Integration of Social and Cognitive Genre in Syllabus Design of English Academic Writing Course for Chinese Graduate Learners

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ABSTRACT
Genre-based pedagogy in ESP tradition has been increasingly popular in English Academic Writing class for Chinese non-English major graduate learners. This paper designs a syllabus framework based on an integration of social and cognitive genre constructs, with the expectation of offering a pedagogically more tangible pathway to genre-based Academic Writing teaching and material production.

Keywords: genre-based pedagogy, English academic writing, non-English major graduate learners, syllabus design

I. INTRODUCTION

Genre-based pedagogy in ESP (English for Specific Purposes) tradition has been fruitful in teaching academic writing and is arguably the most influential one in teaching academic writing for L2 learners [1][2]. In China, with an increasing attention being paid to the learners' English academic writing competence in the past decade, many Chinese teachers and researchers have been endeavoring in the area of genre-based pedagogy of academic writing.

The focus of these researches in China is around the following three areas. The first area is to introduce and explore genre or genre-based pedagogical theories [3] [4] [5]. The second one is to analyze various disciplinary part-genre features like abstract, literature review, discussion, etc. [6] [7] The third one is to explore, design or evaluate genre-based pedagogical models and strategies [8] [9] [10] [11] [12] [13]. For the third area of research, the problem is that most researches offer very general pedagogical advice instead of detailed process description, and few empirical classroom researches have been found [14]. Furthermore, it's found that most pedagogical exploration is based on the practice of Systematic-Functional School or Swales' genre theory of ESP tradition [15], both of which tend to analyze genre from a social perspective, relating organizational content

with linguistic features in discourse analysis for pedagogical purposes. However, Bruce suggests an adequate approach to discourse analysis in terms of genre need to involve both social and cognitive genre knowledge, and cognitive genre knowledge in some way mediates between social genre knowledge and linguistic realization [16].

Thus in the present work, the author tries to offer a detailed description of his/her pedagogical practice based on both social and cognitive genre theories in syllabus design of Chinese non-English major graduate academic writing course. First, the author presents relevant theories of both social and cognitive genre knowledge. Second, the author designs an academic writing course syllabus for Chinese non-English major graduate students by integrating social and cognitive genre theories as well as drawing their pedagogical applications. This illustration is expected to offer insights and help those involved in the teaching of graduate academic writing in China with their pedagogical practices such as syllabus design, material development and course assessment.

II. SOCIAL GENRE THEORY

There are two prominent approaches to genre which have been influential in pedagogical context. One is from Systemic-Functional School of linguistics [17] [18] [19], the other from linguists working in the field of ESP tradition [2] [15] [20] [21]. Both approaches view genre more as a social construct to achieve some kind of conventionalized purpose within a discourse community or a cultural context. And both approaches

relate the conventionally recognized organization and content of a text to the linguistic features. The difference between the two in this aspect is that the Systemic-Functional approach tends to regard that lexico-grammatical characteristics define genre, but in the ESP approach, genre determines lexical choice. However, linguists later tend to believe that social genres cannot be viewed as simple schematic framework of content and linguistic features, instead, it is beyond the sphere of linguistic factors. Bruce proposed that a complete understanding of the nature of social genre needs to involve more knowledge, including context, epistemology, stance, content schemata and cognitive genre [16].

For the knowledge of context, it refers to one's specialized knowledge in the subject area as well as some specialized linguistic knowledge such as terminology or technical expressions. Epistemology concerns about approaches of knowing how people in a particular field create, use or report knowledge. As we know, people from different disciplines often show varied preference in organizing or processing their field knowledge. Stance is the writer's standpoint he/she adopts in communicating with the readers, in which the attitudinal feature of language used in interactive and interactional meta-discourse is taken into account, and Hyland defines meta-discourse as "the means by which propositional content is made coherent, intelligible and persuasive to a particular audience" [22] p39. Content schemata, practiced by both Systemic-Functional approach and ESP approach, is about the conventionalized patterns of structure or "moves and steps" in presenting a particular type of content. Cognitive genre knowledge concerns about the cognitive patterns used in localized textual organization, such as exposition, narrative, explanation, argument, persuasion, etc.

