ability to cope more successfully with task demands in the future?

The 1985 Selmous Conference closed with a panel discussion, in which a subject tutor and three language tutors looked closely at one student's essay and compared their reactions to it. The paper was written by a student on the Diploma in Development Finance at the University of Birmingham. She was asked to write a term paper on the topic 'Why is urban unemployment so great in most Less Developed Countries?' After writing a first draft, the student submitted her paper to her English tutor for feedback. She then revised the paper before handing it in to her subject tutor.

Members of the panel were asked what suggestions they would have made to the student if they had received the first version of her paper. Among the panel members were the student's subject tutor, who had not previously seen the paper in its unrevised form, and her English tutor, who had actually helped the student when she had asked for advice. The reactions of these two teachers, as well as those from two other

institutions, are given below, along with a summary of the issues that arose from the discussion.

It is important to note that the panel members did not discuss their reactions with one another before the public discussion, the idea being to give each tutor a chance to express his/her ideas without being influenced by what others might think.

Unfortunately, the original writer's complete text cannot be reproduced in full here, due to space limitations. However, both the introduction and the conclusion are presented, as is a section appearing near the middle of the paper which proved difficult for several of the panel members to understand. The latter section will be reproduced in the remarks by Joan Allwright below. (See Appendix, page 159, for entire text.)

The paper

Why is urban employment and under-employment so great in most of Less Developed Countries?

Introduction
The data available in table 1 show that the rate of urban unemployment which has been defined as 'those people who are able & often eager to work but for whom no suitable jobs are available,'[1] is very high in Less Developed Countries (LDCs). Most of the countries have rates in excess of 10% and some in excess of 15% from total active population in that country.[2] In great contrast to the situation in Developed Countries (DCs) the great majority of LDCs facing the urban unemployment was at least twice as the rate of rural enemployment.[3] Note that the data available only focuses on the rate of unemployment, and if we include 'those labour force who are working as parttime or underutilised, and those who are working fulltime but productive is so low that a reduction in hours would have a negligible impact on total output';[4] then it is generally beleived the problem is more serious than indicated by the data, where the rate of unemployment and underemployment would exceed 30% in many LDCs[5]. Even though the statistics shown are from the 1960s, but with the high growth rate in population compared to slow growth rate of development in LDCs, they are likely to show that urban unemployment and underemployment rate continues to be below considerably level and it will be more serious in coming years. It is estimated that in 1980 world population is 4.5 bilion, and 6.1 billion in the year 2000 which two third of them lived in LDCs.[6]

The basic reason for this very high rate of urban unemployment and underemployment is the slow growth of labour demand in relation with rapid growth of labour supply in LDCs' urban areas.

Conclusion
From the above discussion, the situation of LDCs is rather like vicious

circle of poverty and in attempt to break the circle many LDCs try to create employment to provide as many job opportunities as they can and redistribute the population of the country. Seventy-six countries which covered more than ½ of LDCs had adopted the policies for the control of urban migration in 1960s and early 1970s. They aimed to divert internal migration from large to small urban centres, and few try to develop the two urban and rural sectors.[25] But a 1983 United Nation survey on 126 government of LDCs found that only three countries were government of small island nation ie Barbados, Malta and Nauru. As a remedy more than 75% of these countries are pursuing their policies to slow down the rural urban migration.

The subject tutor's reaction

Andrew Nickson,

Department of Accounting and Finance, University of Birmingham
These are my reactions to this paper. I am a subject teacher, not a language teacher, so some of my remarks may seem trite and obvious to language teachers.

Firstly, my assessment of the standard of English is that it is 'satisfactory'. I can understand most of what the student is writing, although at times with difficulty. (For example, I had to read one of her sentences three times before I understood it.) My criticism of this paper is not due, then, to any inability to comprehend its content.

Secondly, my overall assessment of the academic standard of the essay is 'weak', meriting a score in the low 40's on our marking scale. My reason for this is essentially because of the disorganized manner of presentation of the content. The information is presented in a 'jumbled-up' fashion. I felt a need to do a scissors-and-paste job on the essay, re-ordering its content so as to introduce a logical flow to the argument, something which is sorely lacking in its present form. A dramatic example of this lack of any sequential pattern is the section on education, which appears in the text without any link to what precedes or follows it.

On a related point, the student's use of statistics is very poor. There is a tendency throughout to assume that statistics somehow speak for themselves. Instead of using them to illustrate a point in the text, she just inserted them and left them hanging in the air, as if they were self-explanatory. For example, the section on western models of industrialization includes some statistics on world inequality which are completely out of context. Presumably, they were included there in order to make a point, but it is not at all apparent what that point was.

In fact, I would regard this paper as one for which the organization is relatively simple. After a few initial definitions, followed by some statistics on the extent of unemployment and underemployment, a discussion of the imbalance between supply of and demand for labour in urban areas would provide a logical way-in for discussion of the

explanatory factors of migration (supply) and choice of technology (demand).

In addition to poor organization, the essay also reveals a weak understanding of key issues regarding the problem of urban employment and a lack of original thought. There is no mention of the important Todaro migration model, which is essential to any understanding of this question. The only attempt at original expression — the mention of 'other factors' in addition to the 'pull and push' factors explaining migration — is not followed up.

The essay ends with a weak conclusion. This includes an attempt at policy prescription (i.e. How can the problem be solved?), although the question clearly does not ask for this. The essay is also marred by a peculiar sentence: 'But a 1983 United Nation survey on 126 government of LDCs found that only three countries were government of small island nation ie Barbados, Malta and Nauru.' There is no reason why this statement should appear in the conclusion since it does not relate to the arguments in the essay at all.

What conclusion do I draw from this essay, which contains problems quite typical of overseas students with little background in English? Perhaps it is this — that language teachers sometimes underestimate the ability of subject teachers to comprehend the content of written English by overseas students. Of course, the grammatical exactitude of this essay could have been improved by extra English teaching, but a point is soon reached with most overseas students when, in purely 'cost/benefit' terms, a higher 'return' to language teacher input can be achieved by a shift in teaching emphasis towards the wider question of essay structure in general and the art of logical presentation in particular.

The writing tutors' reactions:

R. R. Jordan,
Department of Education, University of Manchester
A quick read through the student's economics essay gives one the impression that the student has a reasonable command of English in terms of a fairly wide vocabulary range, and that generally she can communicate her meaning. However, a more detailed reading reveals the following:

Errors
There are just over 300 errors and, on a frequency-count basis, 75% of them can be categorized as shown on page 121.

Although the following categorization of errors can indicate which areas of language cause difficulty for a student, it does not indicate if there are breakdowns in communication, nor if the structure and style of writing are acceptable.

rank order	%age of errors	type of error + examples
1	21%	Singular/plural confusion & lack of concord (e.g. th*is* polic*ies*; stem + (s) − omitted.)
2	17%	articles: 'a/the' misuse (vast majority = omission of 'the')
3	12%	verb tense & form: uncertainty about the use of the present simple active (confusion with 'emphatic do') & about the formation of the present simple passive.
4	10%	punctuation (mostly omission of commas)
5	6%	prepositions (e.g. 'with' is overused: 'at, in, by' needed instead)
6	3%	wrong word form used (e.g. 'scarcity' needed not 'scarce'; 'migration' needed not 'migrant')
7	3%	logical connectors/cohesion − misuse/confusion (e.g. even though...(*but*); whatever, because of, while)
8	2%	wrong vocabulary (e.g. size→amount; level→standard)
9	1%	spelling mistakes
10	−	several unclear references: it/they/this

Breakdowns in communication

For me as a language teacher having a general understanding of economics, there were six places in the essay where communication broke down. I would need to question the student to find out her precise meaning. In addition, there was one instance where four items were placed in a list without any explanation of the items: they were thus incomplete and needed an explanation before being fully comprehensible.

Structure

The *introductory paragraph* was poorly constructed: it gave no indication of the structure or content of the essay. Without any preliminaries the student jumped straight into comments on data and side-by-side defined some terms. Inevitably, the reader has an unfavourable impression from the start. The *concluding paragraph* lacked structure. Some new information was introduced in the form of a non-sequitur. As there was also one illogical statement, the overall impression was of incoherence.

Suggestions for improvement

In order to help the student to improve her essay-writing, I would divide the practice into two main parts: the overall structure of an essay, and some of the language areas causing difficulty.

In commenting on the structure of an essay (introduction, development, conclusion), I would focus on the introductory and concluding paragraphs. I would show some model paragraphs, discuss their structure and content, and ask the student to re-write her own in a similar way.

As the student seemed to be largely unaware of singular/plural concord, I would give her practice in this area as it loomed large among the errors and might be considerably improved with some practice (some blank-fill exercises, and recognition/identification practice using a cassette).

Initially, I would ignore the problem with article usage as it rarely interferes with understanding and requires a considerable amount of practice to eradicate.

Other language areas in which I would give the student practice are:
the formation and use of the present simple active and passive tenses (and the use of "do");
the use of some logical connectors (by linking pairs of sentences);
certain items of vocabulary common to economics and frequently used (e.g. '*standard* of living').

Finally, I would insist that the student re-reads and re-drafts her writing — a habit that she does not seem to have developed.

Joan Allwright

Institute for English Language Education, University of Lancaster

The task of providing students with useful feedback on their writing is notoriously difficult, but writers, I find, are able to improve if they become aware of their underlying problems. They are, of course, already aware of problems of syntax, lexis, spelling and punctuation, but to help them become aware of the more fundamental problems of composition such as organization, signposting and cohesion, many of my students have found it very productive if I *reformulate* rather than *correct* their work. We then compare and discuss the original and the reformulation, either in a private tutorial or in a writing class, to see what can be learned from the comparison.

To help the writer of the Development Economics essay under consideration here, I chose for reformulation a section which was apparently relevant but particularly opaque for the reader. (The original and the reformulated versions are on page 124.)

In producing a reformulation like this, the aim is to attempt to bring out and make explicit what the writer was probably trying to convey. The reformulation does not therefore constitute 'a model version'. Instead, it offers a sympathetic reader's interpretation, in acceptable English, of the original writer's intentions.

By asking the student to identify and then account for differences between her own text and the reformulation, the tutor can offer her the opportunity to make her own diagnosis of her problems and perhaps see ways of overcoming them.

I would hope that the discussion process would enable this particular writer to appreciate that she is making her reader's task unnecessarily difficult in the following ways:

1. Her original heading for this section correctly labels the content of what follows but fails to signpost the relationship between the content and the topic of the essay itself, although the section does make that relationship clear. The reformulation offers a heading that explicitly refers to the relationship between urban under-employment/unemployment and inappropriate technology.

2. Lines 1-4 of the original text have been omitted from the reformulation because they constitute an apparently unmotivated restatement of the push-pull factors which drive workers into poorly paid urban jobs — material already used in an earlier section.

