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A Classification of Genre Families in University Student Writing

Abstract

As demand for English-medium higher education continues to grow internationally and participation in higher education increases, the need for a better understanding of academic writing is pressing. Prior university-wide taxonomies of student writing have relied on intuition, the opinions of faculty, or data from course documentation and task prompts. In our research we classify a broad range of the writing actually produced by university students for assessment purposes. To make such a description manageable, we grouped the texts in the BAWE corpus into thirteen genre families. This project brings together the American tradition of classifying university student writing tasks (e.g. Horowitz 1986; Hale et al. 2004) and the very different Australian tradition of classifying primary and secondary school children's written texts as genres (e.g. Martin and Rothery 1986; Coffin 2004). An understanding of the genre family classification enables effective interrogation of the corpus by teachers and researchers. The diversity in student genres across disciplines and years of study is noteworthy for academic writing textbook developers and all interested in the nature of higher education. [174]

Introduction

As is well known, student numbers and student mobility are both on the increase worldwide. In Britain, there has been a steady rise in the total number of university students over the past twenty years (HEFCE 2001; HESA 2009), and Wächter (2008) cites UNESCO data indicating that the number of international students globally grew more than fourfold between 1975 and 2005, from 600,000 to 2.7 million. Because so many international students are on the move, more universities in countries where English is not a first or official language are offering courses in the medium of English. Wächter and Maiworm's (2008) survey of 2,200 higher education institutions in non-English speaking European countries, for example, found that 38% now offer English-speaking programmes, the majority created since 2003. These developments have increased the need for information about the nature of student writing in English - a need that applied linguists have been slow to meet. Very little empirical investigation has taken place regarding the varieties of writing produced by students during their university education, probably because the collection of a representative body of proficient student writing is fraught with difficulty (Alsop and Author 2009). At present, we believe that the BAWE corpus (1) is the only archived collection of assignments produced across a wide range of disciplines and across the first four levels of university study (2).

In this paper we begin by reviewing some existing classifications of primary, secondary and tertiary level student writing. Although classification is only one of many concerns in the study of academic writing, prior classification systems have been very influential, informing writing materials, raising awareness of writing demands, leading to changes in educational curricula and expectations, and inspiring significant research traditions with international impact.

 Following this review, we present our own classification of university student writing genre families in the BAWE corpus, with details of each genre family and discussion of the potential of such work.

Classifications of school student writing

Text classification is often used by educationalists as a means of allocating writing tasks across age groups and levels of study, on the basis of how well a category suits a learner's developmental stage. It can thus inform the design of teaching materials and syllabi, and may also bring about widespread changes in teaching across continents and educational sectors.

One particularly influential classification was that devised by Britton et al. (1975), which distinguished between 'expressive', 'transactional' and 'poetic' functions of language, and argued that the expressive function was critical in encouraging development and exploration. Britton et al.'s analysis of over 2000 texts in British secondary schools revealed that student writing across the curriculum was more than 60% transactional (expository and persuasive) and less than 6% expressive. Recommendations that followed in Britain and internationally were successful in increasing the amount of personal, expressive writing produced in schools, in the belief that this would lead to improvement in the quality of students' writing in general.

In time there was a reaction to what many now perceive as an over-emphasis on expression at the expense of other functions of literacy. The analysis by Rothery and Martin of 1500 texts representing all writing done by children at one school in the Sydney region (Martin 1989:53) revealed that almost all the children's writing was narrative/expressive rather than factual. Martin argued that, far from preparing children for the demands of secondary school, the neglect of transactional genres was preventing the development of necessary literacy skills. The internationally influential classification of key primary school genres developed by Martin and Rothery informed pedagogy and 'by the mid-1990s genre based descriptions of language ... were a feature of primary school language syllabuses in most states in Australia' (Veel 2006:73).

In Australian educational linguistics, genre is widely regarded as 'the system of staged goal-oriented social processes through which social subjects in a given culture live their lives' (Martin 1997:13). So in presenting to teachers 'eight genres for writing across the curriculum in secondary schools', Macken-Horarik (2002:21-3) not only provides the social purpose and schematic structure of genres such as Recount, and News Report, but also indicates the 'Social Location' - where we might find them. Thus Recounts 'retell events for the purpose of informing or entertaining'; they unfold from an Orientation stage through a Record of Events stage to an optional Re-orientation stage (Orientation^Record of Events^(Re-orientation)) and they can be found in personal letters, police records and excursion 'write-ups'. Explanations are found in environmental and healthcare leaflets, while Procedures are found in gardening books and cookbooks, and Narratives are found in novels and movies. These accounts are underpinned by research from the Write it Right project in Sydney (Martin 2000; Unsworth 2000; Veel 2006) which examined secondary school textbooks and assignments in English, History, Science, Mathematics and Geography, providing detailed genre maps which help explain relationships between genres in subject contexts. Thus in History the genres 'Descriptive Report', 'Taxonomic Report' and 'Historical Account' are classed as instances of 'reporting history'.

