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A genre-instantiation approach to teaching English for Specific Academic Purposes: Student writing in Business, Economics and Engineering

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Abstract

This paper introduces five linked resources and demonstrates, with a focus on Business, Economics and Engineering, their use in a novel genre-instantiation approach to teaching academic writing.

The resources centre on the British Academic Written English (BAWE) corpus. They are 1) published research literature that investigates the student assignment genres and registers; 2) descriptions of the contents of the corpus; 3) the BAWE corpus itself, which can be freely searched by teachers and learners; 4) online teaching materials based on the above; and 5) lesson plans from EAP teachers who use these materials in their teaching of pre-sessional and in-sessional academic English.

The genre instantiation approach to teaching academic writing builds on two central principles: the identification of key genres for the target discipline-levels, and the exemplification of these through instances of successful student writing. This enables teachers to develop programmes that raise genre awareness, where learners can engage with instances from across specific topics, courses, levels and disciplines. The genre-instantiation approach is illustrated here with specific reference to Business Case Studies, Economics Essays and Engineering Methodology Recounts. [178/200]

Biostatement

Dr Sheena Gardner is Professor of Applied Linguistics at Coventry University, UK. She has taught EAP in Scotland and Sudan, worked in North American writing programmes and British MA in ELT/TEAL/TEAP/TESP programmes and has recently developed a new MA in TEAP at Coventry. Her research on the BAWE corpus of assessed student writing in British universities has a systemic functional linguistic focus, with recent publications on language, registers and genres in academic English. With Hilary Nesi and Andy Gillett, she was in the project team that developed the British Council Learn English Writing for a Purpose website materials. [98]

Introduction

One of the perennial issues in English for Academic Purposes (EAP) writing pedagogy concerns the extent to which teachers should address general or discipline-specific writing (see Flowerdew, this issue). Ferris (2001:300) points to the irony that despite a significant number of research publications that clearly demonstrate discipline specificity in texts, the majority of ESL classes in American institutional settings followed the more generalised approach. The same is true today of many courses in the UK.

As Alexander, Argent and Spencer suggest, teachers on short intensive pre-sessional courses generally do not have time to investigate new disciplinary contexts (2008:19), and as a result attention has turned to approaches that enable students to explore the language of their own disciplines. Flowerdew (1993) for instance argues for an education (rather than training) approach that involved teaching strategies for learning about genres rather than expecting teachers to teach all the genres a student might need. In a similar vein, Johns (1997) proposes that students should be trained to conduct ethnographic investigations of their writing contexts and purposes. A decade later, Alexander, Argent and Spencer echo this ethnographic orientation, when in relation to the general or specific EAP issue, they state that 'EAP is principally an endeavour in which students acquire the generic tools to research the language and culture of their academic discourse communities for themselves' (2008:26). This suggests the onus heavily on the students, however, and a compromise is developed in Johns' 2008 paper where she argues that students should both learn how to write texts that are likely to be found in their disciplines, and learn how to explore new types of texts they meet.

The turn of the century also saw the push towards understanding variation follow two very different paths. A growth in ethnographic research greatly enhanced our understanding of the complexity, and variation, in individual students and their contexts of production (e.g. Lea and Street 1998, Lillis 2008, Prior 1998, Starfield 2004). On the other hand, with increasing access to large quantities of electronic data, there was an increase in corpus research on academic writing which has greatly enhanced our understanding of variation across genres and disciplines (e.g. Biber 2006, Hyland 2000, Nesi and Gardner 2012).

So now in the mid 2010s we should be in a position to be able to teach texts similar to those students are likely to encounter, and to enable students to develop as writers with growing appreciation of the nature of the genres and practices in their very specific disciplines. We do need to train and educate teachers to be able to teach to both the general and the specifics of EAP, and the recent surge of professional standards, accreditation frameworks and courses as documented on the BALEAP[1] website is evidence of this demand. Pre-sessional English courses across the UK regularly recruit thousands of students; the recent BALEAP conference for teachers reached capacity early with more than 300 participants, while half a dozen UK universities have in the last few years introduced new courses in Teaching EAP (TEAP). Universities in Hong Kong have seen a similar spate of recent activity, e.g. Mahboob, Dreyfus, Humphrey and Martin (2010), Hyland (2014).

Yet arguments for 'EGAP', for teaching English for General rather than Specific Academic Purposes, persist. For instance, de Chazal reviewing the literature and drawing on his own experience as an EAP teacher argues that 'for a number of pedagogical and practical reasons an EGAP rather than an ESAP approach is the most appropriate approach in most EAP contexts' (de Chazal 2013:135). He argues for

teaching general academic features such as nominalisation and hedging, and for expecting students to investigate the language of their own disciplines.

De Chazal argues strongly and methodically against Hyland's (2011) justifications of discipline-specificity, but in the end concedes that context is key: A more general EAP approach may suit intensive pre-sessional courses, while more discipline-specific courses can be developed for in-sessional teaching. Ironically, an example of this is found at the Centre for Applied English Studies directed by Hyland at the University of Hong Kong (Hyland 2014: 22-23). All first year students there follow a Core University English course in their first year (3000 students in 2012) where they learn such things as 'to structure writing as a coherent argument, to show how they can present a stance through hedging and various kinds of evidence, [and] to develop critical reading skills by identifying how an author's views are expressed' (2014:23). This is followed by an English in the Disciplines course in a subsequent year. This core foundation class followed by writing in the disciplines requirements in subsequent years is a familiar model for North American writing programmes, that appears to be working well for EAP. A similar approach on a much smaller scale is found in many UK universities (e.g. Heaton, Preshous and Smith 2015).

In this paper[2] I aim to describe how resources from two funded projects can be used to support teaching of the more general types of writing students are likely to encounter, while also engaging with more specific writing for the disciplines.

The first project (ESRC RES-000-23-0800 An investigation of genres of assessed writing in British Higher Education) aimed to identify and describe genres that are used across the university. It included the development of the British Academic Written English (BAWE[3]) corpus of successful student writing, which contains assignments from across 34 disciplines and four levels of study, and the identification of 13 genre families (Gardner and Nesi 2013). The genre-instantiation approach to teaching academic writing introduced in this paper involves identifying the genres students are most likely to encounter, and teaching at least two of these. This develops genre awareness through comparison and also provides a common core that can be differentiated with reference to the corpus. Further examples should be sought by students and teachers from the actual target courses to ensure contextual relevance. This approach offers three key benefits to teaching EAP:

1. The BAWE corpus gives teachers and students access to the previously occluded genres of assessed student writing. As we have argued (Nesi and Gardner 2006), these texts provide examples for students that are more readable than research journal articles, and more authentic as target texts than those from online news, published essays or scientific magazines.
2. The classification of assignments into 13 genre families provides a focus for developing a 'common core' of academic writing where each family has key purposes explained through their national, institutional and course-based contexts of assessment; through the courses and modules[4] for which they were written; and through the backgrounds of the student writers. One of the aims of this classification was to identify genres that are shared across disciplines. These genre families reflect the broader aims of student writing, its educational purposes in the academy, and can thus inform the teaching of a common core.
3. The instances of these genre families are many, varied, good quality and occur across over thirty disciplines. This means that teachers and students can drawn examples from relevant disciplines, or can explore the examples from the 6.5

million words in the searchable corpus alongside those from a more local context.