3. In the reformulation, the first three sentences (lines 1-7) and a sentence in lines 12-13 have been added as signposting devices to announce and foreground the next stage in the exposition. These additions may appear to go beyond the reformulator's brief. However, I would argue that if the original writer has apparently tried to relate her points in a particular way but failed to make this relationship clear to the reader, then the reformulator can be said to be trying to bring out the writer's original intentions by stating the apparently intended relationships wholly explicitly. If the reformulator misrepresents the writer's actual intentions, this itself will be a fruitful topic for discussion.

4. Lines 9-14 in the original version attempt to explain how the setting of high wage levels in the public sector forces up wages in the industrial sector. However, only a sympathetic reader with good inferencing skills will be able to make sense of this part of the text immediately. The reformulation offers lexical and syntactic changes which make the reader's task easier and quicker.

After discussing the issues raised by a study of the reformulation, the next step is to ask the writer to examine other sections of her essay with a view to revising it in the light of the lessons learnt.

Diane Houghton
Department of English Language and Literature,
University of Birmingham
The comments I make on this essay are made from the vantage point of having worked fairly closely with Andrew Nickson over the past seven years on the Diploma in Development Finance course and, in the process,

Non-native writer's text

Inappropriate Technology

People who are working in industries have been offered an income interm of wage or salaries, and eventhough the income is lower comparatively it is still better than living in the rural area. Anyway as the development goes on, so has the trade union. In several LDC's union pressure plays an important role to increase wages of the workers. For instance tin, oil, copper, and bauxite has been instrumental for other sector to set an acceptable level of income. The income level in industrial sector also has been increased because of government policies. During colonisation, government servant was offered a better wages compare to other sectors and most LDC's continue using this scheme, and beside that the wages is increase alway higher rate. This scheme is always used as a reference to most industrial sector and determine their level of income.

Native Writer's reformulation

The Relationship between High Urban Unemployment and the Adoption of Inappropriate Technology

The fourth major cause of high urban unemployment in LDC's is the adoption of inappropriate technology – technology that is labour-saving rather than labour-intensive. There are several factors that have contributed to this adoption of labour-saving production methods by LDC's, and these are elaborated below.

The first factor is the high price of labour in urban areas. One reason for this is increasing trade union pressure. As the LDC's have developed, so have trade unions, and in several LDC's union pressure plays an important role in securing wage increases for the workers. For instance, the unionised tin, oil, copper, and bauxite industries have been instrumental in setting an acceptable wage level for other sectors. A second reason for the high income level in the industrial sectors is government policy. During the colonial period government servants were offered higher wages compared to other sectors and most LDC's still follow the practice of setting high wage levels in the public sector – levels that are rising continually. This practice is then used as a reference point for high wage demands in the industrial sector.

> **PLEASE NOTE! THE CLASS WILL RECEIVE BOTH THE NON-NATIVE WRITER'S TEST AND THE REFORMULATION WITH ABSOLUTELY NO ANNOTATIONS.**

acquiring some idea of the criteria likely to be used by him in marking essays in Development Economics.

In general, when looking at a student essay, I would take into consideration the following:

— what the individual student is capable of achieving at that moment, and his or her future potential
— the lecturer's policy on marking (if known)
— the demands of the particular academic area.

In this particular case, I judged the student to be potentially quite able, and likely to make fairly rapid progress, with help. Andrew Nickson, the marker, I judged to be fairly strict, to be looking for some kind of logical argument, and unlikely to be satisfied with a basically descriptive essay or one heavily reliant on his class handouts. The nature of the subject, Development Economics, reflected a balance between content and argument, as illustrated in the main class reading texts.

Turning to the essay itself, I asked three major questions on my first reading:

1. Does the student answer the question given?
2. Do both content and argument make some kind of sense, particularly to me (a non-expert)?
3. Is the essay 'balanced' in terms of the amount of attention given to its component parts?

The answer to the first question was, I felt, 'yes'. The essay title asked for 'reasons why' and the student had provided several reasons why unemployment and underdevelopment were so great in many less developed countries. The answer to the second question was also 'yes'. The essay made reasonable sense to me — it gave me a broad overview of the academic area and its problems. The answer to the third question had to be 'partly no'. The essay seemed unbalanced, particularly towards the end, and ended rather abruptly, having introduced new information in a section called 'conclusion'.

What should my strategy be in dealing with this student and her essay? I had a range of choices at my disposal, from complete acceptance to suggesting a major re-organization. I felt that the essay was basically acceptable, with a few modifications. I went through the essay with her, asking for clarification of points where the meaning was not clear to me, suggesting changes or amplifications when I felt they were needed, and correcting the 'small' grammatical and lexical mistakes as we went through the essay together.

This form of language help is quite time-consuming, and makes fairly heavy demands on the teacher, so I have to ask myself why I have come to believe that it is one of the most effective forms of help for overseas students learning to write academic essays. Firstly, there would appear to be certain amount of value in the time 'given' to the student. The time represents, among other things, some kind of commitment towards the student's success on the part of the teacher. Secondly, some kind of model of an acceptable essay is 'negotiated' between teacher and student. And

in concentrating on the macrostructural level and correcting the 'small' mistakes for the student, I am both stressing the importance of organization and content and acting on the belief that the student will somehow get the grammar right in the long run, after sufficient practice in writing essays and adequate exposure to the correct form.

The help offered to the student by the language teacher is only one stage in the learning process in essay writing. The student writes up and submits the essay. He or she receives feedback from the subject lecturer in the form of a mark and/or comments. The marks and comments are often discussed by the students among themselves, and hypotheses formed about why certain essays are regarded as better than others. They each measure their own essay against the 'good' essays, and the more motivated and more able students apply what they have learned, both from the lecturers and from the informal 'post mortem', to their next essay assignment.

I am pleased to report that the student whose essay we have discussed took this approach to the writing task, and her final results on the course were good enough for her to be accepted for a Master's course starting in October 1985.

Discussion of the reaction papers:

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What can be learned by comparing these four reactions? It is interesting (and reassuring) that the tutors, though preparing their comments independently of one another, agreed on three major points. These were: the need to emphasize organization and logical flow of ideas, the need to concentrate only on language that affects meaning, and the need to make the student more responsible for her own work in the future.

Organization and logic
The subject tutor felt that the academic standard of the essay was 'weak' because of the 'disorganized manner of presentation of the content'. He felt that there was no logical flow to the argument and that in some cases it was difficult to see why an idea appeared where it was since there were no links binding it to what came before or after.

The writing tutors shared this opinion. Jordan paid special attention to the introduction and conclusion of the essay, stating that an introduction with no indication of what would follow would create an 'unfavourable impression' on the reader and a conclusion which contained new information and illogical statements would create an impression of incoherence. He would concentrate on improving the structure of the paper, using model paragraphs, and he would also give practice in the use of logical connectors.

Allwright concentrated on helping the writer see how difficult it was to understand her own writing by reformulating a section which was 'apparently relevant but particularly opaque for the reader'. In the native speaker's reformulation the emphasis is on sign-posting — asking the writer to explicitly relate ideas to one another instead of forcing the reader to infer what any one idea might have to do with what preceded or followed it or with the topic of the paper. Allwright selected a fragment which could be improved by headings and additional sentences to explain what she felt were the 'underlying relationships' between ideas. For her the important point is to get the student to see for herself why the reformulated version is easier to follow, the hope being that these lessons will transfer over to future writing.

Houghton also stated that she would concentrate on 'the importance of organization and content' over grammar. Although the paper made 'reasonable sense' to her she felt it was 'unbalanced', mentioning especially the poor conclusion Houghton's solution would be to work individually with the student, trying to clear up parts where the meaning was not clear, and working on the 'macrostructural level'.

Language and meaning

None of the writing tutors stressed language problems over those of organization and logic. Although Jordan's reaction begins with a breakdown of 300 errors in the paper, he emphasizes that a count of this sort indicates neither whether there will be breakdowns in communication nor whether the structure or style of the paper will be acceptable. He does single out some language features for practice, however — features which do interfere with communication and which might be improved if sufficient attention were given them.

Allwright's approach to helping the student might also seem, at first glance, very language-oriented since when students receive a reformulated version of their own ideas in 'perfect English' they might be tempted to 'take the 'corrected' paper and run'. However, Allwright explains that she is not giving the student good language — rather, she asks the student to consider whether the reformulation really reflects her intended meaning and how the original version has been modified. Although the reformulation contains some improvements in vocabulary and syntax, Allwright hopes that the insights to be gained from examining it alongside the original version will centre on explicit signposting, a language feature which certainly affects the readers' ability to understand and is not form for form's sake.

It is encouraging to compare the writing tutors' approaches and find that even though their methods might differ they seem to be working in accordance with the subject tutor's advice: 'a higher return to language teacher input can be achieved by a shift in teaching emphasis towards the wider questions of essay structure in general and the art of logical presentation in particular'.

There are several problems which remain, however, for which no solutions have been offered.

1. The writing tutors all chose to give at least as much attention to organization and logical connections as to 'language problems', but they were working with a paper in which there were only, according to Jordan, a handful of communication breakdowns. The subject tutor stated that 'a point is soon reached' when attention to grammatical exactitude should be sacrificed in favour of attention to other features, but how can writing tutors know where this point lies? It is not uncommon for universities to admit students whose language competence is far below the standard presented in this essay even in its draft version. What advice can be given to teachers in a classroom situation (or, indeed, even a one-to-one session) to help students whose proficiency is so low, especially if their awareness of what is expected of them in academic writing is also low?

2. Is it realistic to suppose that students will learn to write by working on topics outside their field of study, especially in in-sessional (as opposed to pre-sessional) teaching situations? Unlike Houghton, who teaches writing within a specific faculty and can use her students' departmental assignments as material for writing classes, many teachers have classes made up of students from different departments and they therefore often work with 'neutral' topics. Students who are learning in writing class how to improve material they must hand in for assessment will naturally pay more attention to their writing tutor's comments and be willing to do re-writing. Students who have departmental assignments to do in addition to their writing class tasks may not feel that practising writing on neutral topics is very beneficial, especially when it takes a lot of time.

3. In addition to the problems of what sort of writing help should be given and what content student would be most motivated (and able, in terms of time) to work on, there is also the question of how all the participants in the learning situation are to interact with one another.

Student and writing tutor

Although Allwright states that reformulation can be done with individuals or in a group, Jordan and Houghton's reactions emphasize the need for individualized work, tailored to the student's own needs. It is sometimes the case, however, that institutions cannot offer so much private time. What advice could be given to a teacher working inside a classroom with very little time and many individuals needing their own kind of help? What work has been done in individualizing writing development?

Writing tutor and subject tutor

Although Jordan and Allwright were able to cope with the content

demands of this essay, it seems as if the Birmingham situation, in which writing tutor and subject tutor work closely together, exchanging viewpoints on criteria to be used for teaching and marking, would be more beneficial for all concerned. What is the best way of setting up working relationships with subject departments, in which the writing tutor and the subject tutor's efforts complement each other?

