

## Review – Learning the Language of Dentistry

[CROSTHWAITE, P. & CHEUNG, L. (2019). *Learning the Language of Dentistry: Disciplinary corpora in the teaching of English for Specific Academic Purposes*. Amsterdam/Philadelphia: John Benjamins Publishing Company]

Although it is clear that corpus linguistics offers second language teachers exciting new opportunities, incorporating corpora into the language classroom in an economical, effective and learner friendly way is less straightforward. In *Learning the Language of Dentistry*, Peter Crosthwaite and Lisa Cheung provide a precise insight into their own experience of a corpus-driven approach, based on linguistic analyses of corpora of authentic academic texts that were carefully selected as representative of the target discipline.

The study focuses on English for Specific Academic Purposes (ESAP) in relation to dentistry discourse and the area of academic writing. Prior to writing the book, the authors had taken on the challenge of redesigning and redeveloping a new ESAP course for students of the dentistry faculty at the University of Hong Kong in an attempt to meet their specific academic and occupational needs. In contrast to English for General Academic Purposes (EGAP) courses (the other subdomain under English for Specific Purposes), this approach is aimed at enhancing the student's ability to quickly acquire the language specifics of dentistry discourse. The problems they needed to solve lay in how to bridge the gap between the too-general learning outcomes of an EGAP course and the very specific and unique communication requirements and expectations of the target discipline. Another difficulty related to the commonplace problem of finding a methodology that could substitute for language tutors' lack of theoretical knowledge in natural sciences and clinical expertise, and lack of experience with writing or, at least, reading scientific texts in the field of dentistry. With this in mind, they chose Data Driven Learning (DDL) pedagogy as the best approach to achieve their goals, through the methodology of corpus linguistics and with the aid of its freely available tools and applications.

The study is divided into two sections, which are preceded by a comprehensive introduction to the above-mentioned "root of the problem". The first section of the book deals with the process of creating and analysing corpora in order to explore language features that typically occur in three key genres of dentistry – experimental research articles, case reports and student/professional research reports within the field of Dental Public Health. It is worth mentioning that authentic patient record histories were also considered to be very relevant to the goals of this analysis, however due to the legal and ethical problems associated with accessing this kind of data, it was not possible to utilize them. The chosen methodology combines Douglas Biber's corpus-based multidimensional analysis

approach, analyses of Ken Hyland's metadiscourse features (concerning a writer's presentation of stance in terms of hedging, boosting and self-mentions), and mapping disciplinary versus non-disciplinary senses of lexical devices within the case report genre through the use of Natural Language Processing (NLP) techniques.

The results of the analysis of experimental research articles confirm the crucial role of the passive construction in dentistry research writing, which has a significant influence on selection of the appropriate verb and tense (including past and perfect tense), pronominal forms, participles and other forms. The findings indicate the optimal way for learners to achieve the desired linguistic competence, while drawing their attention to those verbal chunks that are frequently associated with the passive voice (e.g. "considered, found, used"). The second methodological approach lays out the significant differences between student and professional Dental Public Health research reports based on three comparative and contrastive analyses of the corpora. According to the results, professional writers choose language devices that are more informative, objective and authoritative, whereas novice writers often tend to hedge and boost their claims, and use a wider range of lexical devices (predominantly adverbs and adjectives). This kind of output, generated by corpus linguistics tools, can play a significant role in providing guidance to learners on how to express their ideas in an appropriate way and in accordance with the rhetorical practices of professional writers in their discipline. The third analysis relates to lexical features of dentistry case reports via the use of automated NLP techniques. The findings reflect significant differences in the use of disciplinary and non-disciplinary terms across case report and dentistry research writing and the specific function of case reports in reporting states, materials, patient conditions and clinical procedures. The L2 novice writer must be aware of sentiment and semantic differences between general and disciplinary uses of terms.

The aim of the second section is to describe how the results of the analyses were incorporated into the pedagogical process. Despite the unexpected failure of the initial attempt to involve the corpora and a simple corpus tool into the ESAP course, the authors persevered with these innovations via the reorganisation of the teaching procedure, improving the corpus query platform and implementing scaffolding elements into the process of structuring in-class and out-of-class activities. This DDL-enhanced teaching of dentistry writing includes bottom-up activities with top-down structural and genre-focused tasks that contain features of Problem-Based Learning. In addition, the authors mention their previous experience of successfully designing similar DDL activities based on other corpus tools, such as *AntConc*, *SketchEngine* and *Sketch Engine for Language Learning (SKELL)*. The authors go on to provide insights into how the dentistry students actually engaged with the corpus query platform by means of a statistical evaluation of their query inputs. The section concludes with some reflections on practice and

suggestions on the future role and use of corpora, especially in relation to advances in new technologies.

This monograph is highly recommended reading for all Language for Specific Purposes tutors who prefer to be guides for their students with a relevant and functional compass instead of being leaders on an uncharted land with a general prescriptive map.

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