This specific combination of a genre classification, where each genre family is explained in terms of how the educational purposes are met in context; the assignment texts that provide accessible and appropriate examples; and a corpus that can be searched for patterns in the language that realise these genres in different disciplines lends itself to a genre-instantiation approach to teaching academic writing that provides a fresh solution to the general vs specific EAP question.

The second project (ESRC ES/J010995/1 Writing for a purpose: materials to improve the quality of discipline-specific student work) involved the development of materials - based on the results of the first project - that could be used independently or following guidance from a teacher in class. These materials are available on the British Council Learn English website under the tab 'Writing for a Purpose' (https://learnenglish.britishcouncil.org/en/writing-purpose/writing-purpose). They can be approached from the perspective of genre or discipline. They are teaching materials containing information about the genres. and writing in the disciplines. introduced through interviews, presentations, sample texts and many interactive exercises to check comprehension and extend understanding. They thus aim to develop familiarity with the questions and concepts involved in exploring and producing writing for the disciplines.

The complementarity of these two projects and associated resources will be demonstrated here with a focus on writing in Business, Economics and Engineering. These disciplines are an apposite choice for a number of reasons: They are well represented in the BAWE corpus; the writing is widely distributed across the four levels of study and thirteen genre families in the BAWE corpus; and, as these are popular areas of study for international students, they also include a sizable minority of assignments written by speakers of a variety of Chinese, and other languages.

Five linked resources stem from the two projects:

1. The published literature. Gardner and Nesi 2013 presents an account of the genre family classification; Nesi and Gardner 2012 describes the language of each of the 13 genre families, and explains how they are shaped by their social and educational contexts. www.coventry.ac.uk/BAWE/research provides a list of publications, many of which explain the writing in specific genres in more detail: essays (Bruce, 2010); reports (Gardner 2012a), case studies (Gardner 2012b), reflective writing (Nesi 2008).
2. Information about the BAWE corpus and its contents. The development of the corpus is described in publications such as Alsop and Nesi 2009, Nesi 2011, and details about the contents of the corpus are available at www.coventry.ac.uk/BAWE. Durrant's work on disciplinary lexis in the corpus may be particularly valuable for EAP. There are word lists for disciplines by level, and his examination of overlaps in lexis (2014) provides a unique perspective on discipline proximity.
3. The BAWE (British Academic Written English) Corpus of proficient academic writing includes almost 3000 student assignments from 13 genre families over 30 disciplines and four levels of study. The assignment texts were written as part of regular first, second and third year undergraduate and postgraduate degree coursework and assessed as excellent or very good for degree credit in the disciplines. The Corpus can be analysed using programmes such as WordSmith Tools or online search engines such as

AntConc. One easy way for students and teachers is via SketchEngine, where the BAWE corpus can be searched as an 'open' corpus, or where more detailed analyses can be conducted through purchasing the full programme. A guide to using SketchEngine with BAWE (Nesi and Thompson 2011) is available to download from the Coventry BAWE website. Researchers can request a copy of the corpus from the Oxford Text Archive at (http://ota.ahds.ac.uk/headers/2539.xml).

4. Online Teaching Materials to help EAP learners develop their 'Writing for a Purpose' are available on the British Council Learn English website at http://learnenglish.britishcouncil.org/en/writing-purpose. These interactive teaching materials can be used by individual students, or by teachers in class.
5. Sample lessons developed by EAP teachers using the BAWE corpus and the Writing for a Purpose materials are given below. There are plans to publish these on the Coventry BAWE or British Council Teach English website.

There is statistical and anecdotal evidence from around the world that all five resources are influencing current practice, and future research could very usefully explore how EAP teachers engage with these different resources.

These five resources will now be discussed with reference to Business, Economics and Engineering.

1. Published Research on Business, Economics and Engineering

Research on the BAWE corpus of student writing aims to explain how student writing is shaped by its social context, and to describe the linguistic features that evidence these contextual purposes in genres and registers.

Early studies (Nesi and Gardner 2006, Gardner 2008) demonstrate that writing in Engineering is relatively demanding in terms of genre variation. While most writing in History or Economics conforms to an Essay genre, Engineers are expected to produce assignments from across all thirteen genre families, from Essays and Critiques to Exercises and Explanations; from Methodology Recounts and Research Reports to Proposals and Design Specifications. This reflects the multidisiciplinary nature of Engineering, that draws on disciplines from mathematics to management, and research on the vocabulary of Engineering (Durrant 2014) suggests that the vocabulary of fourth year Engineering is more similar to that of Business that that of third year Engineering, reflecting an increased attention to the management of engineering projects in the Masters year[4].

An examination of reports of empirical research in student writing (Gardner 2012a) shows how the 'Introduction- Methodology- Results- Discussion' macrostructure in student writing is used in two different types of assignment: One typical of first and second year study where the emphasis is on reporting the methods and results (e.g. a lab report), and another where the focus is on engaging with the literature and developing an original piece of work often as part of team (e.g. a final year project).

Similar differences are found in Business (Gardner 2012b), where first and second year assignments are written as Critiques or evaluations of a business rather than as Case Studies which have the main intention of making recommendations for future practice. As with the distinctions within Engineering reports, these distinctions echo findings from other countries. For example, in the USA, Zhu (2004) describes

'case analysis tasks' where academic frameworks are used to analyse businesses, and which are differentiated from 'business reports' whose intent according to Yeung is 'to persuade the reader to act' (2007:165). As such they are often addressed to a professional audience and structured as professional reports. In both Business and Engineering, we see a development over the years of study from pedagogical tasks designed to familiarise students with the key concepts and methods of the discipline to more professionally oriented tasks designed to prepare students for future employment.

Other studies examine the language of specific disciplines. For example, Gardezi and Nesi (2009) examines conjunctive ties in Economics; Moreton and Nesi (2012) explore the use of shell / signalling nouns; and Lisicka (2013) investigates phrasal verbs in Business and Engineering.

Genres across the Disciplines (Nesi and Gardner 2012) provides the most comprehensive introduction to the genre families, with examples from Business, Economics and Engineering throughout.