Student and subject tutor
It is not always the case that students feel confident approaching their subject tutors for help; indeed, private discussions with students often reveal that they feel inhibited about calling upon their subject tutors to ask for advice on writing. It is sometimes quite difficult for them to ask subject tutors why certain tasks have been given and what the tutors will be looking for when they mark the papers. It is equally difficult to ask what the feedback they have received on a certain assignment really means. It is very easy, on the other hand, for an overseas student to give up on tutors who look 'too busy'. What is the best way of convincing students to use their subject tutors more (and of getting some subject tutors to be more welcoming to overseas students' requests for help)? How can a better sense of co-operation be built between the students and their own tutors so that students do not feel they must come to the writing tutor to learn about writing for a particular field?

These questions certainly demand more attention so that student writing can be developed more efficiently and with more satisfaction for all the parties involved.

Designing a writing syllabus in English for academic purposes: Process and product

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Introduction
Like other papers in this volume this paper is concerned with process rather than product. The process it is concerned with is that of designing a syllabus for writing. Thus the paper does not offer a fixed and tidy syllabus; rather in the paper I will seek to outline some of the broad considerations which I think might usefully inform the design of a syllabus. These will relate to both process and product in writing. My aim is to suggest the potential of a genre-based syllabus in which writing is integrated with reading and which involves students in developing awareness of both top-down and bottom-up strategies. But I will start with a consideration of the nature of writing for academic purpsoes and the constraints on both learners and teachers in EAP and ESP classrooms. Since my own most recent experience is in ESP this bias will be reflected in the illustrations I use; I believe nevertheless that they are equally applicable to the broader EAP environment.

The nature of writing in EAP
My first assumption about writing for academic purpsoes is that it is inescapably concerned with both process and product. The long term aim for overseas students, and, it must be assumed, for the governments and institutions sponsoring them, is a successful academic return for their period of study in Britain. An inherent part of this outcome is a demonstrable capacity to produce the limited but essential range of forms of written English by which success in their field of study is judged; minimally, essays, laboratory reports and dissertations or theses. To this extent EAP must inevitably be concerned with product, that is with the written language which is used for the purpose of communicating what the writer has done and discovered in his field of study.

But writing for academic purposes is also concerned with process, and for the overseas students with whom we are concerned, with processes of two different kinds: the process of learning about oneself and the world through writing, which Britton (1970) first focused attention on in the

mother tongue context, and also the process of learning about a language through writing. These are, I suggest quite different processes, or different stages, in the process of learning to write in a foreign language. To the extent that a writing product reflects a revision of the writer's ideas about what is being written about, it reflects the process of learning about the world through writing. To the extent that it reflects a revision of linguistic choices for expressing what is being written about, it reflects the process of learning the language through writing. In the early stages of writing in a foreign language learners know more about what they are writing about than they are able to express. The task of writing, then, is not a means of learning about the world or oneself; it is about learning the forms which will permit expression. It is this process, of course, with which the language teacher is concerned. But as the student moves, often erratically, from this stage, to that of writing about what he is learning in his discipline, then it is the subject tutor rather than the language teacher who is best equipped to provide support.

These dual demands on the student writing for academic purposes are reflected not only in the continuum of writing to learn the language and writing to learn, but also in the evaluation of product. In EAP, product is frequently assessed by both language and subject tutors. The criteria for assessment do not always coincide. The criteria for success in the subject area are the taken-for-granted subject specific criteria which actually determine and control the nature of products in that subject area. They are the criteria of the people who control, directly or indirectly, the distinctive genres which the students *are exposed to,* on the one hand, the text books, conference proceedings, and journals, and on the other, the genres the students *are expected to* product, the exam answers, laboratory reports, projects, literature reviews, dissertations and theses. Thus what is required of students if they are to be successful in their writing is that they somehow discover and learn to meet these implicit, taken-for-granted criteria by which the different genres they produce are assessed. In defining genre, I follow Swales (1985) 'A genre is a recognized communicative event with a shared public purpose and with aims mutually understood by the participants in that event'. In order to make it easier to distinguish between a genre and other communicative events I will restrict my use of the term to those communicative products of which an 'editor' is identifiable; by editor I mean either a publicly acknowledged editor or editors, or someone who is responsible for the assessment of a genre, such as, for instance an examiner. Distinct genres are recognizable, of course, not through the identification of the editor but through certain linguistic choices which reflect subject matter, target audience and rhetorical organization. It follows that if students are to create acceptable products within certain genres, they need to have well-established 'content', or information schemata, and to acquire the necessary rhetorical or 'formal' schemata (Carrell, 1983).

The role of both types of schemata in reading has been demonstrated by Carrell amongst others; the importance of rhetorical schemata

underpins Swales' (1980) analysis of the 'moves' in the Introduction sections of academic papers. It is clear that the role of schemata in writing is to provide a top level framework for structuring the discourse. What is also clear is that for writing to be successful, students need to acquire knowledge of the linguistic forms which will allow them to fill in the top-level frameworks from the bottom up. This, of course, is the concern of the language teacher. Thus, in the language learning environment the criteria used for the assessment of writing can vary from those which coincide with subject-based criteria, as they will do in the team teaching situation, to those which are manifestly at variance with subject based criteria. As a consequence there is a potential mismatch between the longer term goals of the student and the goals of the language teacher. I suggest that this kind of mismatch will not arise if the syllabus is genre-based.

A genre-based syllabus

It is for this reason that I propose a genre-based syllabus of the kind that Swales (1985) envisages. By a genre-based syllabus I mean a syllabus which is founded on the identification and analysis of the specific genres the students are required to read and write in their subject-based studies. Such a syllabus would not, of course, exclude other relevant genres; appropriate selections would not only complement the subject specific genres but also provide important contrasts. The team teaching approach pioneered by Tim Johns and Tony Dudley-Evans at Birmingham exemplifies a genre-based approach. An illustration of its potential for writing is given in the description of project work developed at Aston University by Meriel Bloor and Maggie Jo St.John (this volume). In these contexts the goals of the subject and language tutors and of the students are explicit and coincide. By contrast, in the absence of a genre-based curriculum, student and tutor goals are not necessarily explicit and they do not always coincide. Without the explicit identification of target genres the language foundation of a course is inevitably ad hoc and represented either by genres which are not required or relevant, or, alternatively by a narrow selection of text-types, e.g. descriptions of 'physical structure', 'mechanisms' or 'processes' (Davies and Greene, 1984) in the specific subject area. In neither of these situations are the genres required for reading differentiated from the genres which students are required to write. When they are, it becomes clear that even where courses are genre-based, the relative accessibility to students and tutors of different genres varies. Generally the texts students are required to read, textbooks and journal articles, are relatively accessible; by contrast exemplars of the texts students have to produce, exam answers, essays, laboratory reports, dissertations and theses, can be difficult to access or to study. This is one of the problems a genre-based syllabus has to surmount. Another is the lack of descriptions of specific genres. Neither subject tutors nor language teachers are yet able to make explicit the features which

distinguish one type of writing from another. The seminal work under-taken by John Swales on article introductions, merely serves to highlight the actual deficit of descriptive systems and analytic tools. It also suggests directions not only for research but also for teaching. The analysis of 'moves' makes explicit a widely generalizable rhetorical schema used in academic writing; as such it can be used to direct student reading and as the basis for an analysis of the relation between function and form which will inform writing. But it can also be viewed as the exemplification of an approach in which collaborative analysis of relevant genres is central. Such an approach necessarily involves the integration of reading and writing within the curriculum.

Integration of reading and writing syllabuses

The arguments for a genre-based curriculum have been presented above. They are, in the first instance, dictated by an explicit recognition of student goals. The need for reading and writing to be integrated is dictated, I suggest, by the need for writing goals to be made explicit. When they are, as we have seen, the genres students are required to write are identified, and the necessity for students as well as tutors to analyse them becomes apparent. Analysis, of necessity, involves reading. This analytic reading may yield for students new knowledge within a subject area, but this is not its principal purpose, which is to discover what is distinctive about the rhetorical organization of the text and the way in which this is realized linguistically. Nevertheless in order to write something useful and meaningful students will need a basis of knowledge and something to say. In the earlier stages of language learning, a labelled diagram of something with which the student is familiar should be sufficient to activate an appropriate information schema, and the study of a simple 'description' with its stative verbs and present tense form, a sufficient model of the formal schema for writing. But at a more advanced stage, for instance, when writing a review of the literature, students will need to read in depth and quite widely in order to have something to say. They will need to develop elaborated, if not new, content and formal schemata. Thus the need for reading as a basis for subsequent writing and for analysis will be crucial, since the student not only has to learn from the texts but also make comparisons between the different texts being read, and between these and the type of text being produced. A student review of the literature will clearly share some of the features of the academic papers and text books which are input, and not others. Open-ended collaborative analysis between students and tutor is required to identify what these might be. This, I have tried to show, can only occur when reading and writing are integrated in the syllabus and when both students and tutor share common goals and a common experience of texts.

But there are additional reasons for proposing the integration of reading within a writing syllabus. It is, I suggest, the only way of providing students with the massive exposure to target genres which is required,

either in the absence of clearcut descriptions of target genre, or, where these are available, of testing the adequacy of such descriptions. In the former context the absence of established descriptions can also be used to advantage since it requires, of necessity, that tutors and students do collaborate in open-minded analysis; this must facilitate the development of self-monitoring strategies in the student. It will also allow tutors to increase their understanding of the students' subject area by learning content from them.

The integration of reading and writing within the curriculum will also provide students with the opportunity to approach both reading and writing tasks from different starting points, sometimes writing from a non-text base such as a diagram or table, or from their own knowledge, and then comparing their product with those of others, published or unpublished, and sometimes starting from the analysis of an exemplar and trying to write within the constraints of that model. The utilization of target genres within the syllabus is not intended to encourage simple copying of models but rather to develop awareness and sensitivity to style. Movement backwards and forwards from writing to reading, supported at different stages by analysis is what is envisaged.

The need to develop both top-down and bottom-up strategies

The reasons for developing a syllabus which involves attention to both top-down and bottom-up strategies in parallel is suggested by much of what has been discussed above. Gaining control over a particular genre, requires, by definition an awareness of the top level formal and content schemata for structuring it, and of the lexis and syntactic forms which realize it. But an exclusive focus on top level features has limited potential; it may provide an outline and section headings for a text but will not result in a full and comprehensible realization of it. Conversely, a focus exclusively on form, at sentence level, will not equip students for the creation of coherence discourse. What is required is a match between top-down and bottom-up knowledge.

The interdependence of both top-down and bottom-up information is clearly exemplified in two recent studies of learning. While neither is explicitly concerned with writing, both establish, in principle, the necessity for integrated/interactive approaches to learning. In the first study, of text processing, subjects were given short narratives, a sentence at a time and asked to say what they thought was going on, and where, and so on. Here, Rumelhart (1984) demonstrates the role of even single words in helping to generate an appropriate schema for the discourse. He shows, too, how subsequent processing of the discourse is guided by the use of the particular schema generated. Where subjects fail either to generate an appropriate schema, or to check the current schema against bottom-up input, understanding breaks down. Rumelhart proposes that there are at least three reasons in schema theory which indicate why this occurs:

— Readers may not have the appropriate schemata. In this case they simply cannot understand the concept being communicated.
— Readers may have the appropriate schemata, but the clues provided by the author may be insufficient to suggest them.
— Readers may find a consistent interpretation of the text, but may not find the one intended by the author. In this case readers will understand the text, but misunderstand the author.

