A Critical Discourse Analysis of Medical English Course Syllabuses

Haiying Liang
Institute of Education, University College London, London, U.K.

Abstract—This article presents an analysis of the teacher-student power relationship embedded in three English for Medical Purposes (EMP) course syllabuses at a case study university. The study employs Fairclough’s critical discourse analytical approach to examine the linguistic elements of the syllabuses, including verbs, modality, and quantifying adjectives. The findings reveal that the syllabuses textually represent an unequal power relationship, with the teachers holding significant authority over the students. This finding is significant as it contradicts some recommendations that ESP teaching should avoid a teacher-centred approach. By analysing the linguistic elements of the syllabuses, this study provides valuable insights into the power dynamics in EMP courses and highlights the importance of critically examining course materials for equitable and student-centred learning environments.

Index Terms—critical discourse analysis, English for medical purposes, course syllabuses

I. INTRODUCTION

Many different approaches to teaching English as a foreign language have been introduced over the last century. Looking back at these approaches, we could assert that many of the conventional teaching approaches focused on teachers with an emphasis on input-oriented course design, where students are required to process input by demonstrating they have understood a target element in input. However, this approach pays little attention to learners’ individual needs and differences. It was not until the emergence of humanistic psychology in the 1950s that some teaching approaches started to transit from teacher-centred to learner-centred.

A teacher-centred approach has its roots in behaviourism (Kember, 2000), which treats learners as passive recipients of knowledge without being involved in an active learning process (Huba & Freed, 2000). By contrast, the learner-centred approach empowers learners to decide what to learn, how to learn and where to learn (Dasein, 2017). The teacher-centred approach is often associated with traditional teaching methods, such as lectures and rote memorization (Schunk, 2012). According to Schunk (2012), in a teacher-centred classroom, the teacher is the primary source of information and authority, and students are expected to follow instructions and comply with rules. The teacher sets the pace of learning, determines the curriculum, and evaluates student performance.

In contrast, the learner-centred approach emphasizes active learning, student autonomy, and collaboration (Weimer, 2013). According to Weimer (2013), in a learner-centred classroom, students are encouraged to ask questions, explore ideas, and participate in activities that promote critical thinking and problem-solving. The teacher acts as a facilitator, providing guidance and support, rather than simply delivering information.

In terms of research, there is evidence to suggest that the learner-centred approach can lead to improved student outcomes, including higher levels of engagement, motivation, and achievement (Lai & Vethamani, 2015). However, it’s worth noting that the effectiveness of any instructional approach may depend on a variety of factors, such as the subject matter, the goals of instruction, and the needs and preferences of individual learners (Schunk, 2012).

In ESP teaching, many scholars have argued that a learner-centred approach should be adopted because learners’ language learning needs are usually the basis of ESP course design. It is important to provide ESP learners with the opportunity to choose topics that interest them (Sharkey & Weimer, 2003).

The Chinese National Medium and Long-term Education Reform and Development Plan for the period of 2010 to 2020 promulgated by the Chinese government in 2010 clearly stated that in Chinese higher education institutions, undergraduate and postgraduate students should be encouraged to take part in the process of deciding course contents, length, location of study and assessment methods. As a result, many Chinese university teachers have adopted the learner-centred teaching approach in their classrooms (Lee et al., 2017). However, some studies (e.g., Cheng & Ding, 2021; Li, 2019; You, 2019) have revealed that many Chinese students were still accustomed to the teacher-centred approach when entering universities, which entailed challenges of adopting the learner-centred approach for them. For example, Luo and Garner (2017) found that when using the problem-based learning method – a learner-centred approach enabling students to learn a subject by solving open-ended problems – many university students had difficulty in solving problems independently without being fully instructed by teachers.

In conclusion, despite many researchers having suggested that English language teaching should be learner-centred, it would be desirable to find out which approach is currently being used in Chinese EMP classrooms and to investigate Chinese EFL medical students’ and EMP teachers’ perceptions and attitudes towards it. However, regarding this
important issue, very little research has been conducted targeting Chinese EFL medical students. Therefore, the current study investigates this issue using critical discourse analysis on three EMP course syllabuses used in a university in China.