2. Business, Economics and Engineering in the BAWE Corpus

In order to use any corpus, or materials developed from it, it is important to understand its contents and the context in which it was collected. The BAWE assignments are described in terms of level, genre and first language of the writer at www.coventry.ac.uk/BAWE/contents-of-the-bawe-corpus/ [27 June 2015].

Here we can see that assignments in Business, Economics and Engineering are distributed relatively evenly across the four levels of study (Table 1). The corpus design intention was to collect 32 assignments in each category, and to increase this for multidisciplinary areas such as Engineering. Levels 1 to 3 assignments are collected from modules in first, second and third year undergraduate courses[4] respectively. Level 4 assignments are collected from the 4th year in the case of the four year MEng degree, and from independent one or two year taught Masters.

Table 1. Number of Assignments by Discipline and Level

	Level 1	Level 2	Level 3	Level 4	Total
Business	32	33	31	50	146
Economics	30	30	23	13	96
Engineering	59	71	54	54	238

The levels 1 to 3 Business modules contribute to Bachelors degree courses in Management Science, Accounting & Finance, and Business, while the level 4 Masters modules are for courses in Industrial Relations, Personnel Management, Organisational Studies, and Business Administration.

The levels 1 to 3 Economics modules are part of Bachelors courses in Economics, and combinations with Economics, such as PPE (Politics, Philosophy & Economics) or EPAIS (Economics, Politics & International Studies), while level 4 modules are for Masters courses in Economics or Economic Analysis & Policy.

The Engineering assignments come from across Engineering, including Civil, Design, Mechanical, Renewable Energy and Systems. While some students do graduate with a three year BEng, many continue to the four year MEng, thus in Engineering the level four student body is slightly younger and more similar to that of the first three years than in Business or Economics. The fourth year in Business tends

to attract slightly older students such as those who return with work experience to do an MBA (Table 2).

Table 2. Age Range and Average of Writer by Discipline and Level

Level:	**1**	**2**	**3**	**4**	**1**	**2**	**3**	**4**
Business	18 to 21	19 to 22	20 to 23	22 to 39	20	21	22	27
Economics	18 to 23	17 to 24	17 to 24	22 to 28	19	20.7	21.0	25
Engineering	17 to 22	19 to 24	20 to 25	18 to 30	19	21	22	24

The BAWE data spreadsheet includes information collected on the writer's self-declared first language and years of high school education in the UK. This data, like that on age, was collected to inform the context in which the assignments were written, so the numbers from each first language group vary significantly, but there are substantial numbers of writers who declared their first language to be Mandarin, Cantonese or Chinese. These are grouped together here as Chinese, and the 22 other non-English first languages are grouped as 'other'. We know that Business and Engineering are popular courses for international students, and can see in Table 3 that approximately half the number of assignments are written by Chinese as by first language English in Business (29:61) and in Economics (15:32), and around a third in Engineering (50:143), with almost half (49%) of all Business and Engineering assignments in the corpus written by speakers of English. 90% of the L1 English assignments are by students who completed all their secondary schooling in the UK, with a further 2% by those completing one or two years.

Table 3. Number of Assignments by Discipline and Writer's First Language (L1)

L1	**English**	**Chinese**	**Other**	**Total**
Business	61	29	56	146
Economics	32	15	49	96
Engineering	143	50	45	238
Total N	236	94	150	480
	49%	**20%**	**31%**	**100%**

As the assignments collected are all rated as excellent (distinction) or very good (merit) by the subject lecturers as part of their regular coursework, this demonstrates that significant numbers of international students are producing very successful work at British universities. The Chinese assignments have been used in a number of publications (e.g. Leedham 2014, Lee and Chen 2009) and a subcorpus of BAWE called the Han CH-EN corpus has been created that matches assignments by Chinese writers not educated in the UK with assignments by L1 English writers educated in the UK by discipline, level and genre family. This is beginning to produce findings of note (Han 2015).

Once the assignments had been collected for the BAWE corpus, a genre analysis was conducted which generated a classification of 13 genre families (Gardner and Nesi 2013). The genre families are described in detail in Nesi and Gardner 2012, where they are organised according to their primary social function. For example, where Explanations are written to demonstrate understanding of core knowledge in the disciplines, such as how a turbine works, Essays are written to develop the ability to

marshal arguments and evidence and to persuade in response to questions such as 'To what extent should policy be used to stabilise the economy? Discuss with examples from the UK' (0202i). Critiques have the primary purpose of description and evaluation, whether these are website reviews, article critiques or product evaluations. Case Studies involve the assessment of a particular exemplar such as a patient or a business, with the aim of diagnosis and treatment, while Design Specifications involve, as the name suggests, establishing and detailing a design for future implementation.

While the majority of assignments in the BAWE corpus are Essays, they are concentrated in the Arts and Humanities, and are not the most frequent in all disciplines at all levels. Table 4 provides an overview of the percentage of assignments in the most populated genre families in Business, Economics and Engineering. These five genre families account for the majority (between 61% and 92%) of assignments at each level, with the other eight genre families occurring but in smaller numbers in these disciplines.

Table 4. Percentage of Key Genre Families by Discipline and Level of Study

	BUS 1	BUS 2	BUS 3	BUS 4	ECO 1	ECO 2	ECO 3	ECO 4	ENG 1	ENG 2	ENG 3	ENG 4
Case Study	19	24	**32**	14					20	3	13	**22**
Critique	9	**45**	19	10	7	17	21	15	6	6	**20**	15
Essay	**38**	18	19	**50**	**70**	**53**	**39**	**23**				
Method. Recount					13	7	3	**23**	**58**	**49**	19	15
Design Spec									8	11	**20**	9
TOTAL % Coverage	66	87	70	74	90	77	63	61	92	69	72	61

Table 4 shows the distribution of genre families, which helps to characterise the three disciplines. Case Studies in Business and Engineering; Essays in Business and Economics; and Methodology Recounts in Economics and Engineering. Critiques are found at all levels in all three disciplines, while Design Specifications are only found in Engineering. It is important to understand that this does not mirror all the assessed work students do in their courses. Exams, mathematical calculations and poster presentations are among the assignments not collected, as they are less likely to provide examples of the high quality extended disciplinary writing sought.

It is noteworthy that where genre families are found in these disciplines, they are found at all levels, suggesting a secure presence across disciplines. As most general EAP textbooks focus on Essay writing, the evidence above suggests that they will not be relevant to students in Engineering (or indeed in many of the physical sciences) and presents a strong argument that any general EAP texts intended for students outside the Humanities should include attention to several genre families.