In a more broadly-based and natural study of learning, Entwistle and Marsden (1982) analysed the responses of students from sixty-six British universities and polytechnics to questionnaires about their approaches to studying. This involved both reading and writing. They also conducted interviews and undertook experiments involving the reading of academic papers and the assessment of different types of writing. A major outcome was the identification of five distinct approaches to studying which, while tending to be associated with personality and academic subject, nonetheless could alter with task. These are:

1. Deep-active, Meaning oriented;
2. Deep passive, Meaning oriented;
3. Surface active, Reproducing oriented;
4. Surface passive, Non-academic oriented;
5. Deep or surface as necesary, Strategic oriented.

As is clear from Entwistle's and Marsden's summary table reproduced below, certain approaches reflect a reliance on bottom-up strategies, others a reliance on top-down strategies and others an integration of both top-down and bottom-up strategies. Thus the surface active approach with its focus on detail and operation learning (involving a reliance on rules and procedures and step by step sequential learning) suggests a predominantly bottom-up strategy. By contrast, a surface passive approach characterized by too little attention to detail and an over-readiness to generalize, suggests a primarily schema driven strategy which fails to check input against prior knowledge. The probable outcomes of using either of these approaches are clear in the table. Thus while the surface active, detail dependent approach does sometimes result in high grades in science, the surface passive approach is associated with low grades in all subjects. By contrast the two approaches which reflect an integration of both top-down and bottom-up strategies are those correlated with successful performance.

Students who approach their study in these ways describe the way they approach both reading and writing tasks. Comments from two versatile, deep active learners are given below:

Student 1

"I began to realize there, there was a structure in the things they were teaching us, and it wasnt just a load of facts...in the first year... I knew the facts sort of but I didn't know what was really meant 'cos you can't understand there are two sides to an argument — if thats what you're understanding until you see there are two sides to the argument..." (Entwistle & Marsden p. 161)

A framework summarizing descriptions of student learning

Study orientation	Approach	Style	Sterotypic personality	Processes	Probable outcome
Meaning orientation	Deep active	Versatile	Integrated and balanced personality	Uses evidence critically, argues logically and interprets imaginately	Describing, justifying and criticizing what was learned. (High grades with understanding).
	Deep passive	Comprehension learning	Impulsive introvert with a theoretical orientation	Intuitive, imaginative, thriving on personal interpretation and integrative overview but neglecting evidence	Mentioning overall argument, laced with illustration and anecdote. (Fairly high grades in arts).
Reproducing orientation	Surface active	Operation learning (sometimes combined with improvidence)	Converger with strong economic and vocational interests Neurotic introvert with obsessional characteristics	Attention to detail, cautious and limited interpretation, syllabus-bound and anxiously aware of assessment demands	Accurately describing fact and components of arguments, but not related to any clear overview. (Sometimes high grades in science)

A framework summarizing descriptions of student learning (continued)

Study orientation	Approach	Style	Sterotypic personality	Processes	Probable outcome
Non-academic orientation	Surface passive	Improvidence combined with globe-trotting	Social extrovert with few academic interests or vocational aspirations	Little attention to detail, over-readiness to generalize, superficial treatment and casual interpretation	Mentioning often irrelevant facts within a disordered, haphazard overview. (Low grades)
Strategic orientation	Deep or surface as necessary	Strategic	Stability and confidence combined with competitive aggressiveness	Detail or meaning as perceived to be required by the teacher	High grades, with or without understanding

Entwistle and Marsden pp. 200-201, reprinted with permission.

Student 2

"What I tend to do initially on an essay or dissertation, I will make up perhaps a short or a long bibliography, . . . of books and articles that I think are relevant, giving me some sort of framework to work on. And then, after I've built up quite a large body of notes, possibly from that, then I'll get to the stage where I've got a very good idea of how Im going to organize the essay or dissertation or whatever, and there'll be particular areas then which Im looking for. There may be one or two points which I want to see what other people have written about. And so, where previously I've been going through the source material perhaps in a rather general way, then Ill get down to more specific strategies."

<div align="right">(Entwistle & Marsden p. 164)</div>

The two students appear to make active use of appropriate formal and content schemata as frameworks for learning. But they are also aware of the need to check detail. As a result they succeed in producing products which reflect the ability to analyse critically as well as to describe what has been learned.

Entwistle's and Marsden's study provides hard evidence of the long term efficacy of integrated strategies, Rumelhart's of the effects in the short-term. The question is, what are the practical implications for syllabus design for learners of a foreign language? These are, I think, quite far reaching and as yet little understood.

Implications for teaching

A first implication of the studies discussed above of course is the need for tutors to provide opportunities for students to engage in top-down and bottom-up analyses which complement each other. The potential of such an approach is exemplified in Swales' analysis of the introduction to articles. A more directly pedagogic illustration of the approach is provided in Dudley-Evans (1985) book on report writing. In this, students are presented with an example, 'model' if you like, of the target genre. On the basis of the tutor's analysis of the structure of the report, they are asked to analyse it and identify the functions and the structuring of the different sections and then to identify bottom-up realizations, e.g. tense selection, in the different sections. This is followed by the writing of a report. This procedure clearly exemplifies the role of both top-down and bottom-up analyses, as well as demonstrating the fact that both reading and writing are involved. As such it provides a model of a method which can be applied to other genres, albeit a much tidier model than is likely to be achieved with genres which are more complex than the general report.

It also underlines the need for the extension and development of such an approach to other genres or features of genres. As we have seen, amongst the genres which are likely to yield to analysis of top-down organization through the identification of functions or moves are exam papers, seminar papers, conference papers, dissertations and theses, research proposals, and academic/business letters. Within each of the

genres the need for the analysis of 'end' sections like discussion and conclusions is highlighted by the current preoccupation with introductions.

So too, is the potential of analyses which seek to examine the 'match' between introductions and conclusions. Here, instead of the focus being on a sequence of moves, as in the analysis of introductions and research reports, it would be on the extent to which what is predicting, or promised, in the introduction is realized, or fulfilled, in the conclusion and/or discussion section, and, of course, throughout the text.

Across, as well as within genres, a further aspect of top-level structuring which deserves investigation is the variety of ways in which sectional organization, headings and sub-titles are used to structure academic discourse. The taken-for-granted, standard, sections and headings like Introduction, Method, Results and Conclusions, do not occur in all publications. Frequently, standard forms of organization, headings and sub-titles are combined with 'topic' and sub-topic organization and headings. Analyses of the combinations and ordering of headings, sub-headings and sections which characterize texts serving particular functions, or typifying a particular genre, would undoubtedly be useful to student aspiring to produce texts within that tradition. It would also serve to focus attention on an aspect of text organization which has hitherto been neglected, that of topic development. If students are to develop sensitivity to the rhetorical or communicative moves used in academic discourse, they also need to develop skill in developing topic and sub-topic within their chosen field. In this they will need not only a top-down topical framework for analysis, but also knowledge of bottom-up syntactical and lexico-semantic constraints.

Swales and Dudley-Evans have shown how choice of certain verbs and of tense and aspect serve particular communicative functions in texts. They have also given an account of the lexical signals which typically indicate these communicative moves. But lexical choice serves functions other than that of signalling a particular communicative move, in particular it serves to develop topic or sub-topic and to mark off boundaries between different topics and sub-topics. If the full potential of lexical choice is to be realized and employed by students they will need not only to know lots of words, but also to know the ways in which certain words are semantically related, this is they will need to continually expand the range of lexical options available to them, and also to extend their knowledge of the semantic relations between lexical items in particular contexts.

I suggest that the study of lexis in context, entailing as it does both syntactic and semantic constraints, is the principal means by which bottom-up support for student writing can be provided. Hasan (1984) provides a comprehensive analysis of the lexical, semantic and syntactic relations which determine the coherence of texts. McCarthy (1984) and Davies (1985) explore the classroom potential of such analysis. Here, it will be sufficient to point to the potential of analyses of three very basic lexico-semantic relations identified by McCarthy (in press). These are:

— the relation of *equivalence* which in discourse may be regarded as analogous to, but not the same as the formal relation of synonymy
— the relation of *contrast*, likewise roughly analogous to formal antonymy

and that of *inclusion* which may be compared with hyponymy.

In the EAP classroom, equivalence relations can be studied by asking students to mark up in a text, all references to, for instance, the 'topic entity' (Brown and Yule, 1983) or relation, e.g. a particular material, or the characteristics of properties of the material. This kind of activity should serve not only to extend the repertoire of lexical items available, but also to develop sensitivity to different senses of particular verbs.

The potential of analysis of inclusion relations, as a realization of topic development should also be clear. In a recent study of moves in MSc dissertations, Dudley-Evans (in press) uses lexical signals which exhibit the inclusion relation to identify three 'topic development' moves which he calls Introducing the Field (of study); Introducing the General Topic; and Introducing the Particular Topic.

Dudley-Evans and others also note the important function, in academic papers, of contrast. The role of lexical contrast, as a more reliable marker of topic shift than discourse signals such as 'however', is one which deserves attention from students, tutors and researchers. To date, it is minimal discourse markers such as 'but', 'however', 'whereas' etc., which have received attention. In coherent discourse, as Hoey (1983) has shown, the lexical environment of such markers is as important as their signalling function.

These three lexical-semantic relations, realised in lexical 'chains' which contribute to the coherence of a text, do not exhaust the set of cohesive relations which might be studied. But they do represent important stepping stones in the acquisition of bottom-up knowledge of texts. In this role they complement well-developed approaches to the study of cohesion such as that of Williams (1983). As an extension of that approach, it will also be useful, I suggest, to investigate the role of rather larger units which play a part in making a text cohesive and potentially coherent. What I have in mind, in particular, is sentence or clause theme, as defined by Halliday (1985) and investigated by Fries (1983). Theme, identified loosely as the first constituent of a clause, or sentence, is seen to serve the function of providing the method of development of a sentence or clause. Clearly, theme, when it coincides with subject (the unmarked form) serves to establish what the sentence or clause is 'concerned with' and hence to identify the particular participant or topic entity under consideration. The repetition of the same theme, in a succession of sentences likewise establishes the concern of that stretch of text. Thus analysis of theme provides us with a way of examining the development of topics and sub-topics in a text.

It can also provide insights into the way in which participant or topic, or discourse *contexts*, are developed. When theme is marked and does not coincide with (simple) subject, but is an adjunct of time or location

for instance, it clearly does not serve to identify participants or topic entities. Instead, it serves to provide a temporal, spatial, logical or discourse context for the message. Similarly, the selection of 'empty' subject, 'it', or 'there', as a thematic element appears to develop the context of the message by announcing that a significant fact or evaluation is to follow.