Such subject specific classifications suggest linguistic and cognitive learner pathways through genres; Coffin (2004) shows how lexical density, grammatical

metaphor, abstract/institutional participants and causal relations develop from 'reporting' genres through 'explaining' genres to the linguistically and cognitively more demanding 'arguing' genres such as Exposition and Discussion. Such pathways are useful for teachers (Custance 2006) and remind us that genres are realised through language. They also strike a chord with our interest in the intersection of corpus linguistics and genre analysis for classifying writing in higher education: analyses of register variation in the BAWE corpus reveal similar progressions in lexicogrammatical features by year of study within and among genres and genre families (Author 2008; Author 2009).

University student writing

As Loudermilk (2007) points out, university culture is such that students rarely show their coursework to anyone other than their tutors, and the writing produced by students therefore belongs in Swales' (1996) category of 'occluded' genres. It follows that large representative samples of student writing are much more difficult to obtain than large representative samples of some other types of academic text, such as research articles and instructional material. The published research article is a particularly popular choice of genre for academic writing research, both because of its widespread availability, and because it is amenable to detailed analysis following the standard 'Introduction-Method-Results-Discussion' (IMRD) framework, as in studies by Swales (1981), Hopkins and Dudley-Evans (1988), Holmes (1997), Bloor (1999) and Lewin, Fine and Young (2001) amongst others. Perhaps for this reason many studies of academic writing have taken the research article as a model for the sort of writing that students aspire to produce (see, for example, Lee and Swales 2006, where research articles are compared to doctoral students' term papers and dissertation drafts). Other researchers have focussed on the language of textbooks and course

materials; for example Biber's work on university writing (e.g. Biber 2006) draws on the T2K-SWAL Corpus, which consists largely of instructional material.

As we have previously argued, however (Author and Author 2006), assignments differ from research genres and from instructional material in significant respects. Where research genres aim to persuade the reader of the validity of new findings, and textbooks aim to explain or instruct, assignments generally aim to demonstrate the acquisition of required skills and accepted knowledge.

A number of studies have examined the generic features of the dissertation and the thesis. These are not only somewhat less occluded genres than coursework assignments, but also longer and more readily available, so that researchers can gather more text, more easily, from fewer students. For example Samraj (2008) examines introductions to Masters dissertations, Charles (2006) describes MPhil and doctoral theses, while Hyland and Tse (2004) analyse a substantial six discipline corpus of 240 dissertations and theses. Such studies suggest ways in which postgraduate student research writing differs from research articles; it is reasonable to expect that the differences between assessed coursework and professional writing will be even greater. To date, however, most studies of student coursework, such as those of Woodward-Kron (2002), Hewings (2004), North (2005), Ravelli (2004), Swain (2007) and Hood (2007), have concentrated on relatively small numbers of texts in one or two disciplines. Such studies certainly offer detailed disciplinary insights but their attention to different linguistic features hampers comparisons across the academy.

Classifications of university student writing

Earlier classifications of university-wide writing have been based on findings from literature reviews and reflection; from faculty surveys; and from course

documentation. The more local classification studies tend to be conducted for needs analyses to inform EAP and writing programme design (for example Zhu 2004; Jackson, Meyer and Parkinson 2006; Cooper and Bikowski 2007; Gillett and Hammond 2009), while those that gather larger quantities of information across disciplines and universities tend to be linked to validations of the high stakes university entrance examinations of TOEFL (Hale et al. 1996), the GRE (Rosenfeld, Courtney and Fowles 2004), and IELTS (Moore and Morton 2005).

A classification system that has been particularly influential in North American Rhetoric and Composition practice is Kinneavy (1969). This synthesises theories developed by earlier scholars dating back to the classical period, and develops a model where four basic purposes of composition – expressive, persuasive, referential and literary -are linked neatly to the four components of a communicative event – encoder, decoder, reality and signal respectively. Further classification of referential discourse distinguishes between exploratory discourse which asks a question, informative discourse which answers it, and scientific discourse which proves the answer (1969:301). Kinneavy aimed to theorise the nature of rhetoric and communication a priori, rather than classify actual university student writing across the university. His system, while providing a possible frame for empirical investigations of academic writing, has been criticised for prescriptivism, for example by Swales (1990:42) who admired its organising power but warned that 'the propensity for early categorisation can lead to a failure to understand particular discourses on their own terms'.