Table 5 provides some general statistical detail on the assignments in Business, Economics and Engineering. It suggests that assignments generally increase in length from around 1500 words in Level 1 to 3000 words in Level 4 and that assignments in Engineering generally have shorter sentences and shorter paragraphs than those in Business and Economics. As seen in Table 6, this reflects the short average sentence length in Methodology Recounts and Design Specifications (19.6),

which are frequent in Engineering, compared to the longer average for Essays (25.4), which are more frequent in Business and Economics. This demonstrates clearly the necessity to consider genre as well as discipline in the teaching of writing for specific academic purposes.

Table 5. Average No. of Words, Sentences and Paragraphs by Level and Discipline

Level	Discipline	words	sentences	paragraphs	words per sentence	sentences per paragraph
1	Business	1555	68	17	23.4	4.7
2	Business	1834	80	29	23.2	3.4
3	Business	2420	112	42	22.1	3.5
4	Business	2627	112	36	24.1	3.9
1	Economics	1734	71	19	25.6	4.6
2	Economics	2420	112	33	21.9	4.4
3	Economics	2125	101	35	21.4	4.1
4	Economics	3736	163	67	23.1	3.1
1	Engineering	1571	83	40	20.4	2.5
2	Engineering	1982	105	50	20.5	2.7
3	Engineering	3161	158	75	20.0	2.5
4	Engineering	3658	173	66	21.6	2.8

While Essays and Critiques have longer sentences and paragraphs (Table 6), Methodology Recounts and Design Specifications make up for this with more tables, figures and formulae than the other genre families.

Table 6. Features of Genre Families

	Words	Sentences	Paragraphs	Tables	Figures	Formulae	Words per sentence	Sentences per paragraph
Essay	2303.0	93.1	25.3	0.3	1.4	1.9	**25.4**	**4.8**
Critique	2190.4	98.8	36.2	1.0	3.5	8.9	**22.7**	**3.5**
Case Study	**2793.8**	**133.2**	49.2	2.0	2.1	1.3	21.9	3.0
Methodology Recount	2088.0	109.2	**54.4**	**2.8**	**4.8**	**14.7**	19.6	2.2
Design Specification	**2975.7**	**155.5**	**73.9**	**3.0**	**6.4**	**18.0**	19.6	2.5

The following assignment titles from the BAWE Contents spreadsheet (Table 7) provide further insight into the nature of the assignments in Business, Economics and Engineering.

Table 7. Assignment Title Examples

Discipline Genre Family	**Example 1**	**Example 2**
Business Case Study	*Report to the Product Manager of Powermop*	*Apple Computer - Getting to the Core of the Problem*

Business Critique	*Reflection on Shell's Stakeholder Approach*	*PESTLE Analysis - L'Oral in China*
Economics Essay	*Should the Dutch economy be seen as the first modern economy?*	*The East Asian 'Tigers' - Was Free Trade the Key to Success?*
Engineering Methodology Recount	*Laboratory Report - Electrical Machines*	*Pipe Flow Experiment*
Engineering Design Specification	*Assignment 2: Design of a Torque Sensor*	*Design of Composite Drive Shaft*

The information in Tables 1 to 7 is all drawn from the 'BAWE Contents Spreadsheet' which is readily available on the Coventry University BAWE website, and as a download with the corpus from the Oxford Text Archive. It provides an understanding of the production contexts for the texts in terms of the type of student, course, genre features and genre distribution that is crucial for those wishing to draw on BAWE and related research for teaching academic writing.

3. The BAWE corpus

The third resource is the electronic corpus, which can be searched for examples of language by genre, by level and by discipline. The corpus can be requested from the Oxford Text Archive (http://ota.ahds.ac.uk/headers/2539.xml) for use with any search engine, or is freely available as an open corpus through SketchEngine (https://the.sketchengine.co.uk/open/) with a guide for using SketchEngine with BAWE (Nesi and Thompson 2011).

Any search can be filtered in numerous ways, for example by genre, discipline and first language. The word of caution with this is that too many filters can result in a small number of instances which may be idiosyncratic rather than typical. One starting place might be a list of most frequent strings of words, or n-grams, for each of the discipline- genre family complexes identified.

Table 8. Frequent and Key n-grams in Three Discipline-Genre Family Complexes

Business Case Studies		**Economics Essays**		**Engineering Methodology Recounts**	
Frequent	**Key***	**Frequent**	**Key***	**Frequent**	**Key***
of the project 135	the project is 32/62	an increase in 60	the US economy 29/30	can be seen 175	moment of inertia 42/45
in order to 58	the project and 32/75	**as well as** 56	credit to the 29/33	**due to the** 106	mass flow rate 28/29
the cost of 46	the marketing mix 30/70	the interest rate 55	the interest rate 55/88	be seen in 89	of the cylinder 32/37
of the company 40	of the project 135/383	**due to the** 53	to the private 26/38	of the beam 74	the flat plate 29/33
as well as	in the project	**in order to**	Journal of Economic	**in order to**	of the pipe

36	28/102	50	26/51	74	41/51
in terms of 34	in the market 31/218	a number of 40	the private sector 36/79	the value of 67	seen in Table 29/35
the project is 32	the cost of 46/336	the private sector 36	in the economy 36/85	end of the 57	of the beam 74/102
the project and 32	of the company 40/309	in the economy 36	of the economy 30/84	be used to 57	the Reynolds number 31/41
in the market 31	need to be 28/860	in the US 36	the East Asian 25/69	to calculate the 54	of the motor 36/49
the market-ing mix 30	in terms of 34/1456	the long run 35	the long run 35/120	it can be 53	of the cantilever 31/45

*Key words: n>25; BAWE as reference corpus; bold items occur across complexes

To generate the information in Table 8, I built a subcorpus for each genre family complex (e.g. Business Case Studies), then searched first for the most frequent 3-grams, and then for the most key 3-grams that occur more than 25 times - these are strings that occur most frequently in the sub-corpus when compared with the whole corpus. For instance, there are 45 instances of *moment of inertia* in the whole corpus, and 42 of these occur in Engineering Methodology Recounts (42/45). The top ten are listed in order in Table 8.

The most frequent strings in Business Case Studies are very similar to the most frequent key strings, and they typically include terms such as *project*, *market* and *company*. In contrast, the key items in Engineering Methodology Recounts each includes a different specific noun (*inertia, cylinder, pipe*), in comparison to the more general frequent items (*can be seen, due to the*), with Economics Essays occupying a mid-position with some overlap (*the interest rate, the private sector, in the economy, in the long run*). Such frequent and key items can then be used to locate instances from the corpus.

