

# Chinese Students' Writing in English: Using Visuals and Lists

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**Abstract.** In the UK, Chinese students now comprise the largest international student group; yet, little is known about their university-level writing. This study draws on a large corpus of undergraduate student writing from UK universities. It explores Chinese students' written assignments in English, contrasting these with assignments from British students across a range of university disciplines. The paper points to the L1 Chinese students' higher use of visuals, lists and formulae in their discipline-specific writing when compared to the comparison group of L1 English students.

**摘要.** 目前, 中国留学生已构成了英国最大的国际学生群体。然而, 关于中国留学生在大学层次上的写作情况却鲜为人知。基于英国大学本科生的写作语料, 本研究分析了中国留学生的书面作业, 并与不同学科的英国大学生的作业进行比较。文章指出, 就学科内写作而言, 同英国以英语为母语的大学生相比, 中国学生使用图型、列表和公式的频率更高。

## Introduction: Chinese students in the UK

The number of international students in the UK has been rising rapidly in recent years and currently stands at over 600,000 per year, estimated to be worth 8.5 billion pounds to the UK economy (The British Council, 2013). Within the group of all non-UK domiciled students, the single greatest provider of international students to the UK is the PRC, with Malaysia, Hong Kong, and Taiwan also among the top ten non-EU senders. Hence, Chinese people now comprise the largest single overseas student group in the UK with more than 105,000 Chinese students registered at all UK educational institutions in 2012 (The British Council, 2013), representing a year on year increase.

Once in the UK, Chinese students must adapt to the writing required, overcoming difficulties such as tutors' lack of articulation as to exactly what they require (Crème & Lea, 2003; Lillis, 1997); tutor and students' varied ideas of what a particular assignment entails (Lea, 2004); and different perceptions of what constitutes 'good writing' (Lillis & Turner, 2001). At university, assignments are framed within a particular discipline and, in contrast to previous assumptions of academic writing being a monolithic 'one size fits all', many researchers have emphasized how university students have to learn to write in ways prescribed by their discipline in order to have their voices recognized (Harwood & Hadley, 2004; Hewings, 1999). To achieve this goal, a high level

of competence in English language is required, including awareness of discipline-specific conventions (Santos, 2014).

Given the scale of the presence of Chinese students in UK universities and the difficulty of the task ahead of them, it might be expected that there would be a considerable body of corpus research into this group's academic writing at all levels. However, the majority of research studies are limited to the short argumentative essays within learner corpora (cf. Paquot, 2010) rather than the longer, discipline-specific writing at undergraduate or postgraduate level. In addition, most corpus studies on student writing contrast first language (L1) and second language (L2) student groups in terms of what is *missing* or *deficient* in the writing of the latter. ETiC is unusual in taking a stand against this deficit model and promoting a range of acceptability in language use (e.g. see Issue 5 on the acceptability of writing in English as a Lingua Franca [ELF]). Based on the findings from the current corpus study, this paper similarly proposes that researchers, lecturers and EAP tutors could consider expanding the notion of what constitutes 'good' student writing in order to encompass a range of intercultural styles.

The next section provides an overview of the data and methodology followed and the following section explores one aspect of the findings: the high use of visuals, lists and formulae by Chinese students.

## Data and methodology of corpus linguistics

The data for this study was extracted from the British Academic Written English (BAWE) corpus (Nesi & Gardner, 2012). This corpus (or collection of texts) was collected between 2000 and 2008 at the universities of Oxford Brookes, Reading, Warwick and Coventry in the UK and comprises around 6.5 million words within approximately 2,900 student assignments from over 30 disciplines and four levels of study

(three undergraduate years and one Masters year). All writing in BAWE is deemed ‘proficient’ student writing, defined as graded assignments receiving the UK Honours degree classifications of Upper Second (‘merit’) or First (‘distinction’). The data was narrowed to texts from undergraduate L1 Chinese students in a range of disciplines (notably Biology, Economics, Engineering) whose secondary education was mainly in their home country. The same conditions were applied to the L1 English students, resulting in the corpora below.