A more empirical approach to classification involves seeking information from university teachers. Many such surveys (e.g. Bridgeman and Carlson 1984; Casanave and Hubbard 1992) were conducted in the 1980s and early 1990s (see Paltridge 2002:80 for details); more recent evidence comes from 137 British academics (Ganobscik-Williams 2004), 1,512 American academics (Rosenfeld et al. 2004), and 47 science academics in South Africa (Jackson et al. 2006). These studies identify not only types of writing that students produce, but also core tasks and skills that lecturers value and expect to find in students' written work. With similar aims we interviewed 58 British university lecturers (Author and Author 2006) and developed an understanding of the functions of university writing from disciplinary perspectives.

The third main approach to classification involves analyses of course documentation and assignment rubrics. Horowitz (1986) was an early influential study which divided 54 assignment tasks from an American university into seven categories. More recent and larger-scale studies include Hale et al.'s examination of assignment questions and interview data from eight American universities (1996), Moore and Morton's study of tasks from 28 departments in two Australian universities (2005), Zhu's work on 95 syllabi with course handouts, writing samples and interviews from an American business school (2004), Cooper and Bikowski's analysis of 200 syllabi at one American university (2007), and Gillett and Hammond's account of 800 module descriptors at one British university (2009).

Many of these studies identify similar lists of main task types, although the number varies, influenced by disciplines under consideration and classification criteria (such as information source, rhetorical function, genre, and/or the object of inquiry). The lists typically include annotated bibliographies, case studies, essays, experimental reports, proposals, reflection papers, research papers, reviews, and summaries of or reactions to reading materials. It is difficult, however, to synthesise the findings from different surveys, because of the different criteria and because category names mean different things in different contexts, as Braine (1995) and Zhu

(2004) point out, particularly where assignment types are identified 'by the name given to the required written product as outlined in the task rubric, i.e. whether students were asked to write an essay, a literature review, etc.' (Moore and Morton 2005:50). Even within the same discipline, descriptions and naming practices can be inconsistent and unreliable: 'Some genres, particularly in pedagogical contexts, are loosely, and almost casually, named' (Johns 1997:23). Without samples of the writing produced it is impossible to know what differences, if any, exist between 'researched term paper' and 'scholarly article', for example, or between 'book report' and 'book review', as reported by Ganobscik-Williams (2004:14).

Some researchers have tried to avoid the confusion of overlapping terms by adopting categories devised by earlier researchers. Thus Cooper and Bikowski (2007) attempted to apply the categories of Horowitz (1986) and Hale et al. (1996), which had originally been based on analyses of writing task prompts and hypotheses about the way students might respond to them. Ultimately, however, Cooper and Bikowski were not sure whether their findings differed from those of the earlier studies because they had made different classification decisions, or because there were actual differences in the types of texts expected. Jackson et al. (2006) asked their questionnaire respondents to identify task types from a pre-selected list based on the findings of Horowitz (1986) and Braine (1995). They admit that as a result 'our questionnaire was unable to account for the variety of labels and genres that exist within science disciplines' (2006:274).

These surveys have proved useful in the development of complex, multidimensional classifications, and have increased significantly in scope. Whereas in the 1980s Horowitz worked with only 38 usable responses from 750 faculty contacts,

twenty years later Gillett and Hammond were able to access electronically-stored course and module proposals to record every task type set within a given time frame.

As can be seen, however, survey-based typologies rely on official documents and nomenclature rather than descriptions of the writing students actually produce. Zhu (2004) is the only one to incorporate some text analysis, but examines a mere 12 writing samples, as opposed to 242 assignment tasks described in handouts and course syllabi. Without access to the texts produced in response to the task prompts, researchers have to rely on faculty and course developers' genre expectations, which may not all be realised. Corpus projects have not so far described the total written output of a student body, and thus cannot provide such accurate accounts of the quantity and distribution of writing tasks, but they can reveal much more about the linguistic features of student writing genres.

Classification and Genre Families

We aim to develop a genre family framework which contends with 'the difficulty in classifying writing assignments into neat, mutually exclusive categories' (Cooper and Bikowski 2007:218). We consider both differentiating criteria and family resemblances, aiming to group together genres that are similar (e.g. catering plans, dissertation proposals and business proposals) to form genre families (in this case the Proposal family), so that all texts in the BAWE corpus can be assigned to one and only one family. Grouping similar genres together makes the description of large numbers of texts more manageable, and enables us to make comparisons across disciplines. Thus, following a similar approach to that employed by Bhatia (2002:280-1) to create 'colonies' of promotional genres, we place book reviews from History with product evaluations from Engineering in a genre family we label 'Critique' because both genres share a similar educational purpose and have similar generic

 stages: description of an entity and principled evaluation of the entity. A more detailed description of each genre is expected to reveal disciplinary differences -Critiques in some disciplines, for instance, include reports of extensive testing – but there is nevertheless sufficient family resemblance among members of the group to enable us to argue that they are members of the Critique genre family and not members of any other genre family.