In short, analysis of theme can provide a means of studying the ways in which topics are developed and of the way in which topic and discourse contexts are developed. Thus a study of the organization and patterning of different types of theme in texts offers a further means of developing student awareness of the integration of lexical, syntactic and semantic considerations which produce coherent texts. But, as with the other analytic procedures outlined above, it is not enough on its own.

As Dudley-Evans' pedagogic model illustrates, analysis must be paralleled by practice and it must also draw, for its data-base, on the products of practice, that is, the students' own attempts to write for a particular purpose.

If the first aim of the syllabus I have been trying to outline is the development of awareness of different genres, the second is the development of student awareness of the strategies which can be deployed in learning to write for academic purposes. These will include, I suggest, not only general strategies like reading around the subject and making notes, but also more specific strategies involving students in analysis of their own writing as both process and product. As an example, students can be asked to make notes on the basis of reading two or three texts/ papers on the same topic. They are then asked to analyse their own notes — first, by producing topic and sub-topic headings which will 'fit' most of the material in their notes. Then, using these, and perhaps more refined headings, they produce a tabular summary of the notes. The objective of the tabular summary is to capture similarities and differences in the different treatments of the topic. It is then the tabular summary which is used as the basis for writing.

The tabular summary provides the basis for topic development; the writing, the practice in developing the topic within a communicative context. It is the way in which it achieves the latter that is finally examined by students themselves after writing.

The procedure outlined above is simple, and differs from information transfer activities basically only in that the data at two stages of the procedure are the students' own products. Nonetheless the difference is important, I believe, if students are to consciously develop an awareness of the strategies they can use, of the processes they are involved in, and of the way in which their products are developing. If they are to do this they will, of course, need time, perhaps twice as much time as is often available for open-ended analysis and writing, and they will need a working environment in which they can be confident that their efforts will be respected. It is this last condition of course which will be crucial for the development of a writing syllabus.

It is realistic, I believe, to suggest that if the writing syllabus involves tutor/student collaboration in the identification of target genres and tasks and in open-ended analysis and practice, it can be achieved. The syllabus, however, will not be tidy or easily replicable — but it should be flexible and functional, giving due weight to both process and product.

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The social construction of science and the teaching of English: An example of research

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My study of scientific writing, like that of many of the contributors to this volume, began with the need to devise a program. The University of Texas instituted a required writing course in which all students — native and non-native speakers — were supposed to learn how to write in their disciplines. There are plenty of technical writing books for native speakers with sections on describing, giving instructions, and other rhetorical problems, but we were also supposed to teach some sort of critical reading of and thinking about academic texts. While my colleagues studied the social sciences (Faigley and Hansen, 1985), I set out to find how far rhetoric was useful in scientific writing, in case studies of my colleagues in science departments at the University of Texas.

My model for these studies has been recent research by sociologists of science, which seems to me relevant to ESP — and particularly EST — although none of the studies I have used are mentioned in the standard reference works for ESP teachers. Perhaps they seem remote and impractical, since their orientation is not pedagogical, or hazy and impressionistic, since they are not so quantitative as most linguistic studies. What I am going to suggest is that these two approaches — the emphasis on social structures and the emphasis on linguistic forms — are not as far apart as they may seem, and that both can be useful to the teacher of EST. If we think of linguistics as starting from the bottom up, with scrupulous attention to the details of textual data, we can think of the sociologists as starting from the top down, with conceptions of the broad processes that are behind the production of that data. Recently, the two views have begun to meet.

Teachers of English in general, and teachers of EST in particular, seem to have been moving from a purely formal view of scientific writing towards a more social view for at least fifteen years. The various views gathered under the name of the communicative teaching of English all seem to stress the social use of scientific language. Since we need descriptions of this use in order to devise materials (see Widdowson; 1979), there have been repeated calls for interdisciplinary research into scientific discourse (Robinson; 1981, for instance) and a number of linguistic studies

of scientific writing in its social context (Swales, 1981, for instance). The aims of this discourse analysis would be hampered if researchers unthinkingly accepted traditional ideas about the social structure of science: its objectivity, rationality, and impersonality. Such functional categories as describing, informing, or giving an account are familiar, but may be misleading in that they take the context of science for granted, as something given. Perhaps even the assumption that scientific language is meant primarily to communicate is over-simplistic. This is where the new studies by sociologists of science can be useful.

Sociologists begin by asking a different question: not 'How can I teach more effectively?' but 'How does science work?' But this doesn't mean they can't lead us to useful insights for teaching. The sociological studies that seem to me to be the most relevant to our work are those associated with what is called the 'strong programme' in sociology of science. These researchers assert that sociological explanation should try to account for the content, as well as the institutional forms of a discipline. This means that they pursue quite different research from more traditional sociologists, who hold that there is a core of objective scientific truth that cannot be reduced to social terms. Traditional sociologists tend to turn to larger scale, often statistical, studies of scientific institutions and norms, such as analyses of citation patterns. The strong programme people, on the other hand, often perform detailed analysis of scientific texts and conversations, because that is where they can see knowledge being constructed. Recently, they have looked for models in other disciplines engaged in discourse analysis, including literary criticism and ethnomethodology; I have included a bibliography of some of these studies of interest to English teachers. So here the sociologists and the linguists begin to converge.

Let us take my research as an example. I will summarize two case studies I have published in longer form elsewhere (Myers, 1985a, 1985b), both involving the writing processes of research biologists at the University of Texas. I am particularly interested in scientists who are trying to win acceptance for controversial research or research that falls between two sub-specialties, because their texts bring out tensions that may not be apparent in more routine texts. I present scientific texts as a negotiation of knowledge claims, not simply the communication of knowledge. For instance, one of the two authors I discuss is a well-established psychobiological researcher whose recent articles questioning hormone-behavior paradigms met unusual resistance from peers who otherwise respected his work. The other researcher has recently changed subspecialty to work on the evolution of nucleic acids, so he has to start over again as an outsider to his new field. In each case, I collected all the drafts for one piece of writing, all the comments by colleagues and referees, and all the responses of the authors to these comments. I also interviewed the authors at least twice: once before my analysis to collect background information, and again afterwards to check my interpretation. For my study is an exercise in interpretation, rather than simple

description; I compare my sense of the texts' meanings to that of referees and of the authors.

My first study was of proposals for research funding, the most obviously rhetorical kind of writing that scientists do. Most academic research in the United States is funded by the National Institutes of Health (NIH) or the National Science Foundation (NSF), and in each case the decision is based on a written description of the proposed research that is evaluated by a group of peer referees. American scientists spend as much as a third of their time writing these crucial documents, which can take as long as six months to complete. They present a difficult rhetorical problem, for they do not allow for most rhetorical appeals; one must persuade without seeming to persuade. My study suggests that the process of writing a proposal is largely a process of presenting or creating, in a text, one's role in the scientific community.

Many of the changes the writers made as they tried to make their proposals more persuasive altered textual features that define the writer's persona and that place the work in the context of the disciplinary literature. So, for instance, they moderate claims that have been questioned by referees: 'courtship behavior... is dependent on androgens' becomes 'courtship behavior... might depend on androgens.' 'We proposed that...' becomes 'One interpretation would be that...' But they also emphasize the importance of their own previous work: 'mechanisms are revealed' is changed to 'I have been able to reveal...' These subtle shifts in tone cannot be located by lexical or syntactical analysis; they have to be studied in terms of the author's situation in the research community. The authors show their place in the community by citations, altering their reference lists to include rival programs or affiliate themselves with successful programs, trying to insert new work into the existing literature. They also revise their use of terms with specific connotations for one specialty or another; for instance, one writer says he is discussing reproductive *processes,* rather than reproductive *behavior,* because studies of physiology are currently more attractive to the NIH than field studies.

One way of showing how textual features reflect strategies of presentation is by comparing the first submission of a proposal to the same proposal eighteen months and four rejections later, revised in the light of earlier rejections. In one case, the first version is organized around the researcher's activity — theory, model, predictions, while the second is organized around the concept — from the data to rival explanations to preference for one explanation, in a kind of flowchart. In the first, the writer emphasizes his controversial model, while in the second he emphasizes his data, and buries his ambitious goal in a late sentence loaded with cautious verbs. In the first version he discusses *homologies,* a word that for various reasons is controversial in this context; so in the second version he changes all occurences to *matching sequences.* There are a number of other similar changes. And they seem to have been partially successful; though this proposal has not been accepted, the reviews are getting more and more sympathetic to his approach, and he

has recently been awarded a grant from another source. Another change is occuring as well; his research fits more and more into the established research in the field. So we are not just watching rhetorical strategy; we are seeing a textual form that shapes the research itself. Of course I do not use these materials to teach how to fill in an NSF form; few students will have to do that. I do use these versions and others like them with my classes to show the importance of tone and persona in even the most rigid of textual forms.

My second study focuses on the journal articles the same two biologists were writing as they submitted these proposals. These articles, like the proposals, were rewritten and resubmitted a number of times, five times in each case, to various journals, before they were accepted. Why did they take so long? I argue that scientific papers answer questions posed in the literature; these papers answer a question that hasn't been asked, or a question that has already been answered a different way. Of course the authors found the experience of repeated rejection unusual, arbitrary, and frustrating. But I argue there is a point to this complicated procedure of review and revision; we see a process of negotiation of the value the community will assign to the text's knowledge claim. Several sociologists of science have shown how one article can be the basis for a whole range of claims. I present a hierarchy of higher and lower level claims for each article; in each case, the author wants to make higher-level, more significant, claims, while the referees and editors want to limit them to lower-level claims. But the authors cannot just be cautious and stick to uninterpreted data, for that would render their claims unpublishable. Many of the referees' comments focus on this issue, calling an article too speculative or theoretical, at one end, or unsurprising at the other end.

The form of the article also affects the status of the claim; thus when referees comment on the form and style of a manuscript, they may also be commenting on its claim. For there is not a single acceptable form for an article, but a whole range of variables which the authors may alter to suit their claims, and which the editors may negotiate with them. Disagreements over allowable length, for example, can be seen as negotiations of status: the first submitted versions of both articles I studied were longer than the average for such journal articles, and were later cut. Disagreements about structure may also reflect negotiations of status. An earlier research report by one author, which had no difficulty getting accepted, has a short introduction and long methods and results, while the submitted manuscript of the article studied is nearly all introduction and discussion. Referees rejecting the later article said it was too long and badly written, though it is shorter than the earlier article. The author is saying his point is important enough to deserve a long introduction orienting the reader, and a long discussion of its significance. The final, accepted version of this later article had much more conventional structure than the first form in which it was submitted.

The structure of the other article does not cause any trouble. But it does show a marked deviation in tone from what is expected of a review

article. Such an article is supposed to be an impartial survey of the work of the field as a whole. This author offends the referees by his advocacy. And he does this deliberately, as we can see by comparing the submitted manuscript of the article studied to the published version of an earlier, more conventional review of the same journal. In the title, opening sentence, and closing sentence of the manuscript, the author subtly attacks the other researchers in the field. Again, the final, published version of the later article is closer to the earlier, more conventional article in its tone, with all the offensive words here altered.