Document analysis on three EMP course syllabuses was conducted. The main purpose of analysing three EMP course syllabuses was to examine messages about teacher-student power relationships embedded in the syllabuses of EMP courses. The two questions to be answered by analysing syllabuses were: 1) Do these courses adopt a learner-centred or teacher-centred approach? 2) Are students given flexibility in course activities and grading procedures?

Three syllabuses of the EMP courses that are provided as optional courses for undergraduate students in Clinical Medicine (5-year degree) at a university in China were analysed. The syllabuses were downloaded from the university official website. The syllabuses used are all open-access documents. None of them required an application or someone’s help to gain access. The lengths of these syllabuses vary from 572 words (Illness Narrative), through 875 words (Medical Visual Culture), to 1117 words (Medical Terminology). For all courses, the tasks in each academic week are clearly outlined.

The reason for choosing these three syllabuses rather than other syllabuses is because this research focuses on examining the adequacy of the current EMP courses in preparing medical students’ English language skills for their target careers; these three courses are the only dedicated EMP courses that undergraduate students in Clinical Medicine (5-year length) can take at this university. The reason for analysing syllabuses rather than other forms of documents available at this university is that the syllabuses contain more detailed information, enabling me to analyse how teacher-student power relationship is textually represented than others. In line with the purpose of this study, only components that indicated classroom power relationships were presented: course objectives and grading procedures.

II. COURSE SYLLABUSES

A. Course Name: Illness Narrative

Course objectives: The syllabus presents the course objectives as “To provide students with a grounding in auto/biographical illness that focus on narratives that focus on aspects of the body – from cancer, HIV/AIDS to disability – by examining key theoretical and auto/biographical texts as well as biographical films; to reflect upon variants of the experience of illness in various contexts; to engage with volunteers from the Cancer Rehabilitation Society of the Chinese Anti-Cancer Association to write about their experience of living with cancer”.

Assessment: The assessment comprises “class attendance and tutorial portfolio – 20%; profile of an illness – 50%; parallel chart – 30%”. From the assessment procedures, it can be seen that 80% of the grade is based on submitted written work, which may help students develop writing skills. In addition, to accomplish these two tasks (profile of an illness – 50%; parallel chart – 30%), students are required to interview a volunteer from the Cancer Rehabilitation Society of the Chinese Anti-Cancer Association who speaks Chinese.

B. Course Name: Medical Visual Culture

Course objectives: According to the syllabus, the course objectives are “to connect and integrate across-discipline knowledge between the humanities and medicine; to learn and apply cross-disciplinary skills to solve problems; to synthesize and transfer knowledge across disciplinary boundaries through the lens of morality, ethics, socio-economic factors, cultural bias, and changing environment; to collaborate on team project and presentation; to learn the analytical techniques used by art historians and health professionals; to enhance students’ visual literacy and critical thinking skills”.

Assessment: The grading is “short paper assignments – 40%; homework (submitting blog posts and comments on the class website) – 30%; group project: presentation and final paper – 30%”.

C. Course Name: Medical Terminology

Course objectives: Helping students “learn medical terminology” and “improve their reading and communication skills in medical settings” are the objectives of this course. Reading and communication skills are stated in these course objectives.

Assessment: Grading is based on the following guideline: “attendance – 20%; quizzes – 30%; final exam – 50%”. English and Chinese are both used as language of instruction in class, while all quizzes and exam are taken in English.

III. DATA ANALYSIS

The theories and analytical techniques on which this document analysis was based were Van Dijk’s discourse semantics and ideology (Van Dijk, 1995), Fairclough’s emphasis on word choice (Fairclough, 2001), and Halliday’s functional analysis of discourse, particularly his analysis of lexical connotation (Halliday, 2004). Specifically, it involved analysing word choices, lexical connotations, modality, and quantifying adjectives.