> *Overall, we can say that when there are only monetary effects* ***in the economy****, exchange rates obey relative PPP* ***in the long run*** *as set out in the Monetary model. However, changes in the output market will have an effect which is not in line with PPP.*
>
> (Economics Essay 0187b)

> *Strain gauges were attached to the top and bottom surfaces* ***of the beam in order to*** *measure the strains in the surface* ***of the beam*** *whilst being loaded and unloaded. The resultant strain plot* ***can be seen in*** *Graph 6.5.*
>
> (Engineering Methodology Recount 3091i)

In addition to the key strings identified in Table 8, some frequent strings occur across two or three complexes: *as well as, due to the, in order to.* A quick search for *due to the* shows that it tends to occur with other frequent and causal features (in bold).

> *PCD Maltron has a range of products but* ***because*** *the owner has never really marketed the products there is little IPR. However, this is largely* ***due to the*** *fact that the main Maltron keyboard is not a patented design.* ***Without*** *a*

patent there is no possibility of licensing to firms with existing complimentary assets. It is especially important to get a patent for an ergonomic keyboard ***as*** *it is fairly easy to reverse engineer* ***due to the*** *relatively low amount of technology involved.*

(Business Case Study 0146g)

In an open economy the reduction in ***the interest rate triggers****, in addition, a depreciation of the domestic currency which* ***increases*** *net exports. However****,*** ***due to the*** *increase in domestic GDP* ***caused by an increase in*** *net exports, imports rise. It can therefore be seen that it is uncertain how a depreciation* ***affects*** *net exports and therefore output.*

(Economics Essay 0058f)

From the graph in the appendix ***it can be seen that*** *the pressure loss, or head loss, decreases as the velocity decreases. This is* ***due to the fact that*** *as the velocity increases the skin friction will have a greater effect on the liquid.*

(Engineering Methodology Recount 0341c)

These extracts could usefully be deployed for developing discipline familiarity through dictogloss (where learners listen to a short text read aloud and then reconstruct it through a series of activities), for instance, or for teaching cohesion, subordination patterns or causal relations in explanatory writing.

In a similar way, a search for *in order to* in Critiques yields:

IKEA has had to make a number of key operations decisions in order to achieve it's performance objectives.

(Business Critique 0289d)

Similarly, labour may need considerable re-training in order to acquire the skills necessary to work in a different industry.

(Economics Critique 0111a)

In order to effectively evaluate each method for analyzing mechanisms a simple four bar mechanism has been chosen, shown in Figure 1.1.

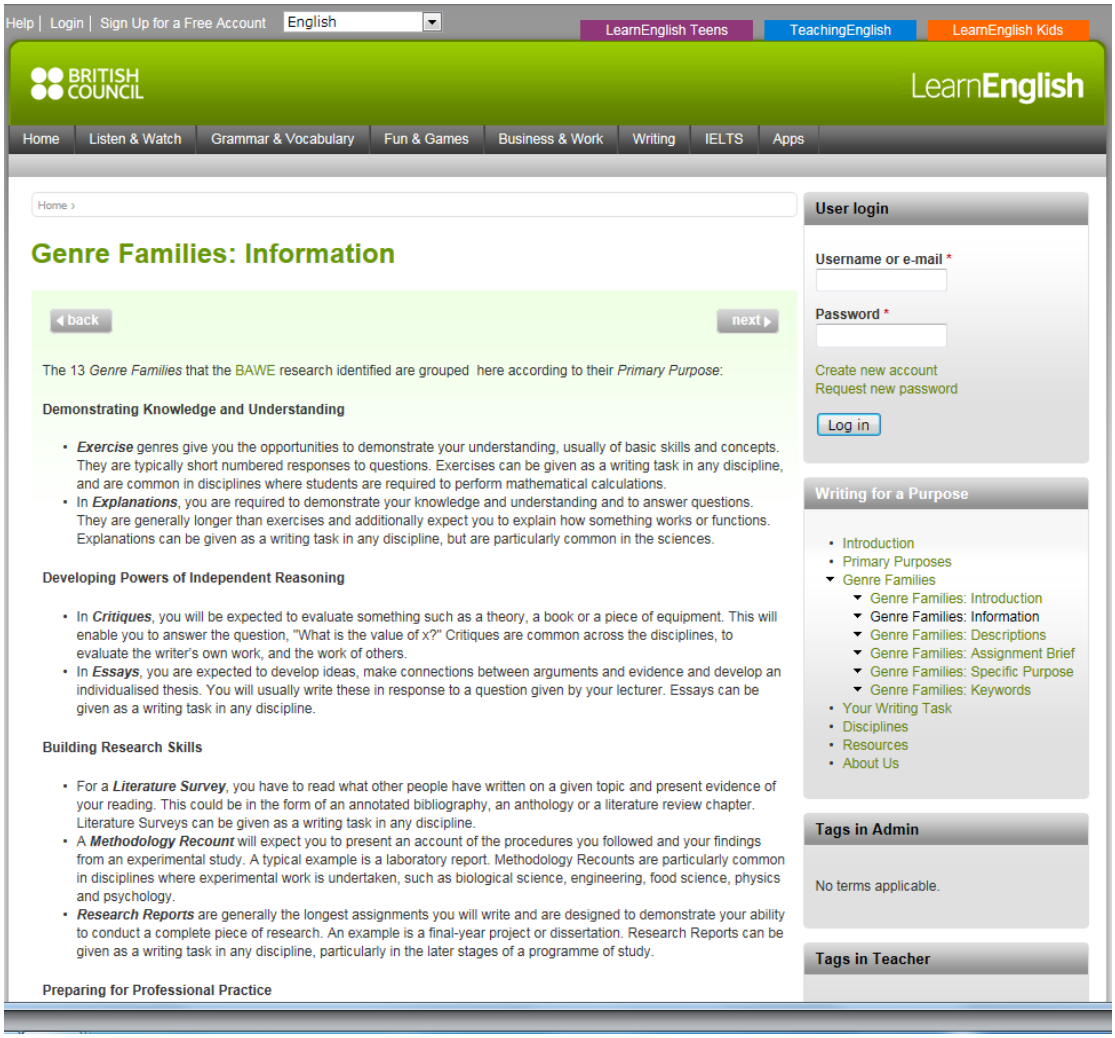
(Engineering Critique 3091b)

Sentences like these lend themselves to a discipline identification exercise, a matching exercise of the two parts of the sentence; or at a more advanced level to an examination of multiple examples to explore when people use *in order to* rather than *to*.