Both these scientists' articles are now in print. But they are in print form in a form different from what the authors first intended; the theoretical models are played down or suppressed entirely, their challenges to the paradigms of the field are muted, the continuity of their research programs is less apparent. One has to look to their unrefereed publications to see how they actually view their work. (Recently, though, their views have been given more attention, and by one of the very journals that rejected their articles). But this is not a story of the stifling of creative individuals. Rather, it shows how scientific knowledge is created in a process of negotiation that focuses on texts, not on facts.

In my most recent paper I discuss the revision of several popularizing articles (Myers 1985c). Again, the researchers' original articles are significantly altered by editors; in this case, I focus on the changes in the narrative structure and how they alter the public's perception of the work of science. Different forms give different meanings.

Why does work like this matter to teachers? Most of our students will never write a major research grant proposal or an article for *Nature*. There are three areas in which my reading of sociological research has changed my teaching of writing:

1. First, it has given me *material* for discussion of such matters as persona, tone, and audience, matters that enter into all scientific persuasion, but are often hard to illustrate. I find these matters important to more advanced overseas students as well as to native speakers. The material has also been a useful source of comparisons for my classes, particularly in showing how even the most skilled writers rewrite and rethink in a long on-going process. Other discourse analysis research is also useful; for instance, those who have read Widdowson's exercises drawing on non-verbal communication will be interested in the chapter in Gilbert and Mulkay on illustrations.

2. Second, this research helps me see writing and reading in a larger *context* than most text-based studies, and design appropriate materials. While the communicative approach to teaching has attractive principles, many of the exercises reify some very simple rhetorical forms; research on the larger context in which communication takes place restores the sense of process. For instance, Swales has produced an excellent typography of opening

moves. This sociological research allows us to ask why an author chooses one of these patterns instead of another (see Swales; 1981 and 1985).

3. Perhaps most important, it has broadened my view of my *role* as a writing teacher. It has become clear to me, in my work with researchers and their post-graduate students, that native speakers learn the language of their disciplines as part of their apprenticeship in research, not as part of their required classes in technical writing. The same is true, to a lesser degree, of the more advanced non-native speakers. The scientific apprenticeship is a powerful pedagogical relationship; perhaps for the first time in his or her academic career, the student has something new to say to an audience. And the teacher, the researcher, has a strong personal interest in seeing that the student says it well. The dissertation and first articles can be a baptism of fire that shapes the prospective researcher's style, for good or ill, for the rest of his or her career. This baptism can be painful and costly. There is, I think, a role for us here in helping students to begin to publish, as we now help them begin to write lab. reports. It is a role more like that of a consultant, on equal terms, than that of a teacher. But in my experience, it is an exciting role for a teacher.

One implication of this approach is that we have as much to learn from our students as we have to teach them. The most valuable research in this field is the daily experience of teachers with highly sophisticated researchers struggling to understand scientific English. The more we are aware of the complexity of scientific English, the more we escape from simple descriptions of its dimensions, the more we will have to tell other discourse analysts who do not have the benefit of such daily opportunities for research.

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A short bibliography of sociological studies of scientific discourse

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Overwriting and other techniques for success with academic articles

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In the early 1970s a Dr. Myron Fox gave a lecture entitled 'Mathematical Game Theory as Applied to Physician Education' to two groups of eleven psychiatrists, psychologists and social workers and to a third group of thirty-three educators and administrators. The audiences were asked to fill in a questionnaire afterwards. They were almost unanimously favourable in their views of the lecture; remarks made about it included, 'articulate...knowledgeable...and excellent presentation'. In fact Dr. Fox was an actor who had been given this name and a fictitious curriculum vitae. He had been trained to give the lecture, which was based on a genuine paper that had been written with an 'excessive use of double talk, neologisms, non-sequiturs and contradictory statements...interspersed with parenthetical humor and meaningless references to unrelated topics'.

The above experiment was carried out in the School of Medicine, University of Southern California, by Donald Naftulin, John Ware and Frank Donnelly (1973). They were looking at the effect of personality variables on the ratings of lectures and they were forced to conclude that presentation was more important than content. One of the problems for the audience in this study was that they were not experts in mathematics and certainly not in games theory and therefore vague and unfounded abstractions were accepted because they came from an apparently respectable source. In most situations people are reluctant to challenge 'authorities' and ask them to explain matters more simply. In academic circles it seems especially important to be in the know; at conferences and in research seminars it is very easy to sit nodding in recognition of names and references you don't really know. One person in Dr. Fox's audience even claimed to have read the speaker's previous publications. More recently other people have carried out studies to test the 'Dr. Fox Hypothesis' against written material.

J. Scott Armstrong (1980) looked at articles in the field of management studies. He asked twenty members of academic staff in relevant faculties to rate the prestige of ten well-known journals and then he took sample passages applying the Flesch Reading Ease Test to them. The result was

quite clear: the more prestigious the journal, the more difficult it was to read (the correlation of +0.67 was statistically significant at the .05 level of probability). One explanation for this might be that the more prestigious journals dealt with more complex issues and so the style would inevitably be more complex. This was at least partly tested by a further experiment in which four previously published articles were rewritten in either easier or more complex styles. The style was made easier by cutting out unnecessary words, substituting easy for difficult words, breaking up long sentences into two or more and various other changes. The more complex rewrite was produced by doing the reverse. Thirty-two members of academic staff were asked to rate the competence of the research after looking at passages from either the original articles or the rewrites. In all cases the original articles were rated higher than the simpler rewrites, while the more difficult rewrites were rated almost as high. This suggests that the style of articles should not be too simple but that there may be a plateau of complexity above which it would be foolish to clamber. Thus the Dr. Fox Hypothesis appears to be valid in writing also and J. Scott Armstrong concludes that 'researchers who want to impress their colleagues should write less intelligible papers. Journals seeking respectability should publish less intelligible papers. Academic meetings should feature speakers who make little sense. This strategy would be beneficial for advancement by an individual researcher or by a journal. Its major drawback is that it does not promote the advancement of knowledge.' (p.80)

Some people might accept the above research but still feel that this state of affairs does not hold in their own discipline. From my own brief *ad hoc* survey of various subjects like psychology, sociology, linguistics and literary criticism I found that clear and simple writing is produced by only a small minority of authors. Kenneth Hudson in his book *The Jargon of the Professions* (1978) quotes a Dr. Pantin of Cambridge (not I hope another alias for Dr. Fox) as saying, 'I have yet to attend an international conference which did not illustrate how firmly men and women believe, perhaps correctly, that professional advancement is closely knit with long-winded and excessive publication, particularly in the highly specialised fields of learning.' (p.3) Hudson's book as a whole suggests that it is not only academics who use over-elaborate language but the majority of people working in all the professions or would-be professions. He provides examples from Medicine, Law, Politics, the Arts, Literature, Journalism, Advertising, the Armed Forces and Management and anyone who wishes to find relevant examples from these areas should consult Hudson.

Before returning to overwriting I want to look at other factors affecting the success of academic articles. Academic progress is determined by the number of articles someone has published so guides have naturally been written on how to succeed. William Remus (1977, 1980) produces a rather cynical set of rules for the games that academics can play. He starts by recommending a 'market research' approach rather than a 'true science'

approach; this just means know your market and tailor your product to fit it. Find out the prejudices of the editors, use the old boy network (and it usually is just boys), cite the people you expect to act as referees, take material from neighbouring fields, use abstract statements and unstated assumptions, put in statistics wherever possible, preferably without saying what methods you used to arrive at them. If all else fails, get to know some senior academics who can lean on the editors of your target journal.

This is obviously overstated but some detailed research has been done on publication prejudices and the role of referees in the area of psychology. In general if you want to publish an article in a journal you find out the most suitable journal, present the article in the prescribed style and it is then sent out to two or three experts working in the same field. The reviewers may either see the article blind, that is without the author's name and institution on the copy, or more usually with the name and institution present. Reviewers are usually anonymous and reply on forms which allow space for comments either addressed only to the editor or to the author, together with a recommendation to accept, accept with alteration or reject. This mechanism is designed to guarantee the quality of work that is published but occasionally it appears to break down, as found in the work cited below.

Michael Mahoney (1977) studied 'confirmatory bias' in the publication of articles in cognitive psychology. This form of bias is an acknowledged type of erroneous thinking, where we seek out, attend to, and sometimes embellish experiences that confirm our beliefs while ignoring those that undermine them. This is often found amongst depressed patients, paranoids and now unfortunately amongst journal reviewers. Mahoney presented reviewers with various versions of an incomplete article, in some the results were positive and in others they were negative. The results showed that work which proved what it set out to prove was much more acceptable than work that came to negative conclusions. Further there was very little disagreement between the reviewers. This confirmatory bias in reviewing is particularly disturbing given Karl Popper's (and others') injunction that the best way for science to proceed is by falsifying hypotheses rather than by confirming them.

Douglas Peters and Steven Ceci (1982) took twelve already published articles by authors from prestigious institutions and resubmitted them to the original journals with new names and fictitious institutional affiliations. The period of time from the original publication and resubmission was between eighteen to thirty-two months but of the thirty-eight editors and reviewers who looked at the papers only three people recognized the resubmissions. This left nine articles to be reassessed and eight of them were rejected. The grounds given for rejection were often described as 'serious methodological flaws'. This is disturbing on the grounds that the same article could be given such different evaluations within such a short period of time by similarly qualified or even the same actual reviewers. One interpretation of this study is that the name of the author

and the institution that they work for is more important than the content of the article itself.

So far we have been looking at the writing and publishing of academic articles in general but now I want to focus more specifically on scientific work. The common view of science is that of some finished product; it is the present day sum of articulated knowledge, independent of any actual scientists. To outsiders at least, it is seen as relatively objective, coherent and true, because that is what it means for knowledge to be scientific. This view rests largely on the assumption that there is a simple relationship between established facts and external reality or nature. Further, the language used in science is seen as merely the clothing over assumed naked, natural truth. This linguistic clothing might be more or less elegant or downright utilitarian but it does not fundamentally distort the body of scientific facts. At its very crudest, this view suggests a one to one relationship between a thing and a concept and between a concept and a word. With a view like this a language teacher could assume that a scientist would know about things and concepts and all that needed to be taught would be the correct words.

A more realistic view of science can be found by looking at the people and processes involved in its production. The making of science is a highly social process (see also the paper by Greg Myers). Most scientific work is carried out under the patronage of different schools; these schools of thought may be based in a single institution or they may cut across colleges, universities, industrial research departments and even countries and continents. The schools are in competition not just over ideas and theories but, more importantly, they compete for funding. Most of the funding in this country comes from either the government or from industry and the various schools have to sell their projects to these funding bodies. The outside funding of science makes it vulnerable to interference; I will not suggest that this leads to deliberate distortion but it does mean that certain problems are focused on while others are ignored. The schools control access to the profession, promotion within it and the detail of funding for individual research. This means that there is often fierce competition within a school between the individual members. The competition within a school will make many members opt for safe problem-solving work rather than risk anything that will go counter to received views. Because of the patronage system most people will not do any work that brings them into conflict with the professor, the leader or the godfather of the school unless they have already obtained the patronage of another godfather who will protect them from academic attack.