Linguistic features of texts were analysed and then linked them with a broader issue – teacher-student power relationships – to understand the teaching approach (student-centred or teacher-centred) used in the EMP courses. Fairclough’s three-dimensional framework for critical discourse analysis (CDA) is a model that is widely used to
analyse language use in social contexts. The first dimension focuses on analysing the linguistic features of the text, such as grammar, vocabulary, and discourse structure. The purpose of this analysis is to understand how language is used to construct meaning and how it reflects power relationships and ideologies. The second dimension is concerned with analysing how the text relates to its social context. It examines how the text constructs and reproduces social practices, identities, and power relationships. The analysis of this dimension helps to uncover how language is used to perpetuate or challenge dominant discourses. The third dimension focuses on the broader social context in which the text is produced and consumed. It examines the social institutions, structures, and practices that influence the use and interpretation of language. The social analysis helps to understand how power is distributed in society and how language is used to maintain or challenge power relationships. Fairclough's critical discourse analysis has been used in educational research to analyse language use in textbooks, syllabi, and classroom interactions. Researchers may use CDA to examine how language use reflects power relationships between teachers and students, or how language use in textbooks reinforces or challenges dominant ideologies related to race, gender, or class.

Fairclough's (2001) critical discourse analytical framework (Table 1) was adopted because its three interrelated analysing processes (at the micro-, meso- and macro-level) that are tied to the three interrelated discourse dimensions suit the purpose of this part of the case study, which is to examine how the student-teacher power relationships are textually represented by syllabuses. By using all three dimensions, Fairclough's framework aims to provide a comprehensive analysis of language use and its role in constructing and reproducing social practices, identities, and power relationships. Therefore, a linguistic analysis at the micro-level was first conducted on learning objectives and grading procedures and the syllabuses were then further analysed by using the principles of ideology for a macroanalysis. The findings were structured in the three dimensions of analysis.

### IV. FINDINGS

#### A. First Dimension: A Linguistic Analysis

The linguistic analysis focused on the verbs used in ‘intended learning outcomes’ and ‘grading procedure’. In particular, it focuses on the modality of the statements on the basis of whether these verbs were transitive or intransitive. For example, the learning outcomes of Medical Visual Culture stated that learners will: “connect and integrate interdisciplinary knowledge between medicine and humanities; learn and apply interdisciplinary skills; synthesize and transfer knowledge over disciplinary boundaries; learn the analytical tools used by health professionals and art historians” (emphasis added). The verbs in this section are all transitive and show a strong modality (a category of linguistic meaning having to do with the expression of possibility), indicating certainty and strength. Moreover, the declarative mood found in these statements ignores learners’ diverse language learning needs.

Another example is the strict rules of assessment; the frequency and due dates of assignments were clearly defined, and a rubric explicitly precluded flexibility. For example, in the Illness Narratives syllabus, the use of the subjective modal verb “must” in “class attendance is compulsory and active participation in tutorials and class discussions is strongly encouraged. Before each tutorial students are required to read all of the articles in advance and prepare 2 questions and/or discussion points. The questions and discussion points must be submitted in class each week.” expresses the instructor’s authority and defines him or her as someone with power over the students instead of someone who shares the power. In addition, the use of the adjective “compulsory” and the quantifying adjective “all” designates the instructor as the decision-maker regarding the curriculum; it implies that the instructor, not the learners, knows the elements that are crucial for the students’ learning. The quantifying adjective with a fixed grading percentage seemed to deny the students any power in the decision-making process.

#### B. Second Dimension: Text Production and Consumption Analysis

In terms of text production, the verbs used indicate that the syllabuses are constructed using a politically acceptable approach. This reveals the fact that syllabuses may only get official approval if they are written using uncontroversial
language. Although teachers may expect the language of syllabuses to be constructed using declarative tones, it may be a potential problem because it may be inconsistent with the diverse needs among learners. Throughout the learning objectives, there is little acknowledgement of the diverse nature of learners’ language learning needs. If the consumption (use) of these syllabuses is guided by its language, it may influence the achievement of course objectives.