Unlike some accounts of genre, we have not given exclusive priority to communicative purpose and prefer to present it as a complex notion. Thus we recognise that in an educational context the purpose of assessed student writing is a combination of demonstrating proficiency to the tutor, developing writing proficiency, and engaging an audience or reader who may be more or less explicit. In our interviews with lecturers (Author and Author 2006) we developed an understanding of the relative importance of the purposes of specific assignments, describing them as essentially pedagogical, professional or academic-research. From this perspective, essays and exercises have a central pedagogical purpose, unlike case reports in Medicine, site investigation reports in Engineering, project proposals in Publishing, and appeals in Law which all have the same broad purpose of preparing students for writing in professional contexts. Our classification of genre families captures these broad purposes, but is more specific in its focus not only in terms of educational purpose, but also in terms of the staging or schematic structure which conventionally realises that purpose in our corpus.

We should state that while we have read all the texts in our corpus and identified each as belonging to one specific genre family, we have not yet completed full genre descriptions. This work is ongoing. Our classification of genre families is presented here for us and others to interrogate through application to further student writing texts. We believe it is adequate for our corpus, which is diverse and substantial, but we welcome feedback from those applying it to different corpora. This, of course, is the shortcoming of empirical studies such as ours: theoretical possibilities may have been excluded because they were not found in the data examined.

Methodology

The contents of the BAWE corpus are described in Alsop and Author (2009) with reference to a four by four matrix of levels (from first year undergraduate to Masters) and disciplinary groupings (Arts and Humanities, Social Sciences, Life Sciences and Physical Sciences). Our sampling strategy took care to maintain an even distribution of assignments across the four levels and four disciplinary groups, and to ensure that individual disciplines, courses, modules or students were not over-represented within the matrix. The corpus only contains assignments formally assessed by subject tutors and given a good pass grade, and is made up of almost equal numbers of 'distinction' level assignments with a grade of 70% or over (1,251 assignments) and 'merit' level assignments with a grade of between 60% and 70% (1,402 assignments). We assume that writing of this standard will tend to contain the generic features desired by the disciplinary communities.

We relied on students to voluntarily contribute their work, and with the aim of developing an electronic corpus of student writing collected word-processed assignments, excluding handwritten examination scripts, assignments consisting solely of mathematical calculations and Powerpoint presentations assessed through oral delivery. For these reasons we cannot claim to have gathered proportionate quantities of every type of assignment set in every discipline in the four universities concerned. Nevertheless, the corpus holdings are indicative of actual student writing practices across disciplines and levels of study. Page 13 of 34

Manuscripts submitted to Applied Linguistics

Table 1 provides an overview of the corpus contents. As some assignments comprise several autonomous texts (for example a collection of several lab reports), there are more texts than assignments.

TABLE ONE ABOUT HERE

In order to derive the genre families we read all the texts in the corpus and assigned each of them provisionally to a genre category. We then grouped all those with similar purpose(s), regardless of discipline, following Swales and Martin in the primacy given to purpose. During the categorisation process we paid attention to the macrostructure of the genres and worked to differentiate genre families according to their expected stages. As Prosser and Webb (1994:131) point out, 'successful essays reveal their organisational pattern explicitly'; in our corpus organisational patterns were often revealed through the use of section headings (Author and Holmes 2009), through an introduction with a projecting move, and through a conclusion containing a move reviewing what has been achieved. Our classification was therefore grounded in the corpus data, and is open to future challenge, either from assignments collected in other contexts, or from more detailed analyses of individual genres.

The genre families we call Case Study, Critique and Explanation illustrate the way our system works. A defining feature of Case Studies is the inclusion of recommendations, while Critiques include evaluation as central, and Explanations offer a more neutral explanation. Assignments in all three genre families might include a description of a business, for example, so the determining factor for classification is not the information content of this description, but its main purpose. This allows us to compare business evaluations with book reviews, or Case Studies of businesses with Case Studies of medical patients, thus providing a big picture of university student writing across topics and disciplines.

The Genre Families Classification

Table 2 describes each of the 13 genre families identified in terms of their purpose and generic structure. The first column gives labels for each family. These were inspired by the Systemic Functional literature (e.g. Recount, Explanation), by the New Literacies literature (Lea and Street 2000) (Empathy writing), by academic disciplines (Case Study, Essay, Problem Question, Research Report, Exercise, Literature Survey, Proposal), or were simply chosen as suitable superordinate terms (the Critique genre family includes reviews and evaluations, for example).

The second column first gives the educational or social purpose; this may include an assessment purpose such as 'to demonstrate understanding' to examiners, as well as a broader pedagogical purpose such as 'to develop understanding' in students. The second paragraph indicates the generic structure or schematic structure through which the genres unfold. The stages are fairly general, and descriptions of specific genres will vary in the detail of these stages, but they are important for distinguishing between genre families. The only genre family whose members do not share a common generic structure is Empathy Writing.