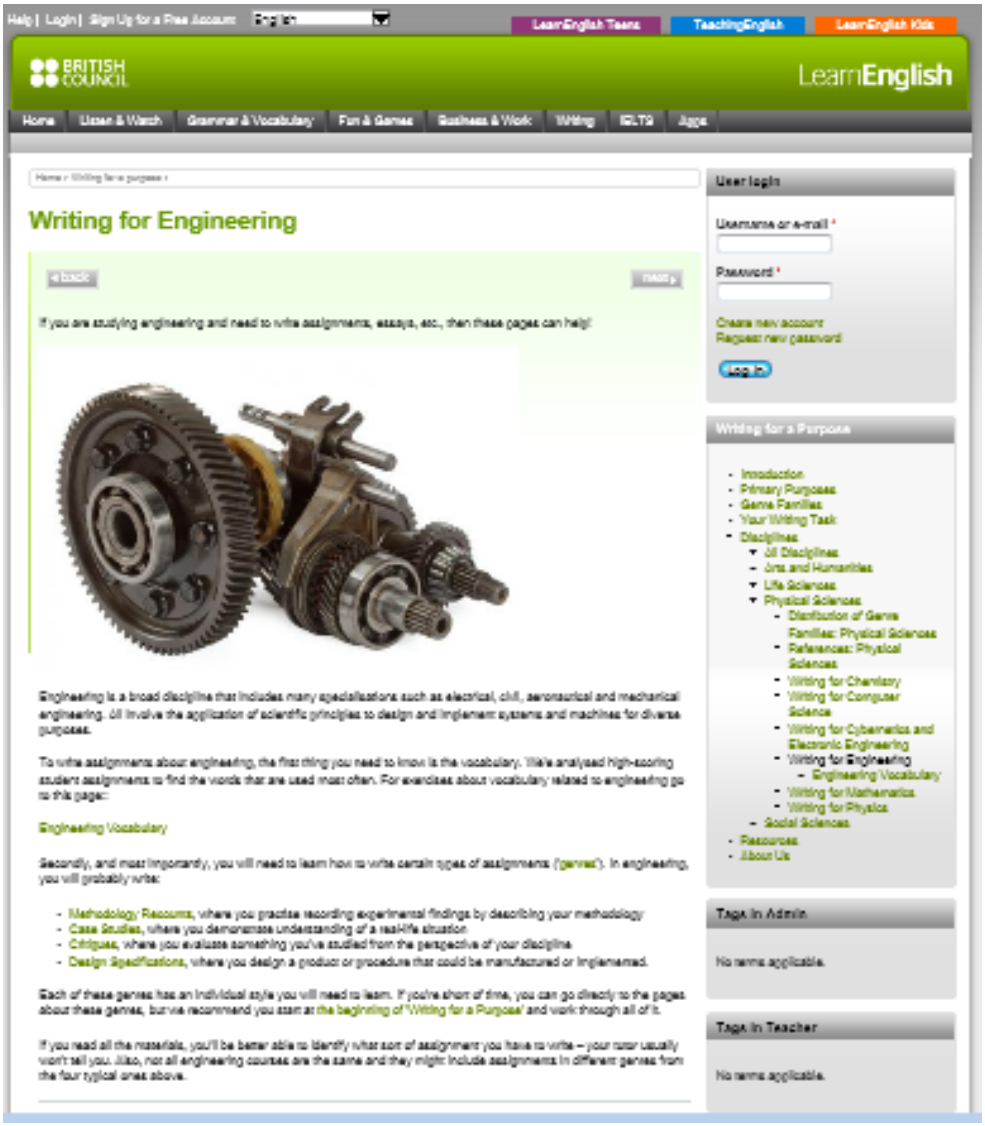
4. Writing for a Purpose (WfaP) online materials

The fourth resource is the Writing for a Purpose materials developed from explanatory accounts of the writing in the BAWE corpus in conjunction with the British Council (Nesi, Gardner and Kightley 2015). These materials are available on the British Council Learn English website and intended for an audience of pre-university students. They can be used by individual learners, but are also being used by teachers for in-class or extension work for students in pre-sessional and in-sessional classes.

The materials begin with an introduction to the general purposes of assessed student writing and proceed to accounts of each of the genre families with exercises to develop users' understanding of the purposes of each genre family, of the stages through which each typically unfolds, to examples from across disciplines, and attention to specific lexico-grammatical features that typically occur.

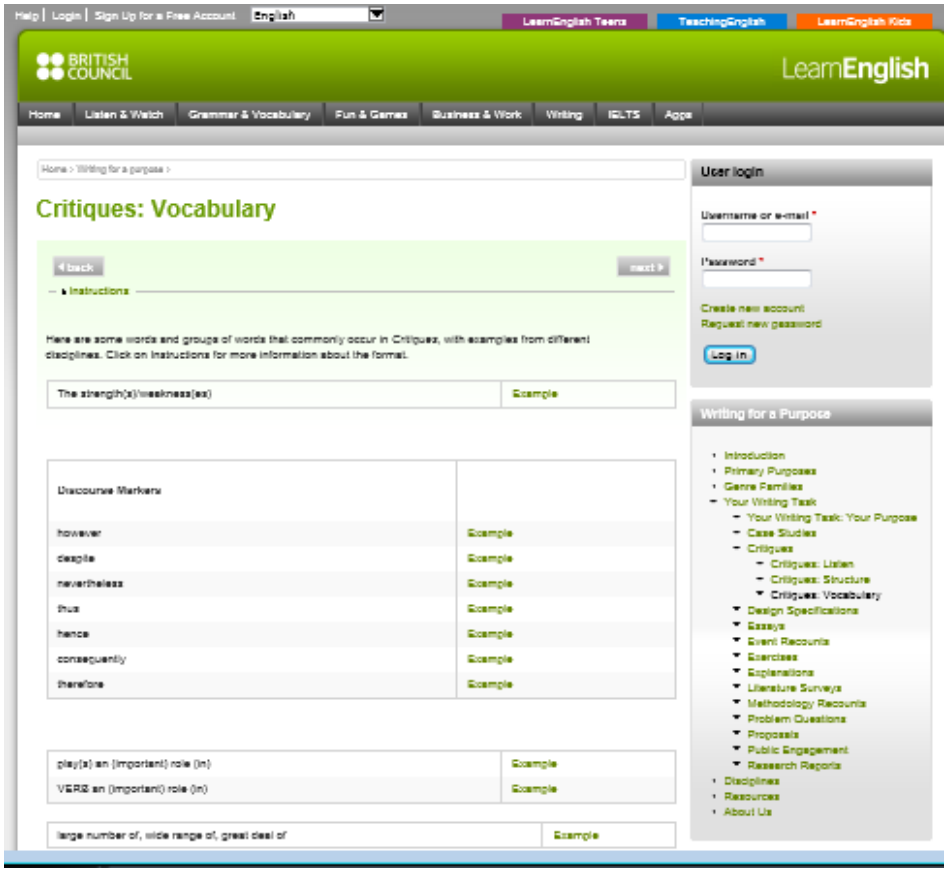


Alternatively users might use Disciplines as an entry point and locate the page that introduces writing in specific disciplines. The Engineering page has links to Engineering vocabulary and to the four frequent genre families.