	L1 Chinese corpus ‘Chi123’	L1 English corpus ‘Eng123’
Number of words	279,695	1,335,676
Number of texts	146	611
Number of students	45	70

**Table 1.** Number of words, texts and students per corpus  
(NB ‘Chi123’ denotes the Chinese corpus, undergraduate years 1, 2 and 3.)

The assignments extracted from the BAWE corpus are primarily investigated through the methodology of corpus linguistics. This enables the comparison of one corpus with another, larger, reference corpus: in this case the L1 Chinese corpus was compared with the larger L1 English corpus. The main means of exploring each dataset in the study was through the corpus linguistic technique of keyword analysis. ‘Keywords’ are those words or n-grams (two or more consecutive words) which occur statistically more frequently in a small corpus than in a larger ‘reference’ corpus, relative to the total number of words in each corpus. A keyword is thus a word which occurs with unusual frequency in a text, or “what the text ‘boils down to’” (Scott & Tribble, 2006, p.78), and as such offers some insight into the differences between two corpora. Many of the keywords uncovered were from semantically coherent areas, and these were grouped together into ‘key categories’.

Four key categories were uncovered through the keyword analysis:

1. connectors (e.g. *on the other hand, last but not least*);
2. informal items (e.g. *lots, a little bit*);

3. use of the first person plural (e.g. *we, we also need to*); and
4. references to data or visuals within the text (e.g. *the figure, according to the*).

For reasons of space, the remainder of this paper focuses on the final of these key categories (a description of the full study and findings are available in Leedham, 2011, 2015).

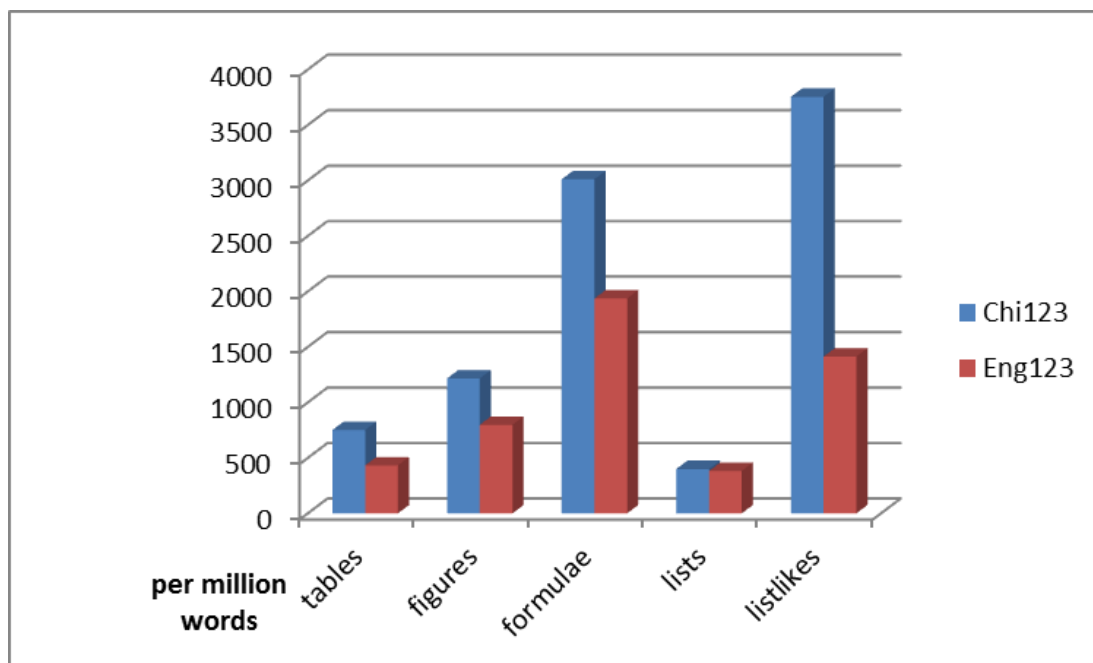
### Findings: High use of visuals, lists and formulae

Student use of lexical items relating to visuals, lists and formulae has not previously been reported on in the student writing literature. This category includes numbers (whether single digits or lengthy numerals), formulae (mathematical, chemical or other), and references or directives to data items (e.g. *according to the + figure/appendix/equation [or eq], refer to (the) + figure/table + [number]*). Here, a ‘table’ consists of any graphic presented using rows and columns while a ‘figure’ covers any graph, diagram, image, picture, or drawing. A ‘list’ is a regular list of noun groups or similar fragments of prose, whereas a ‘listlike’ is formatted as a list but the list items are given in complete sentences.