We know from the interviews we conducted with university lecturers that some genres are designed to prepare students for similar writing in their future professional lives. Where genres approximate to professional writing, the genre network is identified in the third paragraph of the second column. This also contains observations about how some genres may be embedded or reappear in other genres, forming 'genre sets' (Devitt 1991). An important purpose of some of the less complex genres is to prepare students for the more elaborate genres encountered later in their education.

Thus a lab report in the Methodology Recount family might be recontextualised as a discrete component of a Research Report which also includes other sections; the nature of the experiment reported might be very different, but the lab report component of the Research Report remains similar in structure and purpose to the lab report as an autonomous assignment. Research Reports may also contain stages that correspond to Literature Surveys; similarly, Explanations may be embedded in Critiques.

TABLE TWO ABOUT HERE

Finally in the third column are examples of genres that belong to each family. The labels for these are typically taken from the discourse community, though we have modified some to capture their generic structure and purpose to avoid the pitfall of earlier classification studies which relied on departmental naming practices. We have distinguished between business explanations, business evaluations and company reports, for example, all of which might be labelled 'case studies' or 'reports' in the disciplinary community. In our system, the first of these genres explains how a business works, the second may offer a critical assessment of a business model, and the third is forward looking, beginning with an executive summary and including specific recommendations for business strategy.

The Variety of Genre Families across the University

The student writing guide by Creme and Lea (1997) suggests that 'one of the most difficult things to learn about being a university student is how to tackle the variety of different written assignments that you will be asked to complete throughout the course' (1997:25). This variety applies more to some disciplines than others. For instance, a comparison of History and Engineering shows History students writing

essays and book reviews, while Engineering students face at least 15 different genres (Author 2008). Table 3 shows how the spread of genre families varies across disciplinary groups in the BAWE corpus.

TABLE THREE ABOUT HERE

Essays appear in all groups, endorsing Warburton's view that 'whatever you study, at some point you will be asked to write an essay' (2006:7). While they represent more than 80% of assignments in Arts and Humanities, a far wider range of genres is required of students in the Physical and Life Sciences, a fact often ignored by the authors of academic writing textbooks, who tend to emphasise the development of 'essayist literacy' (Tribble 2009:411) and focus on the soft pure genres at the expense of science, engineering and professional genres (Gillett and Hammond 2009). The claim in Thoreau's textbook, for example, that 'if you know about two essay genres, you will have a good foundation for tertiary study' (2005:29), is at odds with the preponderance of Methodology Recounts in the BAWE science groupings, and the high numbers of Case Studies and Critiques in the Life Sciences and the Social Sciences.

In Table 4 we see that while Essay is the largest category at all levels, there are more Essays and Explanations in the corpus at level one; significantly more Methodology Recounts in levels one and two; more Design Specifications, Empathy Writing and Research Reports at level three; and more Case Studies, Proposals and Critiques at level four. The numbers here are indicative rather than statistically representative, as mentioned previously. The findings for level four are also affected by the prevalence of Case Studies among the assignments collected from the graduate Page 17 of 34

intake medical school, and the fact that we did not include Masters dissertations in the corpus (most of which would belong in the Research Report genre family).

TABLE FOUR ABOUT HERE

It is also possible to infer pedagogical reasons for these patterns of distribution, however. Explanations are intended to demonstrate knowledge and develop understanding of an entity, issue or method, and are therefore particularly suitable for students embarking on a new course of study. They feature heavily in science disciplines, including those, such as agriculture, which are not standard school subjects. Critiques differ from Explanations in that they include a discipline-specific evaluative component indicative of higher levels of study and greater command of the subject matter. Design Specifications and Empathy Writing are very much geared towards future employment, and are therefore most relevant to final-year undergraduates; Design Specifications address design and manufacturing needs, while Empathy Writing provides practice in communicating with a lay readership outside the confines of the university. Design Specifications and Methodology Recounts are also stepping stones towards the more advanced Research Report, which is likely to include experimental components. Case Studies and Proposals reflect the professional orientation of many Masters courses, where workplace genres often replace the more pedagogical genres such as the Essay, which rarely occur outside the academy. Further research on genre mapping (cf Custance 2006) is needed to explain how these trends are realised in specific courses of study.

Figure 1 shows how the genre families are distributed across the corpus by both disciplinary group and level of study. In addition to the general trends in each disciplinary group towards greater genre family variation at each successive level of

study, we can see the dominance of Essays in Arts and Humanities (AH) as well as in Social Science (SS), compared to the significant role of Explanations in Life Sciences (LS), and of Design Specifications in Physical Sciences (PS).