C. Third Dimension: Ideology Analysis

Given the nature of transitive verbs and the declarative tones in syllabuses, the ideology was taken within the syllabuses as being teachers’ power over students. In many parts, the discourses in learning outcomes and grading procedures are framed with students’ obedience as the default. Moreover, the Medical Visual Culture syllabus seems to be an extreme example of teaching language in the target culture (English) because the readings and course topics are all related to western culture without any Chinese counterparts. For example, “the Renaissance period” and “Broad Street Pump Outbreak” are entirely western, whereas Chinese culture in medical visual arts is clearly absent in the syllabus, even though the target students are mostly Chinese speakers and there has been a long history of Chinese medical visual arts (Chen, 2019). In addition, the declarative language used in this syllabus indicates a certainty of teaching contents and schedule; thus, the target students might not have been given the flexibility in deciding learning contents.

The linguistic analysis on a micro-level showed that all three EMP syllabuses were written in a declarative voice with predominantly transitive verbs and in a modality that indicates strong certainty. The ideological analysis on a macro-level reveals an unequal teacher-student power relationship in the EMP class that is textually represented in the discourse of these syllabuses. The reason might be that people tend to write in certain genres (Nagao, 2018). When today’s instructors were students, they were taught by their professors using traditional, teacher-centred syllabuses. When they became instructors, the university they are working at would give them a syllabus format for them to follow. As a consequence, the syllabuses they develop may be based on a given convention, producing a situation where instructors are unaware of the message these syllabuses may convey to the readers. According to Fairclough (2001), power relationship could be reinforced with the conventions being frequently repeated and thus undermined the possibility of making changes to the conventions.

Auerbach (2000) argued that teachers are pivotal in fostering a participatory learning community. Many students, including Asian students, instead of being independent thinkers who are aware of the rationale behind their behaviours, tend to be obedient and wait for the teacher’s instructions (Zhu & O’Sullivan, 2020). Regardless of whether they are aware of this, the dynamics of power are integral to daily classroom activities. Even when teachers try to enhance the degree of learner participation by using dialogue and negotiation, their attitudes critically influence their classroom decisions. Thus, it is meaningful and important for teachers to become aware of their standpoints. If language instructors acknowledge the power structures embedded in the text and reflect on their own syllabuses to determine the teaching philosophy underlying formal, traditional syllabuses and their choice of words, then they may be able to provide their students with more power, enabling them to become participants in their own learning process, and foster their critical thinking and creativity, all of which are emphasised as essential skills in the Student Handbook of this university (2019).

Since the concept of learner centeredness (Hutchinson & Waters, 1987) was developed in foreign language teaching, many scholars (Literat, 2017; Bremner, 2019; Ibrahim, 2019) have critiqued traditional teacher-centred pedagogy, and suggested that ESP courses should be learner-centred and based more directly on learners’ language learning needs. Ideally, ESP courses should be designed for learners with homogeneous language learning needs (Blackie, 1979). However, as Cunningsworth (1983) stated almost forty years ago, the needs of learners in a group may differ quite considerably from one to another. In view of this, ESP courses should be designed with a certain flexibility, especially in learning activities and grading procedures. In other words, ESP courses should assist students in overcoming the teacher-student boundary, allowing students to express their opinions freely and become decision-makers in their learning rather than seeing teacher as an authoritative figure.

V. Discussion

The research findings focus on a linguistic analysis of the syllabuses of three English for Medical Purposes (EMP) courses in a Chinese university, with an aim to understand the extent to which the syllabuses reflect learner-centeredness. The linguistic analysis is conducted using three dimensions: linguistic analysis, text production and consumption analysis, and ideology analysis. The linguistic analysis found that the syllabuses were written using a declarative voice with predominantly transitive verbs, indicating strong certainty. The text production and consumption analysis revealed that the language used was politically acceptable and may not acknowledge the diverse nature of learners’ language learning needs. The ideology analysis found that the syllabuses represented an unequal power relationship between teachers and students.

The study highlights that the use of declarative language and transitive verbs in syllabuses may create an unequal power relationship between teachers and students, with the former being seen as having the authority and power over the latter. The study argues that this approach is not learner-centred, and may limit students’ participation and critical thinking. The study suggests that instructors need to reflect on their teaching philosophy and syllabus design to ensure
they promote learner-centeredness, which fosters critical thinking, creativity, and participation in the learning process.