From the above types of social genre knowledge, it is seen that the application of genre-based pedagogy in academic writing is a much more complex and richer picture than just concerning about "moves & steps" and linguistic realizations. Thus, much more factors, like specialized vocabulary, ways of subject area knowledge processing, reader awareness, conventionalized and effective cognitive patterns, etc., need to be considered in syllabus design of academic writing course. Among the types of genre knowledge, the author finds through years of pedagogical experience that content schemata has been much practiced in many Chinese academic writing teachers' genre-based pedagogy and proved effective in helping learners to master the general conventionalized structure and language features of research articles, especially for novice writers. But for the localized organization or cognitive patterns of textual organization, many Chinese students feel awkward to deal with, because most of them had limited experience in academic writing and even in

general English writing before they take the first year graduate academic writing course. Take the Introduction part of research article for example, through genre-based instruction, the students learn the CARS model (Creating a Research Space) of this part, but in addressing the second move — the research gap, they usually are not logically clear in recounting the related researches before they point out the research gap. And in the Results & Discussion section, they are not universally clear about the strategies in dealing with this localized part, for example, how to interpret and explain the results, how to evaluate a research outcome and how to relate the present results with the previous ones through comparison and contrast. If a concern of cognitive genre knowledge is given by the teachers into the syllabus design, it will help the students to make up this deficiency. The other three types of genre knowledge — specialized vocabulary, way of subject area knowledge process and reader awareness, belong to the types knowledge that need to be acquired within a longer period of learning, instead of something learned through immediate instruction like content schemata and localized cognitive patterns. Surely they need to be considered in syllabus design as well, but not within the author's concern in this article.

III. COGNITIVE GENRE THEORY

The corpus study of Biber and the genre research of Paltridge question about the deterministic relation between social genre and linguistic features[23] [24], and Paltridge see both social genre and cognitive genre operating inseparably as part of discourse knowledge and need to be included in EAP courses (English for Academic Purposes) [25]. About the theoretical basis of cognitive genre, in spite of the fact that there are a multiplicity of approaches with a wide range of terminologies of basic cognitive constructs such as prototype theory, schemata theory, frame theory, mental space theory, idealized cognitive model theory, etc., there seems to be a common basis in the actual concepts. That is, the processing of information or organization of knowledge follows certain framework or schemata, which are likely to be stored unconsciously in one's memory in forms of prototypes with various levels of categorization determined by cultural and contextual factors. So cognitive genre knowledge is the cognitive structure or procedural knowledge one adopts in organizing the discourse, working most unconsciously, in the hierarchy of human category knowledge as a lower category level under social genre knowledge which mainly includes elements of communicative purpose and the conscious organization of discourse.

As to the types of cognitive genres, especially those usually adopted in genre-based EAP courses for EAL (English as an additional language) learners, Quinn summarized four types of cognitive genres based on a

needs analysis for pedagogical purposes, which are reports, explanations, discussions and recounts [26]. Based on a corpus study, Biber proposes four cognitive genres for academic writing, namely, scientific exposition, learned exposition, general narrative exposition and involve persuasion [23]. The difference between the two categorization of cognitive genre is that the former is prescriptive for pedagogical purposes based on needs analysis, while the latter is descriptive based on corpus study. However, concerning their general communicative or rhetorical purposes, there is much resemblance.

Bruce proposed that in authentic texts, social genres are realized by a synthesis of different cognitive genres, cognitive genre is the unit of discourse serving as a basis for instruction to novice writers, and the teachers in pedagogical practice need to consider how cognitive genres interact with social genres in realizing particular communicative purposes [16]. He illustrated the relationship between social genres and cognitive genres by categorizing three levels of knowledge needed in academic writing. The upper or first level is social genre knowledge of research articles. For example, the students need to learn the composing sections like Introduction, Method, Result & Discussion, etc. The second level is cognitive genre knowledge. For example, in writing the Method section, the students need to know how to adopt cognitive genre constructs like report, recount and explanation to realize the particular rhetorical functions of this part. The lower or third level is the linguistic realization of the text. For example, in realizing the cognitive genre strategy of explanation, the students need to adopt particular language structures signaling cause-effect.

IV. INTEGRATION OF SOCIAL AND COGNITIVE GENRE IN SYLLABUS DESIGN

Based on the genre-based pedagogical experience in teaching non-English major graduate students in China, the author tries to integrate social and cognitive genre into the syllabus design of English Academic Writing course with the purpose of achieving better pedagogical outcomes and production of teaching materials.