FIGURE ONE ABOUT HERE

Of course much more work could be done here to explore the complex intertextualities among university assignments, across disciplines and years of study. Remnants of earlier texts may surface in later texts, and rhetorical structures may replicate themselves (Devitt 1991). How the structures of occluded genres emerge and stabilise is an intriguing question, given that students have little access to exemplars of the genre other than their own earlier attempts. Many genres in the initial stages of higher education are likely to be transformations of school genres, influenced, perhaps, by the rhetorical patterns of instructional material, although course outlines and writing task prompts may not in fact play much part in genre formation, particularly where, as Haggis (2006:524) describes, they are insufficiently explicit to usefully inform the novice writer.

Implications and conclusions

Gillett and Hammond (2009) complain of the relatively narrow range of activities and techniques covered in study skills manuals, and the lack of 'comment or advice on the purpose and function of the wide range of academic activities demanded of students (in the name of assessment) in their various subjects of study' (2009:112). Tribble (2009:416) echoes this criticism in his comparison of 27 popular academic writing textbooks: 'For students who face the challenge of writing extended, factual, evidence-based and disciplinary specific texts, there is still relatively little on the market'. This neglect of important pedagogic higher education genres is probably at

Page 19 of 34

Manuscripts submitted to Applied Linguistics

least in part due to the failure of applied linguists to describe actual genres in as extensive a manner as Australian accounts of pedagogic genres in primary and secondary schools.

The classification of the BAWE corpus texts into thirteen genre families offers a breakthrough in terms of the research methods used to develop university-wide classifications of student writing. Having drawn on tutors, students and departmental documentation to develop an emic understanding of the educational purposes of written assignments, we examined several thousand texts. Rather than focusing on individual genres and disciplines, our classification draws attention to the similarities and differences among assessed work across disciplines and disciplinary groups.

In curriculum terms, our classification not only suggests ways of providing for the writing instruction needs of students when several disciplines are represented within the same class, but also suggests ways in which educators working within or across disciplines can create assessment pathways for their students, using less complex genres as a gateway to the more elaborate genres in which they may be embedded. In these ways writing development and assessment may become more manageable for EAP teachers, for those involved in benchmarking exercises across faculties, and for others engaged in English medium education in Britain and internationally.

Moreover, an understanding of the classification and distribution of genre families is essential for effective investigation of the BAWE corpus by teachers, textbook writers and researchers. We know that academic language varies significantly with genre and with discipline (Author 2009), and for these reasons, the genre family and discipline of each assignment in the corpus are provided in its file header, and can be viewed and used to filter corpus queries, for instance using *Sketch* *Engine* (3). In addition to searching online via the Sketch Engine open site, applied linguists can request the entire corpus from the Oxford Text Archive (4) and use their own corpus search techniques. In these ways further research on the corpus can substantially reduce the occluded nature of student assignment genres.

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Endnotes

1. The British Academic Written English (BAWE) corpus was developed at the Universities of Warwick, Reading and Oxford Brookes under the directorship of Author and Author (formerly of the Centre for Applied Linguistics [previously called CELTE], Warwick), Paul Thompson (Department of Applied Linguistics,

Reading) and Paul Wickens (Westminster Institute of Education, Oxford Brookes), 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. We are grateful to the students who contributed their work, without which the corpus would not exist.

2. The Michigan Corpus of Upper-level Student Papers (MICUSP) is currently the only other partially comparable corpus: it is smaller (around 830 texts and 2 million words) and only contains assignments by final-year undergraduates and graduate students.

3 . Kilgarriff, Rychly, Smrz and Tugwell (2004) describe *SketchEngine*, available at http://www.sketchengine.co.uk/open/.

4. The British Academic Written English (BAWE) corpus is resource #2539 in the Oxford Text Archive: http://ota.ahds.ac.uk/headers/2539.xml.

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Table 1. Overview of BAWE Corpus Holdings