The study highlights the importance of instructors understanding the power structures embedded in the text and reflect on their own syllabuses to promote learner-centeredness. This approach can enhance students' autonomy, foster their critical thinking and creativity, and make them active participants in their learning process. The study emphasizes that instructors need to be aware of their attitudes, which critically influence their classroom decisions, and promote participatory learning communities. The findings of the study can be useful for instructors, syllabus designers, and educational policymakers who are interested in promoting learner-centeredness in the classroom.

The research discussed here sheds light on the linguistic analysis of the syllabuses of three English for Medical Purposes (EMP) courses in a Chinese university. The aim of this study was to understand the extent to which the syllabuses reflect learner-centeredness. The study used three dimensions, namely linguistic analysis, text production and consumption analysis, and ideology analysis, to examine the syllabuses.

The linguistic analysis found that the syllabuses were written using a declarative voice with predominantly transitive verbs, indicating strong certainty. This approach may create an unequal power relationship between teachers and students, with the former being seen as having the authority and power over the latter. This finding is concerning as it is not learner-centred and may limit students' participation and critical thinking. The text production and consumption analysis revealed that the language used in the syllabuses was politically acceptable and may not acknowledge the diverse nature of learners' language learning needs. This approach is not conducive to promoting learner-centeredness, which fosters critical thinking, creativity, and participation in the learning process. The ideology analysis found that the syllabuses represented an unequal power relationship between teachers and students. This finding reinforces the importance of instructors understanding the power structures embedded in the text and reflect on their own syllabuses to promote learner-centeredness. The study argues that instructors need to reflect on their teaching philosophy and syllabus design to ensure they promote learner-centeredness. This approach can enhance students' autonomy, foster their critical thinking and creativity, and make them active participants in their learning process. Instructors need to be aware of their attitudes, which critically influence their classroom decisions, and promote participatory learning communities.

In summary, the findings of this study have important implications for instructors, syllabus designers, and educational policymakers who are interested in promoting learner-centeredness in the classroom. It is crucial to reflect on syllabus design to ensure that it is inclusive and promotes a participatory learning environment that fosters critical thinking and creativity.

VI. CONCLUSION

In recent years, there has been growing interest in the role of power dynamics in language teaching, with an increasing emphasis on creating more equitable and student-centred learning environments. This study has contributed to this literature by examining the underlying messages of three EMP course syllabuses at the case study university, and revealing an unequal teacher-student power relationship textually represented in the discourse of the EMP syllabuses.

The analysis of the linguistic elements of the syllabuses, including verbs, modality, and quantifying adjectives, has provided a valuable insight into the power dynamics in these courses. The findings suggest that the teachers hold significant power over the students, which contradicts the recommendations of some scholars that ESP teaching should avoid a teacher-centred approach.

The implications of these findings are significant for course evaluation and improvement. By analysing the linguistic elements of the syllabuses, educators can identify and address any imbalances in the power dynamics, and work towards creating a more equitable and student-centred learning environment. This is particularly important in ESP classrooms, where students may already feel marginalized or intimidated by the technical and specialized language used in the curriculum.

Overall, the analysis of EMP course syllabuses has demonstrated the importance of critically examining course materials and their underlying power dynamics in order to create more effective and equitable language teaching environments. By prioritizing the needs and perspectives of students, educators can create an empowering and inclusive learning environment that supports the development of their language skills and knowledge.

REFERENCES


Haiying Liang holds a PhD from University College London, UK, an MA from Queen’s University Belfast, and a BA from the University of Science and Technology Beijing. She was also a visiting scholar at Swansea University, UK.

Her research interests are in the field of English for Specific Purposes, with a focus on English for Medical Purposes curriculum development and medical education.

Dr. Liang has published extensively in academic journals and presented her research at international conferences. One of her notable publications is: Liang, H., Reiss, M., & Isaacs, T. (2023). Factors influencing Chinese physicians’ attitudes towards patient-centred care: A cross-sectional survey in Beijing. BMJ Open. DOI: 10.1136/bmjopen-2023-073224.