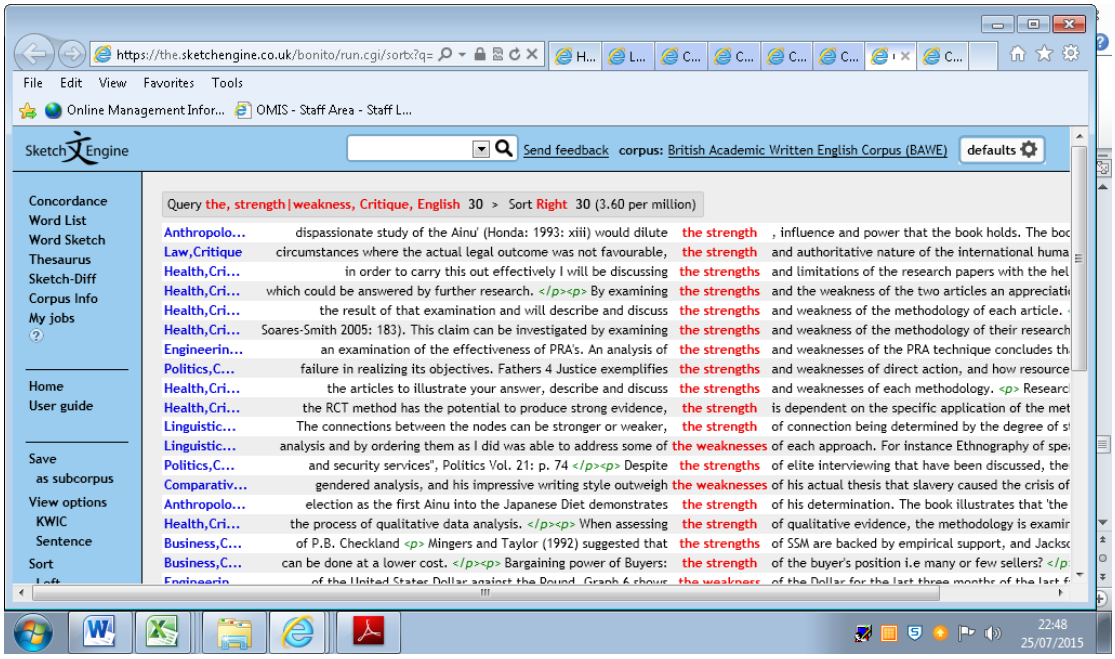


Each of the Genre Family pages includes interviews, sample assignments and a range of activities designed to familiarise students with their purpose, stages and useful language.

The next screen shot shows the Critique vocabulary page.



From here there are links to the BAWE corpus, which shows examples from Critiques across the disciplines. A very simple exercise of genre instantiation might involve asking students to seek an example from their target discipline and explain to a classmate what the strengths and weaknesses referred to involve. (Clicking on the search term in the middle extends the example; clicking on the discipline provides additional information about the assignment.)



As this last example suggests, while the online materials can and are being used by learners without access to the other resources described in this paper, an understanding of the BAWE corpus, its context, and the genre family classification will enable an enhanced appreciation of the data.

5. Lessons taught in BEE using BAWE and WfaP

Descriptions of the writing in the BAWE corpus and the WfaP materials are used in many different ways by teachers and learners. They inform teachers about the range of genres and about how writing varies across the disciplines and levels of study in England, which provides a framework for teachers to investigate their own target contexts. They provide examples of specific assessment genres, stages, moves and lexicogrammatical features that can be used in teaching and learning. And they suggest activities for teachers and learners.

There is evidence that the WfaP materials are widely viewed (1,143,948 unique page views between June 2013 and April 2014.), and feedback from teachers and learners around the world suggests that they are proving useful for writing development. One future project is to gather more systematic evidence from teachers on how they are using the materials and the corpus in their teaching. There are also plans to publish some of these ideas. Here are two examples.

The lesson plan in Appendix A focuses on the Recommendations stage of the Case Study. It directs students through a number of online activities, structured around class discussion of purpose, structure and language. In contrast, Appendix B presents free standing materials developed from the online materials by extracting a listening task, preparing cards to do a jumbled text activity and preparing a handout with exercises from the web.

The advantages of using the findings from the Genre Family classification, from the BAWE corpus and from the Writing for a Purpose materials include a confidence in the relevance of the genres across disciplines and evidence of their salience specifically in Business, Economics or Engineering; the availability of authentic samples of the writing students are expected to produce at English Universities; and the affordances for independent and blended learning to reinforce and extend what is taught in class and develop confident autonomous learners.

Although there has been fair criticism that there is ‘too much’ information in the materials, and that the site can be difficult to navigate (Sayers, 2014), because this is a live website, there is ongoing work to improve the materials in these respects and as this paper has perhaps shown, a specific focus and methodical approach can reap rewards. Significant benefits result from the way the materials enable access to the corpus. This allows teachers of ‘general EAP’ classes to employ specialist examples or to encourage students to seek examples that relate to fields they understand. While few would deny that the language of academic English differs significantly across the disciplines, there are still practical questions of finding teachers with expertise in a range of disciplines and in grouping students according to discipline in meaningful class sizes. Teaching a general EAP point with access to instances from across the disciplines is one way around these issues. This however does not negate the need to explore the language and genres of the specific target course situations. Moreover, in the lesson plans, the online materials have been adapted for students with IELTS level from 5.5 to 7. Greater teacher care should be taken if using the materials with students

of lower language proficiency to ensure they are inspired rather than demotivated when encountering the work of successful students.

Concluding remarks

This paper has shown the contribution of the Investigations of Genres project to our understanding of the scope and nature of genres of student assessed writing; the contribution of the BAWE corpus in providing a resource that can be mined for examples and explored through various interfaces; and the contribution of the WfaP materials in making these resources more accessible. It has also begun to explore how teachers are using these linked resources in the classroom. They can inform course design, syllabus design, lesson planning and pedagogy.

Decisions to be made include how much time to devote to enabling learners to use the corpus themselves and for which purposes, and to what extent the genre families in the corpus reflect the learners' targets. Although the contents of the BAWE corpus are from four universities in England, there is evidence from international research that the genre families are relevant across the English speaking world. See, for example, the three university Literacies in the Disciplines project in Hong Kong, or reference to Zhu's (2004) work in the US above. Nevertheless, there will be variations in specific genres across national, educational and institutional contexts, and across time, so relating teaching to examples in specific contexts where known will enhance the relevance and face validity of the EAP programme. The development of courses for national, institutional or degree specific contexts requires different skills from the writing team and lends itself to further exploration and research.