Within any school of science there is a particular way of looking at that part of the world they are concerned with. In his book *The Structure of Scientific Revolutions,* Thomas Kuhn (1962) examined the history of scientific development. In this context he introduced the term 'paradigm' and it has been used widely in discussion of science ever since. A paradigm is a partial view of the world and it includes general theoretical perspectives,

models or metaphors for thinking about certain phenomena (eg. colour and charm in particle physics, waves in the study of light and sound, double helices or spirals in biology), also a commitment to specific methods and instruments (eg. particle accelerators, electron microscopes or computer modelling), and finally a range of common experiences. The acceptance of a paradigm has less to do with truth and logic than with its persuasiveness and the relative strength of its followers within the scientific community. Normal scientific work is centred around detailed problem solving based on the generally accepted paradigm and reports of the work are mainly addressed to other practitioners through specialist journals and conference papers. After a time problems may be found within the paradigm that cannot be resolved so a group of dissatisfied practitioners begin searching for a new paradigm which will make sense of their work. Kuhn calls this the revolutionary stage of science, when appeal is made outside the school or discipline, and writing is now done for a wider audience. The revolutionary stage continues until a new paradigm is accepted by a sufficient number of practitioners.

Anyone wanting to become a scientist goes through a long period of training or apprenticeship. At school sciences are taught from textbooks that present the correct constellation of accepted theories and methods. From the start long periods of time are spent in laboratories where standard experiments are carried out. If there is not enough equipment for particular experiments, demonstrations are given. Standard ways of writing up experiments are taught with an introduction, hypothesis, method and equipment, results and discussion. At college and university level the demands are even greater; science students spend much more time in laboratories and lectures than do arts and social science students. This often means that science students develop into fairly coherent social groups with common values. (Of course it is not just science students who can be recognized as having a common culture; in most places you can easily recognize students taking engineering, medicine, law, drama and so on.)

Once they begin research, science students are apparently allowed more control over their own work. Often research allows them to develop their own slight shift in method, use of instruments and sometimes even theory but all this work takes place under the guidance of a supervisor. The supervisor will also give guidance about how to write up the research and where to try to place articles. Sometimes senior researchers allow students to be named in joint articles and thus slowly acquire a reputation. Most students are content to work within the framework set by the paradigm and encouraged by the supervisor. If anyone wants to step out of line they will usually have to work twice as hard to have their work accepted. Future careers depend on the production of articles and even more so on being taken under the wing of a well-known academic patron, preferably one of the godfathers I mentioned above.

I feel that this description of the social context of scientific work will help to account for the results of the studies on writing journal articles

mentioned above. Competition between institutions could account for the acceptance or rejection of articles based on the name of the author and institutional affiliation. Being known as a member of a school under the patronage of a particular professor would also be useful. The acceptance of confirmatory research rather than work that falsifies a hypothesis can be explained by reference to the concept of the paradigm. Work within a particular paradigm frame is more acceptable than work that challenges it; cautiousness rather than bold conjecture is more typical of scientific work, especially amongst newcomers to a discipline.

However, the over-elaborate style of much journal writing is not so easy to account for. It we take Halliday's (1973) distinction between the ideational, interpersonal and textual functions of language we might be able to explain something. Although we assume that the complexity of a text is related to the complexity of the subject matter, that is to do with the ideational function, we may find that the over-elaborate style is really to do with the interpersonal function. Perhaps journal writing is as much a matter of personal display, using the accepted show forms of in-group style, as it is a matter of communicating the content of some work. H.M. Collins (1982) argues that in many instances experiments could not be replicated on the basis of research articles and that often research articles hide as much as they reveal. Some articles are merely 'priority claims' and are not intended as full descriptions of the techniques, equipment and theories used. This again goes against what many of us believe about empirical science because we assume that experiments should be fully described so that they can be replicated by others to either falsify or confirm the results.

Articulated scientific knowledge is embedded in tacit assumptions based on shared experience. Collins (1982) argues that informal communication and actual hands-on experience is more important for scientific understanding than written reports of experiments. When journal articles are written they are normally addressed to colleagues and the tacit background knowledge is not articulated. For an outsider without the range of inside experience it is almost impossible to fully follow specialist articles and even more popular articles can make use of unstated assumptions. It sometimes seems as if authors of journal articles want to preserve the knowledge for the chosen few who have been through the ritual initiation, and as if the language used is a celebration of that eliteness. I do not believe that this is necessarily deliberate but is just a habit picked up in becoming a member of the group.

Not all students will write academic journal articles so what can be deduced from the above discussion about writing at a lower level? The main suggestion is that any teaching of writing will have to take more account of the social and physical context of scientific work. In any scientific writing it is not enough just to know the surface features of the style which have been quite widely reported, eg. the heavy use of the passive, the present simple, non-finite verbs, long nominal groups, especially nominal compounds and various kinds of specialist vocabulary.

These features can be taught separately but they are normally much easier to learn in relation to some actual experience in a laboratory or in discussions about scientific work. The language used is embedded in certain ways of thinking about the world which are in turn embedded within sets of physical activities. Language teaching that does not draw together these different levels of scientific work can lead to problems.

In some work I carried out in Tanzania (1975) on the written styles of university students I found that the weakest students had often picked up the worst features of an over-elaborate style. Their reading of textbooks and journals had given them examples of overly complex writing and they had tried to imitate it. Unfortunately they had problems with the textual function: they could not make the pre-learnt chunks hang together in a coherent form. The reason, I discovered, was that the student's language was often not based on enough experience in the laboratory, nor in discussions. In primary and secondary schools, classes were crowded and there was little equipment. In that situation rote learning of texts was almost the only way of passing examinations. When it came to work at the university level they found that this technique could not get them through. They had to gain more experience not of disembodied language in texts but as used in actual interactive situations. This took some time and the language teachers often felt frustrated because the scientific staff were reluctant to work with them.

For any progress with the non-native user of English for Special Purposes, especially in the field of writing scientific reports, language teachers and subject specialists must collaborate. The language teacher should attempt to make the specialist articulate the implicit rules that are used in their area of expertise. However, this is very difficult in many cases because the rules have been learnt through non-verbal practices and are not consciously known. The language teacher might be able to make these more explicit if they observed some of the experiments and took part in the discussions themselves. If students are to learn the scientific styles they must be helped by those who have some understanding of the full context in which they are used. If non-native learners use these styles for the display of status and to hide rather than to reveal knowledge, they will only have learnt what many of their native user colleagues are already doing.

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Appendix

Why is urban unemployment and underemployment so great in most of Less Developed Countries

Introduction

The data available in table 1, show that the rate of urban unemployment which has been defined as 'those people who are able & often eager to work but for whom no suitable jobs are available,'(1) is very high in less Developed Countries (LDCs). Most of the countries have rates in excess of 10% and some in excess of 15% from total active population in that country. (2) In great contrast to the situation in Developed Countries (DCs) the great majority of LDCs facing the urban unemployment was at least twice as the rate of rural unemployment.(3) Note that the data available only focuses on the rate of unemployment, and if we include 'those labour force who are working as parttime or underutilised, and those who are working fulltime but productive is so low that a reduction in hours would have a negligible impact on total output';(4) then it is generally believed the problem is more serious than indicated by the data, where the rate of unemployment and underemployment would exceed 30% in many LDCs(5). Even though the statistics shown are from the 1960s, but with the high growth rate in population compared to slow growth rate of development in LDCs, they are likely to show that urban unemployment and underemployment rate continues to be below considerably level and it will be more serious in coming years. It is estimated that in 1980 world population is 4.5 bilion, and 6.1 billion in the year 2000 which two third of them lived in LDCs.(6)

The basic reason for this very high rate of unemployment and underemployment is the slow growth of labour demand in relation with rapid growth of labour supply in LDCs' urban areas

Western model of industrialisation

In the year 1950 the world population was estimated at 2.5 billion and 70% of them lived in LDCs(7). In LDCs majority of the population lived in rural areas, and for obvious reasons they work in agriculture sector to meet their basic needs and they do really spend most of their working hours to obtain food. But the population keep increasing and with very high rate which is around 2.1% per year compared to 0.7% in DC.(8) The place thus becomes densely populated. Since the size of land and capital remain the same, with an addition of members in the family the land become smaller and smaller, especially when it is divided among themselves into tiny plots which often result with zero marginal productivity of labour. But people keep on working on that small piece of land because

there is no other alternative job in the area. It is worst when more and more people become landless which had created mass unemployment.

In general, the productivity and standard of living in most LDCs are very much lower, and this is not only in relation to the DC but evidence shown also to small elite group in their countries which normally include those who are in power. Even though two third of the population lived in LDCs but they only consume 20% of world income. In 1980, Gross National Product of the world was US $ 7900 billion and only less than US $ 1400 billion came from LDCs while the rest was originated from DCs.(9)

In trying to solve the problem of poverty inequality of wealth and mass unemployment and underemployment; Western economists and government officials in the countries which gain independence after World War II were convinced with and adopted the 'Western Model of Industrialisation; This policy was supposed to be a natural process in which surplus of labour was gradually withdrawn from the rural sector and improved the social and economic condition of LDCs. The process was deemed socially beneficial since human resources were being shifted from location where their social marginal products were often assumed to be zero to places where they were not only positive, but also growing as the result of capital accumulation and technological progress.

However by 1970s, it is obvious that this sole strategy is not bringing the

Table 1: Rates of Urban and Rural Unemployment on Selected LDCs

Country	Year	Town	Urban Unemployment	Rural Unemployment
Africa				
Algeria	1966	Urban areas	26.6	
Ghana	1970	2 large cities	9.0[+]	
Kenya	1968-69	2nd largest city	14.0[+]	
Morocco	1960	Urban areas	20.5	5.4
Nigeria	1963	" "	12.6	
UR. Tanzania	1965	" "	7.0	3.9
UR. Camaroon	1964	Capital city	17.0[+]	
Latin America				
Bolivia	1966	Urban areas	13.2	
Chile	1968	" "	6.1	2.0
Jamaica	1960	Capital city	19.0	12.4
Panama	1967	Urban areas	9.3	2.8
Uraguay		" "	10.9	4.3
Venezuela	1968	" "	6.5	3.1
Asia				
India	1961-62	Urban areas	3.2	1.7
Indonesia	1961	" "	9.5	—
Malaysia (W)	1967	" "	11.6	7.4
Philipinnes	1967	" "	13.1	6.9
Sri Lanka	1959-60	" "	14.3	10.0

Source: Todaro, Michael P., Economic Development in the Third World, 2nd Edition, 1971-1981 P230 (P. Bairoch, Urban Unemployment in LDC P49, J. Gugler, Internal Migration: The New and The Third World, ed. A. Richmond and D. Kubart (California: Saga Publication 1976) P185).
Note [+] Men only

anticipated miracle to the imbalance between labour demand and geographical distribution of labour supply. The applicability of the basic model of the economically induced urbanisation to the LDC is highly problematic. It was, like McGee said, 'A wide divergence between Western theory and Third World Reality.'(10) The industrial sector can not absorb all or more labour supply in urban area and it only employ 10-20% of the total labour force in most LDCs. For example, in Brazil in 1970 whilst 40% of the population live in urban areas, only 18% of the people were engaged in industrialisation.(11)

Urbanisation

An invetable part of industrialisation is urbanisation. There is very rapid growth of large cities in LDCs and places of 100,000 or more population and capital cities grew in a 1960−70 decade at rates of 5% per year; and over 7% per year in many African cities including Nairobi, Accra and Lagos. In 1950, around 38% of LDCs population lived in urban area, 50% in 1975 and will be more than 2½ times more than rural population in year 2000, unlike DCs which only less than 50% in their cities (for year 2000)(12). In LDCs, which raised by many researchers, is that the urban growth or urbanisation are not primarily caused by economic opportunities only but rather by the push factors of rural poverty and overcrowded. In contradict with DCs, it may be occurring independently of the course of economic development.