| | | Level 1 | Level 2 | Level 3 | Level 4 | Total |
|---|-------------|-----------|-----------|-----------|-----------|---------|
| Arts and Humanities | Students | 101 | 83 | 61 | 23 | 2 |
| Applied Linguistics, English, | Assignments | 239 | 228 | 160 | 78 | 7 |
| Philosophy, History, Classics, | Texts | 255 | 229 | 160 | 80 | |
| Archaeology, Comparative American Studies, Other | Words | 468,353 | 583,617 | 427,942 | 234,206 | 1,714,1 |
| Life Sciences | Students | 74 | 71 | 42 | 46 | - |
| Biological Sciences, Agriculture, | Assignments | 180 | 193 | 113 | 197 | |
| Food Sciences, Psychology, | Texts | 188 | 206 | 120 | 205 | , |
| Health and Social Care, Medical Science | Words | 299,370 | 408,070 | 263,668 | 441,283 | 1,412, |
| Physical Sciences | Students | 73 | 60 | 56 | 36 | , |
| Engineering, Chemistry, Computer | Assignments | 181 | 149 | 156 | 110 | |
| Science, Physics, Mathematics, Meteorology, Cybernetics & Electronics, Planning, Architecture | Texts | 181 | 154 | 156 | 133 | |
| | Words | 300,989 | 314,331 | 426,431 | 339,605 | 1,381, |
| Social Sciences | Students | 85 | 88 | 75 | 62 | 3 |
| Business, Law, Sociology, Politics, | Assignments | 207 | 197 | 162 | 202 | 7 |
| Economics, Hospitality Leisure & Fourism, Management, Other, Anthropology, Publishing | Texts | 216 | 198 | 166 | 202 | 7 |
| | Words | 371,473 | 475,668 | 440,674 | 688,921 | 1,999,1 |
| Total students Total assignments Total texts | | 333 | 302 | 234 | 167 | 10 |
| | | 807 | 767 | 591 | 587 | 27 |
| | | 840 | 787 | 602 | 620 | 28 |
| | Total words | 1,440,185 | 1,781,686 | 1,558,715 | 1,704,015 | 6,506,9 |

1. In Social Sciences 3 students and 9 texts are of unknown level

Table 2. The Classification of Genre Families

| Genre Families | Educational purpose/ Generic structure/ Genre network | Genres (examples) |
|----------------------------|---|--|
| 1. Case Study | to demonstrate/develop an understanding of professional practice through the analysis of a single exemplar | business start-up company report |
| | description of a particular case, often multifaceted, with recommendations or suggestions for future action | investigation report organisation analysis patient case notes |
| | typically corresponds to professional genres (e.g. in business, medicine, and engineering) | patient report single issue tourism report |
| 2. Critique | to demonstrate/develop understanding of the object of study and the ability to evaluate and / or assess the significance of the object of study | academic paper review approach evaluation business / organisation evaluation |
| | includes descriptive account with optional explanation, and evaluation with optional tests | financial report evaluation interpretation of results |
| | may correspond to part of a research report, professional design specification or expert evaluation | legislation evaluation policy evaluation product/ building evaluation |
| | R | project evaluation review of a book/ film/ play/ website system evaluation |
| 3. Design Specification | to demonstrate/develop the ability to design a product or procedure that could be manufactured or implemented | teaching evaluation application design building design database design |
| | typically includes purpose, component selection, and proposal; may include development and testing of design | game design label design |
| | may correspond to a professional design specification, or to part of a proposal or research report. | product design system design website design |
| 4. Empathy writing | to demonstrate/develop understanding and appreciation of the relevance of academic ideas by translating them into a non-academic register, to communicate to a non-specialist readership | expert information for journalist expert advice to industry expert advice to lay person |
| | may be formatted as a letter, newspaper article or similar non-academic genre | information leaflet job application letter (e.g. reflective letter |
| | may correspond to professional writing | to a friend; business correspondence) newspaper article |
| 5. Essay | to demonstrate/develop the ability to construct a coherent argument and employ critical thinking skills | challenge commentary |
| | introduction, series of arguments, conclusion; may be discussion (issue, pros/cons, final position); exposition (thesis, evidence, restate thesis); factorial (outcome, conditioning factors); consequential (input, consequences, restatement); challenge (opposition to existing theory); or commentary (series of comments on a text) | consequential discussion exposition factorial |
| | may correspond to a published academic/specialist paper | |
| 6. Exercise | to provide practice in key skills (e.g. the ability to interrogate a database, perform complex calculations, or | calculations data analysis |

| | explain technical terms or procedures), and to consolidate knowledge of key concepts data analysis or a series of responses to questions | mixed (e.g. calculations + essays) short answers stats exercise |
|------------------------------|--|--|
| | may correspond to part of a methodology recount or research report | |
| 7. Explanation | to demonstrate/ develop understanding of the object of study; and the ability to describe and/or account for its significance includes descriptive account, explanation may correspond to a published explanation, or to part of a research report or professional design specification | business explanation job description instrument description methodology explanation organism / disease account product development report site/ environment report species / breed description system/ process explanation account of natural phenomenon taxonomy report working farm report |
| 8. Literature Survey | to demonstrate/develop familiarity with literature relevant to the focus of study includes summary of sources relevant to the focus of study and varying degrees of critical evaluation may correspond to a published paper or anthology, or to part of a research report | Analytical bibliography annotated bibliography anthology literature review literature overview research methods review review article |
| 9. Methodology Recount | to demonstrate/develop familiarity with disciplinary procedures, methods, and conventions for recording experimental findings describes procedures undertaken by writer and may include Introduction, Methods, Results, and Discussion sections, or these functions may be realised iteratively may correspond to a section within a research report or research report | computer analysis report data analysis report experimental report field report forensic report lab report materials selection report program development report |
| 10 Narrative Recount | to demonstrate/develop awareness of motives and/or behaviour in individuals (including self) or organisations fictional or factual recount of events, with optional comments may correspond to published literature, a professional proposal or a report, or to part of a research report | accident report biography character outline plot synopsis recount of literature search reflective recount report on disease outbreak short story urban ethnography |
| 11. Problem Question | to provide practice in applying specific methods in response to simulated professional problems problem (may not be stated in assignment), application of relevant arguments or presentation of possible solution(s) in response to scenario problems or situations may resemble or be based on real legal, engineering, accounting or other professional cases | law problem question logistics simulation medical problem |
| 12 Proposal | to demonstrate/develop ability to make a case for future action includes purpose, detailed plan, persuasive argumentation | book proposal building proposal business plan catering plan |