While these five resources may prove useful in many different ways, they seem particularly well suited to the genre-instantiation approach proposed here to bridging general and specific EAP. For disciplines such as Business, Economics and Engineering, a general EAP course must go beyond Essays to compare several genres that the learners are likely to encounter (e.g. case studies and lab reports). A comparison of two or three genre families will raise genre awareness, while instantiation from a range of disciplines will enable teachers and students to explore how these appear in specific target disciplines.

Notes

1. BALEAP was founded in 1972 as SELMOUS (Special English Language Materials for Overseas University Students). It changed its name to The British Association of Lecturers in English for Academic Purposes in 1989 and then to BALEAP, the global forum for EAP professionals, in 2010.
2. This paper is a substantially revised version of a paper I delivered at the Summer Institute on Creative and Discovery-based Approaches to University Undergraduate Writing Programmes, City University of Hong Kong, 28-31 May 2014.
3. The British Academic Written English (BAWE—rhymes with 'saw') corpus was developed at the Universities of Warwick, Reading, and Oxford Brookes under the directorship of Hilary Nesi, Sheena Gardner, Paul Thompson, and Paul Wickens, as part of the project 'An investigation of genres of assessed writing in British Higher Education' which was funded by the Economic and Social Research Council (project number RES-000-23-0800) from 2004 to 2007.

4. Undergraduate students in England, unlike in many other parts of the world, typically follow a three-year course of study for a Bachelor's degree. Each course consists of a number of units, called modules. In some areas, such as Engineering, high school graduates can embark on a four year Master's course. In most areas, students would graduate with a Bachelor's degree after three years and then a small number apply for a Master's course, which would last for a full (twelve month) year.

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Appendix A: Recommendations in Case Studies from Benet Vincent

Aims: Business case studies include an obligatory 'Recommendations' section but it is often not obvious to learners what the appropriate style and associated language should be in this part. This lesson plan, based around based on materials found on the British Council Writing for a Purpose website (see link below) aims to address this issue.

Objectives: To develop learners' awareness of the language of recommendation and structure of recommendation sections in case studies.

Module: Academic English for Students of Business (20 credits towards a BA in International Business top up (level 3) course at Coventry University)

Students: 24 international students at B2+ /IELTS 6.5 level.

Duration: 1 hour 20 minutes

Materials: http://learnenglish.britishcouncil.org/en/writing-purpose/case-studies-structure-2
http://learnenglish.britishcouncil.org/en/writing-purpose/case-studies-structure-1

Procedure

1. Introduction (10 min)	• Short discussion about what sections students expect in a business case study. • Students to complete Task 1 at: http://learnenglish.britishcouncil.org/en/writing-purpose/case-studies-structure-1 • Establish where the 'Recommendations' section comes in a report; discuss what recommendations might be based on.
2. Distinguishing between problems and recommendations (20 min)	• Learners look at http://learnenglish.britishcouncil.org/en/writing-purpose/case-studies-structure-2 Task 4 and attempt to distinguish between problems and recommendations for action. They then listen to check their answers. • Discuss how the 'problems' and 'recommendations' might be written in a report, in particular recommendations: what language structures would be used? Which would come first, problems or recommendations? • Listen again to see how this person words the recommendations (e.g. *I suggest…*) and compare answers.
3. Ordering ideas in a recommendation (20 min)	• Learners try to do the (rather challenging) ordering activity, Task 3 at http://learnenglish.britishcouncil.org/en/writing-purpose/case-studies-structure-2 • They can then listen to check their answers. • Learners then identify what language is specific to recommendations in this section (e.g. *must*; *the first stage is for … to be …*; *(in order) to… I would suggest…*; *should*). Feedback may involve discussion of the final hedging comment (*it may take time to overcome…*) and the general formality of the passage as indicated by e.g. high numbers of passive

	structures and other impersonal structures used to avoid saying ‘you should’.
4. Looking at the language of recommendation (10 min)	• Learners do (a selection of) Tasks 5-7 at http://learnenglish.britishcouncil.org/en/writing-purpose/case-studies-structure-2 and check answers.
5. Consolidation: recommendations (20 min)	• At this stage, it will be helpful to summarise the language of recommendation for the purposes of recording it by putting similar structures together (e.g. modal, semi-modal verbs *must, should, need to*; phrases with performative verbs – *I (would) suggest/recommend* etc.). Learners can also be encouraged to suggest other structures or expressions that might be used in case study recommendations.

Appendix B: Design Specifications from Anne Heaton

Coventry University Pre-sessional Programme

EIMS Design: What is a Design Specification?

Task 1
Have you ever written a Design Specification? Do you know what one is, or what writing one might involve? (e.g. stages, style of writing: formal/informal, etc.) Discuss your ideas in small groups.

Task 2
Read the text below and try to predict which of the words in the box will fill each gap. Don't worry at this stage if there are some words you don't know.

design	brake	tested	industry	code	created	car
specification	test	report	design	technical	website	
construct	produced	smaller	sciences	graphic	describe	

Now listen to the recording and check your predictions.

S: Can you tell me exactly what a (1)_____ (2)_____ is?

L: Yes, it's a kind of technical (3)_____ where you (4)_____ how you (5)-_____, and you (6)_____ and you (7)_____ some stuff that could be (8)_____.

S: Oh, do you mean like a (9)_____ engine?

L: Well, it could be a car engine, but it's more likely to be a (10)_____ part of a car, for example a (11)_____ system, or if in computer science it might be a piece of (12)-_____ that you have (13)_____and you've (14) _____ to show that you could use it in (15)_____ .

S: I see, so this is really only for the (16)_____ ?

L: Well, it's (18)_____. It could be used in (19)_____ design, for example, or occasionally it's used in other areas for (20)_____ design, for example.

Task 3
The stages of writing a Design Specification are in the table below. Match them to their descriptions and try to put them in the correct order.

		Order (1,2,3,4)
Concluding remarks	Specifies the purpose of the report and the design. Refers to the design brief, if there is one.	
Development and specifications	Describes the development of the design. It includes details of any testing of the design that has been carried out to improve the specifications.	

Introduction	Reviews the procedures and confirms that testing has been carried out to ensure the specifications are fit for purpose.	
Background	Provides any theoretical background needed for the design.	

Task 4
There are several different kinds of Design Specification: application design, building design, database design, game design, label design, product design, system design and website design. Look at Example 1. What type of Design Specification is it?

Task 5
Look at the sections of Example 1. Are all the components in the description above included? Indicate which sections cover which components.

In which section are the following mentioned:

1. Introduction
2. Macaulay's methods
3. Mohr's circle
4. Basic design of upright and axle for analysis
5. Analysis of the upright and axle
6. Estimated loading of components
7. Calculations
8. Analysis and evaluation of results
9. Analysis of the suspension upright
10. Recommendations for upright
11. Analysis of stub axle
12. Recommendations for stub axle
13. Bolt analysis

What do you think is missing from Example 1?

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