Examples of prose referring to the use of visuals are given below:

1. According to the program and *refer* to the *figure* 4.1.1, it is easy to find... (Chi123, Engineering).
2. As shown in *Figure* 3, IHG even shows a better performance than... (Chi123, HLTM).
3. *According to the* 3 sets of data calculated above... (Chi123, Food Science).

The existence of frequent references to visuals does not in itself mean the Chinese students use more of these features in their assignments than the English students: it could be that the former are simply naming and referring to external visuals using a small set of lexical items which thus appear many times and become keywords. The next step in the study was to count the number of tables, figures, formulae, lists and listlikes. This revealed that the Chinese students made greater use of all of these features than the British students (Figure 1).



**Figure 1.** Visuals and lists in the two corpora  
(Significantly greater use by Chinese students for all features except lists,  $p < .0001$ )

One possible explanation for this higher usage of visuals and lists is that employing a table, figure, list or listlike to present information in an assignment is an attractive option for Chinese students since it reduces the quantity of connected (L2) prose required. A great deal of information may be given succinctly in a table or figure, resulting in shorter wordcounts; similarly, lists and listlikes reduce the need for connecting chunks and again reduce the wordcount. More positive explanations for the differences are that visuals and lists are viable alternative means of giving the required information, that they do so concisely, and that they also help visual readers to process information.

Detailed exploration of writing within Biology, Economics and Engineering suggests that using visuals and lists are different, yet

equally acceptable, ways of writing assignments. In a follow-on interview study, lecturers in Biology, Economics and Engineering suggest that visuals and lists are highly favoured in these particular disciplines (see also Leedham, 2012). For example, one Biology lecturer commented that students should 'do whatever it [takes] to make it clearer... tables, pictures, dividing into subsections... whatever helps you'. This degree of flexibility allows for a wide range of variation in answering the assignment question, enabling students to present their data within a table if this is more appropriate, or to provide an image and prose in explaining the method they used in an experiment. An open-minded approach to the display of knowledge and use of a range of multimodal resources to persuade the reader was prevalent among the lecturers interviewed.

## Conclusion

The keyword analysis of the two student corpora suggested that the use of visuals and lists is a significant area of difference in the writing of L1 Chinese and L1 English students. Given the challenges involved in writing at undergraduate level for all students (e.g. uncertainties over the rubric, the wide range of genres required, the discipline specific lexis and disciplinary conventions required) and the additional difficulties for L2 students, it is unsurprising that a range of strategies are developed. Since the writing of both student groups has been judged by discipline specialists to be of a high standard, it seems that differences in the use of visuals and lists illustrate the broad range of acceptability of these features at undergraduate level.

Important features for discipline lecturers – and also EAP tutors – are a level of reflexivity in exploring the ‘taken-for-granted’ procedures and practices in order to demystify academia (Lillis, 2012, p. 245), as well as a flexible attitude in considering what might be acceptable within unfamiliar disciplines and genres (see Leedham, 2015, for further discussion). This open-mindedness moves beyond lexicogrammatical considerations (e.g. the acceptability, or choice, of passive or active voice) to also exploring assignments and multimodality (for instance, the acceptability of a table to display results or presenting a conclusion as a bulleted list). Breadth of vision allows tutors to recognise different ways of achieving the same end goal in writing, and to embrace the different cultural backgrounds L2 English students bring to their studies. It is hoped that this article can help in encouraging this process.

## Note

The data in this study come from the British Academic Written English (BAWE) corpus, developed at the Universities of Warwick, Reading and Oxford Brookes under the directorship of Hilary Nesi and Sheena Gardner (formerly of the Centre for Applied Linguistics [previously called CELTE], Warwick), Paul Thompson (formerly of the Department of Applied Linguistics, Reading) and Paul Wickens (Westminster Institute of Education, Oxford Brookes), with funding from the ESRC (RES-000-23-0800).

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