The first thing the author needs to consider is whether it is the social genre or cognitive genre that provides the basic unit of a genre-based syllabus, which is determined by learner needs and learning context [16]. First, in the author's teaching context, English Academic Writing is an optional course for first year non-English major graduate students, aiming to help them with their publication of journal or conference articles. Most of the students are novice researchers or academic writers, but expected to publish before graduation at least one or two articles in peer reviewed English journals with good reputation (such as those from Science Citation Index or Social Science Citation

Index). So they have an immediate demand for social genre knowledge to construct a publishable article meeting particular academic standards within their disciplinary communicative contexts. Second, most students from the author's English academic writing class are from multi-disciplinary background of science and engineering, while art students are of much less proportion in the class, since they have a comparatively lower demand for English publication. Based on this learning context and learner needs, following the syllabus of the present teaching reference book used at the author's university [27], the author constructs the basic unit on a social genre based syllabus with the conventionalized IMRD (Introduction, Methods, Results, and Discussion), which is a prototypical structure of most research articles, especially for those from experimental research background like science and engineering. And this social genre based syllabus could also serve as a baseline or a point of departure for analysis of the similarities or differences among multi-disciplines.

The following lists show the unit topics. There are three parts in this table. The first part (unit 1-2) is course introduction and key issues. The second part (unit 3-8) includes the reporting of research concerning Introduction, Literature Review, Methods, Results & Discussion, Conclusion and Abstract. The third part (unit 9-11) includes some unfinished business and course review.

- 1. Course introduction
- 2. Key issues in academic writing
- 3. *Literature review*
- 4. *Methods*
- 5. *Results & Discussion*
- 6. *Conclusion*
- 7. *Abstract*
- 8. Titles, figures, acknowledgements and reference.
- 9. Other issues: plagiarism and publication
- 10. Course review

For integration of both social and cognitive genre knowledge, the author fits cognitive genre into those sections concerning the reporting of research including Introduction, Literature review, Methods, Results & Discussion, Conclusion and Abstract. The reason for this integration is, the author finds out that, due to lack of cognitive genre knowledge and inadequacy of training in undergraduate studies, the students feel awkward to construct localized cognitive frameworks in achieving social genre purposes, such as to recount related research, evaluate research work or summarize

theories or concepts. If the teacher could give them a cognitive pattern or guideline to follow, they would come up with clearer flow of thoughts. Thus, for better focused learning, one or two types of cognitive genre constructs will be emphasized in each unit, the other types could be mentioned as complementary, so that each unit will have a different cognitive genre focus. For example, in the unit of Introduction, the main type of cognitive construct could be recount, concerning about describing the research background and related research so as to establish a niche and also find connection between the previous and present work. And the students also need some cognitive knowledge of discussion in summarizing the relevant materials and also connecting the previous research with the present work, such as comparison, contrast, evaluation, etc.

Here, inspired by Bruce's illustration of integrating both social and cognitive genres in teaching the Result section in research [16], the author takes the Literature Review section as an example to show how he/she integrates social and cognitive genre constructs within a course unit in a genre-based teaching of English academic writing. This syllabus would follow a top-down principle, that is, social genre is before cognitive genre, leading the students to start from exploring the upper level or more socially constructed elements like rhetorical structures to lower level or more cognitively constructed elements like procedural knowledge of content organization, inter-propositional relations and lexical expressions. "Table I" shows the syllabus outline for the unit of Literature Review.