   With the increase of population is, no more consider as contributor to economic growth in LDCs urban sector, some time it drag on the process of economic development. Migrant especially rural to urban do not contribute significantly to economic production but do demand tremendous outlay of public service. Scarce governmental funds when.used to provide these increased services were lost to potential productive investment elsewhere in the economy which could provide more jobs in the long run.

   Since 1950, the experience of LDCs suggested that the rate of employment in industrial was lower compared to the rate of the industrial sector itself. Statistic from World Bank 1960−1980 for LDCs showed that there was 5% increase in value added for industrial sector and 4% increase of employment. The labour force at that time grew at 1.9% per annum. Since 15% of labor force were in rural sector that is 0.6% of labour force so industrial development only can take ⅓ of the growth in labour force(13). Comparing urban growth in LDCs today with that in the West during 19th Century, a World Bank Report stated that 'the basic difference lies in the relatively weak link between urbanisation and economic development'

Natural Growth and Migration

The rate of population growth is very high in LDCs which is around 2.1% per year, compared to 0.7% per year in DCs. In table 2, we can see that most of LDCs having rate population than DCs.

   Birthrate (fertility) in LDCs are generally much higher than DCs. Even though death rate also higher in LDCs, but it is smaller than birth rate and as the result the average rate of population growth in LDCs now is about 2.1% per year while DC only 0.7%.

   But, with the 5% annual rate of population growth in LDCs' cities which about twice the growth rate of total population it indicates that the population growth in urban is not only because of natural increase by people in the cities, but also by migration which is estimated around 49% to 75% of total population in the

Table 2

Country	Total Population (m) 1979)	Rate of Natural increase (1979)
China	950	1.2
India	660.9	1.9
USSR	264	0.8
USA	220	0.6
Indonesia	140.9	2.0
Japan	115.9	0.9
Brazil	118.7	2.8
Bangladesh	87.1	2.9
Pakistan	79.1	3.0
Nigeria	74.6	3.2
UK	55.8	0.0
Italy	56.9	0.4
Mexico	67.7	3.4
France	53.4	0.4

The fifteen largest countries and their annual population increase, 1979 source: Population Reference Bureau, 1979. World Population Data Sheet (Washington DC 1979)

cities(14). Many studies shown the majority of migrant continue to be men and women in their twenties, the age group most active to form a family, which also pushes up growth in natural increase and supply of labour.

Inspite of the relatively slow growth of urban jobs, migrants are continuously on the march into mushrooming cities, because many studies confirmed that they are actually better off economically in the city than in the rural area(15).

Policy which is adopted by many LDCs, have left the rural area without development. With a very small investment it is not attractive enough to make or to invite people stay in rural area. There is no proper and improvement of irrigation, transportation, technical knowhow and assistance which could help to raise the living level of rural people; and worst thing is that many LDCs especially African countries have has policies to lower the price of foods to support urban areas and other cash products to capture international market. This policies are very obviously not helping to increase the income of rural people and thus has reduced their incentive, and do pressurise them to migrate. In contrast to DCs, this distorted price of agriculture led production. In 1934–38, industrial countries only produced on average 1.15 tons of grain per hectare, and 1.14 tons in LDC. But buy 1975, grain yield in DC were 3 tons verses 1.4 tons per hectare in LDCs(16).

Besides low productivity, people in absolute term is still increasing in rural area. In 1970s, rate of population in rural area is reduce to 1.6% compared to 4.3% per year in urban area, but in actual term total population in rural is increase by 1.45 million to 1.9 million (17). Rural poverty and overcrowding in LDCs is still a major factor of rural-urban migration and to certain extent some people argued that immigration is not primarily caused by the pull forces of economic opportunities but rather by the push factors of rural conditions.(18)

However we can not ignore the pull forces of the cities. The opportunity of job with expected income which is not only in industrial sector but also in construction, public sector and services really form the attraction of migration. The

expansion of urbanisation do attract investors to invest their money, and people migrate in supporting the development, for example, taking part in informal sectors of hawkers, maids, vendors, cabmen and other assorted workers. Even those who are without job would rather stay with their relative or friends while looking for a job, than to come back to their hometown.

Besides the 'push' and the 'pull' factors there are other factors which influence the decision to migrate:
(a) rural violence
(b) natural disaster such as flood, drought etc.
(c) desire to break away from traditional role requirement
(d) political reasons or policy of the government.

Migration also happen in between countries, and during 1957−70 period there was substantial movement of labour from Malaysia to Singapore (19). Even though their pay were much lower than their Singaporean counterparts, they were still satisfied because it offered them higher pay than their country could offer. For political reasons countries like Malaysia, Thailand, Philipines and Indonesia are obliged to take certain number of refugees from Vietnam and normally they prefer to stay in urban area.

For what any reason of migration in every mind of migrants they want to get a job and settle down in cities. Many studies shows that it is not only drag on the process of economic development in urban areas but also in rural areas.

Inappropriate technology
People who are working in industries have been offered an income interm of wage or salaries, and eventhough the income is lower comparatively it is still better than living in the rural area. Anyway as the development goes on, so has the trade union. In several LDCs union pressure plays an important role to increase wages of the workers. For instance tin, oil, copper, and bauxite has been instrumental for other sector to set an acceptable level of income. The income level in industrial sector also has been increased because of government policies. During colonisation, government servant was offered a better wages compare to other sectors and most LDCs continue using this scheme, and besides that the wage is increase alway higher rate. This scheme is always used as a reference to most industrial sector and determine their level of income. In Kenya for example, the wage for public sector increase at the rate of 16% annually in the year 1954−64, and by almost 10% increase per annum in all department. Even though the labour force grew at 3% per annum during the same period, but total employment did not grow at all. In many LDCs, government also insist on using wages as substitute for social legislation by requiring pension, insurance, family allowance, licensing and other fringe benefit which normally increase the basic income to 30−40% more.

But evidence shows that the productivity of labour was not increased as the wage rate increase. In many African and Latin American countries real product percapita is only increasing at 1 to 1½% per annum compared to 4 to 5% per annum increase on real wages.(20)

As a consequence of high wage rate and very low or zero rate of productivity has led the company to use more capital-intensive production method which is more efficient than labour and, power is more readily available. This also can be done by improving personnel and production management practices which which reduce labour requirement per unit output and looking for machinery which can save labour.

Government policies in many LDCs such as allowing duty free importation of equipment, a preferential exchange for servicing and making loan from overseas suppliers do also encourage more industrial sector to use labour saving machinery. Besides that many LDCs encourage direct foreign investment and impliment the policy of industrialisation via import substitution. Those two policies have dominated the expansion of the Industrial urban sectors. But normally it is accompanied by inflation and because the circulation of money and the economy is not properly controlled in many LDCs, the real rate of interest is always below the nominal rate and sometimes even to a negative real rate. This condition often leads to currency of LDCs being overvalued interm of foreign currency and the true cost of machinery is also been distorted which affectively push the price of capital below its real opportunity cost.

The combination of overpriced labour and underpriced capital is always a factor of using capital intensive method and reduce the employment opportunity.

Many cases in LDCs, capital intensive method has also to be used to fulfil the condition of National Aid Agencies which insist on tying their aid or loans to the importation of their own nations capital intensive equipment. The worst thing is that sometimes the imported machinary is not applicable and not fully utilized especially in government project, and many occasions the project become abandon, which is due to lack of skill manpower, different weather etc: but yet the debt-service has to be paid.(21)

Education policy
Since migration involves young and educated people, the rural area are deprived of the leadership potential of their educated youth as well as their investment on education. The older and less educated people who are left in the area are proven not responsive to new approaches and not willing to change their way in attempt of the authority to improve their conditions. Development without proper system of education is partly to blame. According to Tinbergen 'the most essential task of quantitative educational and manpower planning is to have the various kinds of qualified labour available at the right time and in the right number'.(22) With a new academic institution and vocational training, most LDCs could only provide fresh graduate without experience which are normally not wanted by leading industries. While very few with expertise and experience more likely to migratie to other DCs such as Canada and Australia.

Even when there are many jobs opportunities, they can not be filled by people of the countries. In the case of Malaysia many giant project like construction of housing and office building, highway, 7 miles bridge from Penang Island to mainland and sewerage had been awarded to foreign companies such as South Koreans and Japanese firm. These companies normally bring along their own expertise, workers and even their equipment (23).

Scarce of capital
Capital is very important for development, but general characteristics of LDCs do not allow having 'enoug' saving for investment. The aid or loan always in favour of DCs' interest, (24) while their elite group in the economy do not put their extra money on saving and investment. They prefer to spend on luxurious and imported goods, and on the part of foreign firm they are more likely to make quick profit and repatriating their fund to external account. It has always been due to scarce of capital which leads to very limited development.

Conclusion

From the above discussion, the situation of LDCs is rather like vicious circle of poverty and in attempt to break the circle many LDCs try to create employment to provide as many job opportunities as they can and redistribute the population of the country. Seventy six countries which covered more than ½ of LDCs had adopted the policies for the control of urban migration in 1960s and early 1970s. They aimed to divert internal migration from large to small urban centres, and few try to develop the two urban and rural sectors.(25) But a 1983 United Nation survey on 126 government of LDCs found that only three countries were government of small island nation ie Barbados, Malta and Nauru. As a remedy more than 75% of these countries are pursuing their policies to slow down the rural urban migration.

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Academic Writing:
Process and Product

This set of papers from the 1985 Selmous Conference presents a wide-ranging look at contemporary approaches to the teaching of writing. The chief focus is on non-native-speaker students in tertiary level education but ideas and research are presented from both mother-tongue language education and from the subject specialists. In line with current thinking, the contributors are concerned with the whole process of writing: the intellectual, social and psychological activities that must precede the final product. Together these papers offer a fruitful set of suggestions, records of practical experience and research insights for teachers of EAP and of ELT in general.