| | may correspond to professional or academic proposals | legislation reform marketing plan policy proposal research proposal |
|------------------------|--|--|
| 13. Research Report | to demonstrate/develop ability to undertake a complete piece of research including research design, and an appreciation of its significance in the field | research article research project topic-based dissertation |
| | includes student's research aim/question, investigation, links to other research in the field | |
| | may correspond to a published experimental research article or topic-based research paper | |

Table 3. Distribution of Genre Families by Disciplinary Group

| | Arts and Humanities | Life Sciences | Physical Sciences | Social Sciences | Total |
|----------------------|------------------------|------------------|----------------------|--------------------|-------|
| Case Study | 0 | 91 | 37 | 66 | 194 |
| Critique | 48 | 84 | 76 | 114 | 322 |
| Design Specification | 1 | 2 | 87 | 3 | 93 |
| Empathy Writing | 5 | 19 | 9 | 3 | 36 |
| Essay | 601 | 127 | 65 | 444 | 1237 |
| Exercise | 14 | 33 | 49 | 18 | 114 |
| Explanation | 9 | 117 | 65 | 23 | 214 |
| Literature Survey | 7 | 14 | 4 | 10 | 35 |
| Methodology Recount | 18 | 157 | 170 | 16 | 361 |
| Narrative Recount | 10 | 25 | 21 | 19 | 75 |
| Problem Question | 0 | 2 | 6 | 32 | 40 |
| Proposal | 2 | 26 | 19 | 29 | 76 |
| Research Report | 9 | 22 | 16 | 14 | 61 |
| Total | 724 | 719 | 624 | 791 | 2858 |

Table 4. Distribution of Genre Families by Level

| | 1 | 2 | 3 | 4 | Total |
|----------------------|-----|-----|-----|-----|-------------------|
| Case Study | 26 | 30 | 35 | 103 | 194 |
| Critique | 78 | 79 | 67 | 96 | 322 ¹ |
| Design Specification | 24 | 19 | 35 | 15 | 93 |
| Empathy Writing | 10 | 3 | 18 | 5 | 36 |
| Essay | 416 | 360 | 264 | 191 | 1237^{1} |
| Exercise | 28 | 28 | 31 | 27 | 114 |
| Explanation | 81 | 62 | 34 | 37 | 214 |
| Literature Survey | 10 | 6 | 9 | 10 | 35 |
| Methodology Recount | 120 | 127 | 49 | 65 | 361 |
| Narrative Recount | 18 | 19 | 21 | 17 | 75 |
| Problem Question | 12 | 19 | 6 | 3 | 40 |
| Proposal | 10 | 19 | 11 | 35 | 76 ¹ |
| Research Report | 7 | 16 | 22 | 16 | 61 |
| Total | 840 | 787 | 602 | 620 | 2858 ¹ |

1. 9 texts are of unknown level (2 Critiques, 6 Essays and 1Proposal)

http://mc.manuscriptcentral.com/appling

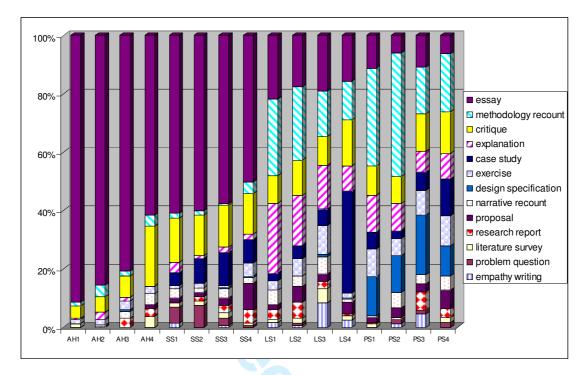


Figure 1 Genre family distribution by discipline and level

AH1 = Arts & Humanities Level 1; AH2 = Arts & Humanities Level 2, etc.