TABLE I.   SYLLABUS OF THE LITERATURE REVIEW SECTION

Aims: Social genre knowledge		Student Activities
Context	Students will know that they need certain specialized content knowledge and context-specific vocabulary necessary for reading and writing this type of text.	Read, discuss and report structures, language features and functions of Literature Review section.
Epistemology	Students will know how experts in their subject areas process this section and how previous knowledge and research is reviewed.	Read two Literature Review sections from research articles related with their research areas and complete individually a genre analysis task following the teacher's guidelines.
Stance	Students will know the language features in this part especially those referred to as meta-discourse, or those marking rhetorical structures.	
Content schemata	Students will know the general structures or "moves and steps" in this section related to their subject areas.	
Aims: Cognitive genre knowledge		Student Activities
Overall	Students will be able to write a 200 to 300-word Literature Review with a given topic based on the guidelines.	Perform a guided analysis of the discourse organization of the Literature Review part from articles in their reference collection.
Discourse organization	Students will incorporate a discourse pattern of Summary-Evaluation-Connection in writing a Literature Review. For each part, the students follow the pattern below. Summary: 1). generalize related research, theories, concepts, etc. 2). Present research in logical order of time, author, research, etc. 3). Synthesize research by comparison, contrast, connection, etc. Evaluation: Find the advantages, disadvantages, confirmation or opposition in relevant research. Connection: Find the connection or advancement between previous and present research.	Analyze the language focus in this unit such as identifying source and comparison & contrast. Carry out an individual construction of a patterned writing given by the teacher.
Syntactic relations	Identifying the source. Students will focus on the reporting verbs in identifying sources of literature. Comparison and contrast. Students will examine the use of syntactic and lexical markers of comparison and contrast.	Carry out peer review and teacher feedback of their constructions on discourse pattern, syntactic relations and lexical expressions.
Lexical expressions	Students will acquire and memorize vocabulary concerning the construction of Literature Review like summarizing, evaluating and connecting.	

For the design of social genre section, the author adopts Bruce's framework for analyzing social genres, which includes five types of knowledge: context, epistemology, writer stance, schematic structure and use of cognitive genres [16]. Since cognitive genre will be mentioned separately, the author mainly includes the previous four elements of social genre knowledge in

unit design. As is shown in "Table II", in the unit of Literature Review, the learning aim is to help the students know that they need certain context-specific vocabulary, specialized content and procedural knowledge as a prerequisite to understand their disciplinary articles. They also need to acquire rhetorical structures revealed through particular

communicative purposes and language features signaling those rhetorical structures so as to be able to deconstruct and construct their own articles. In achieving these learning aims, the students need to perform individually teacher guided genre analysis tasks about the Literature Review section after series of work involving reading, observation and discussion. The guidelines of the genre analysis task concerns three parts: rhetorical structures, language features signaling rhetorical structures, comparison and contrast of the similar, different, prototypical or deviated features of the two reading samples.

For the design of cognitive genre section, Bruce proposed that the four types of rhetorical purposes of the cognitive genre model can be used to provide the basis for designing the syllabus with a cognitive genre focus, namely, gestalt structure, discourse patterns, inter-propositional relations and lexical levels [16]. In the author's design, considering learner needs and for the sake of brevity in task design, the author combines the gestalt structure and discourse patterns into one, namely, discourse organization, for both concerns about the procedural knowledge of text organization. Thus, the author includes three parts in the syllabus, namely, discourse organization, syntactic relation and lexical expression. The learning aim is to let the students know the localized discourse pattern of construction and the language expressions realizing this pattern at the level of syntax and lexicon so as to be able to construct their own pieces. In achieving this aim, the students need to first identify the discourse pattern, acquire the focused language points particular for each section at the syntactic level as well as vocabulary in realizing this pattern by reading, observation, discussion and teacher instruction, then construct their own pieces of a mini-structured 200-300 word Literature Review by following the teacher's instruction, and finally internalize the cognitive constructs through peer review and teacher feedback. For effective learning, one thing to stress in this process is that at most two language features will be focused in each unit either at the syntactic or lexical level.

V. CONCLUSION

In this paper, the author introduces social and cognitive genre theories and concepts related with syllabus design of genre-based English Academic Writing course, and integrates both social and cognitive genre knowledge into his/her syllabus design. This tentative design would serve as a pedagogical reference for a detailed syllabus design in genre-based teaching of English Academic Writing in China and for production of related teaching materials, especially on the integration of both social and cognitive genre constructs. Due to limited space in this article, the author takes only the Literature Review section as an example instead of illustrating the design of all the

reporting sections of research articles. It's expected that in the future more detailed description of syllabus design would be provided, with clearer and more specific cognitive pathways and linguistic scaffoldings in realizing particular rhetorical purposes of social genre, and with similarities and differences among inter-disciplines considered in each stage of designing, which would offer practical help for both Chinese academic writing teachers and learners.

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