

# The Acquisition of English Academic Thesis Writing in Perspective of "Discovery Learning"

Yanping Cui<sup>1,a</sup>, Siyou Zhang<sup>1</sup>

<sup>1</sup>Foreign Languages College of Wuhan University of Science and Technology, Hubei Province, China

<sup>a</sup>1585143263@qq.com

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**Abstract.** In virtue of Bruner's "discovery learning", this paper explores the acquisition of English academic thesis writing from the aspects of language, culture and psychological cognition, etc. The author starts with the cultural characteristics of English to analyze how students autonomously acquire the culture in English countries, as well the vocabulary, norms and convention in professional fields during the process of learning writing academic papers. And the author also analyzes how students focus on developing intuitive thinking in the process of the acquisition. Through the autonomous cognition, students rearrange and optimize the acquired language culture, and renew cognitive structure by stimulating intrinsic motivation and reorganizing and extending internal knowledge structure. In this vein, students can combine thoughts and behaviors and also construct an output mode of special language in English academic paper. Therefore, students can acquire English academic thesis writing and meet the requirements of international academic writings.

## Introduction

Writing is a means that mankind consciously uses language to record events and express intention; Academic science is a special and systematic learning that scientifically verifies the existence and its law; Paper is the article researching and discussing questions. Therefore, the academic paper is the article that presents scientific research results in the field of science.

With the increasing deepening of economic globalization, the international academic communications become more and more frequent. And the undergraduates have to improve their ability in writing English academic papers.

## Research Status of the Acquisition of English Academic Writing at Home and Abroad

Thesis writing has been scholars and educators' research object for a longtime. As a special output form, writing is a complex cognitive psychological process. It is not only simple text output, but also the output of author's ideological conceptions, discourse structure, paragraph settings, words and sentences, punctuation choices and many other skills.

The studies of Second Language Writing began in the 1940s and mainly focus on English. The first school of English for Academic Purposes (EAP) was proposed by John Swales and Vijay Bahtin in the 1990s, that is, Genre Analysis. This new writing theory has made great contributions to the development English academic thesis writing.

EAP is a research concept in the field of English Language Teaching (ELT). Its research object is the learners' academic communicative competence, which mainly reflects in three aspects: the ability of finding out problems, innovation and research communication skills, namely, academic thesis writing skills.

With the advent of Swales' genre analysis, China has set off a wave of studies on genre analysis, which soon extended to the field of academic thesis writing acquisition. These studies find that domestic researches on English academic writing mainly focus on two aspects: the words, syntax, textual and stylistic features and some other linguistic elements; the approaches to teach academic

thesis writing skills and teaching instruments. Rarely did the studies involve in the writers' own acquisition of writing skills.

The present study, from the perspective of cognitive linguistics, is on the basis of previous domestic and foreign studies. It explores academic thesis writing acquisition with Bruner's theory of discovery learning, and analyzes the functions of language, culture and psychological recognition in the acquisition of academic thesis writing, which would contribute to learners' acquisition of thesis writing method of intake, output and innovation.

### **The Theoretical Framework of Bruner's "Discovery Learning"**

The theory of "discovery learning" was first put forward in 1925 by Wolfgang Kohler, a psychologist of Gestalt theory. From Wolfgang's point of view, problems will be solved when people find the new relations among objects. Thus, people can achieve the goal of learning through the discovery of the new relations among objects. His viewpoint is inherited and developed by Bruner. In Bruner's viewpoint, all knowledge is organized according to certain encoding systems. As long as the way of encoding arrangement is found out, a better learning outcome can be acquired. In this case, Bruner regards discovery learning as the best way to study.

Discovery learning refers to that learners take full advantage of the learnt knowledge and experiences as well further combine the thinking ability to recognize new things and acquire new knowledge.

Discovery learning is a completely learner-oriented learning method, emphasizing the autonomous acquisition, cognition and finds. It can greatly enlighten the acquisition of English academic thesis writing. As a presentation of learners' research ability, academic writings cannot be independent with the learners' autonomous studying and founding whether in the content or form. The key of scientific researches is innovation, that is to say, a new information structure is discovered on the basis of the original knowledge structure and then formed to be a new system for use, which coincides with the theory of discovery learning. Meanwhile, discovery learning highlights the intrinsic motivation. It proposes that the extrinsic motivation can stimulate students' autonomous acquisition only with the linkage of intrinsic motivation. As the foreign academic communication becomes more frequent, English academic writing has been an important means for Chinese students, especially graduate students to involve in the communication. Motivated by such extrinsic stimulation, students will have an increasingly strong intrinsic motivation to improve the ability in writing English academic papers. Therefore, a study on the acquisition of English academic thesis writing from the perspective of Bruner's "discovery learning" seems to be quite necessary for students to improve writing ability.

### **Application of Discovery Learning in the Acquisition of English Academic Writing**

As the requirements of scientific research ability have been improved constantly, English academic writing has been an indispensable part in academic researches. However, in order to accomplish the presentation of academic results in English that is different from the first language, learners should have a basic understanding of the English language culture before writing an English academic paper.

**Discovery Learning of Features in English Language Culture.** As we all know, English and Chinese belong to Germanic languages and Sino-Tibetan languages respectively. There are rather more precise syntax rules in English, centering on the beauty in structure. Exactly as Wang Li, a famous linguist in China said that "as far as the sentence structure concerned, western language is governed by law, while Chinese language is governed by people."(Wang Li, 1984:35) Thus it can be seen that English pays attention to syntax while Chinese focuses on semantic meaning. Moreover, the semantic structure of English consists of subordinate clauses layer by layer, while that of Chinese consists of a series of clauses to realize the semantic integrity. Also there are more subordinate clauses in English, while there are more simple sentences in Chinese. In addition, there are a large amount of long sentences in English, which is one of the most troubling factors for Chinese students.

While Chinese centers on the expression of meaning in the sense that forms are not rigid as long as the meaning is presented fully. In terms of wording, English belongs to static language and uses more nouns, while Chinese uses more verbs. In terms of voice, English makes use of more passive voice, while Chinese is keen on active voice. The phenomena are not uncommon in scientific writings. Therefore, before learning how to write English academic paper, it is necessary to cognize and to acquire these features in English language culture.

The preciseness in academic papers requires abiding strictly by the academic rules and also by the rules of English language culture in accordance to the habits of English language. As a result, during the acquisition of English academic thesis writing, the cultivation of intuitive thinking should be laid emphasis on. Through the cognition and acquisition by themselves, students can acquire useful knowledge with the help of imagination and developing thinking ability. Meanwhile, the reorganization and optimization of the acquired language culture also should be emphasized in order to meet the requirements of writing English academic papers.

**Discovery Learning of the Aims in Academic Papers.** In Bruner's viewpoint, intrinsic motivation is exactly the true motivation that promotes students' learning. Intrinsic motivation, what is called, refers to a kind of learning motive produced when students become interest in the learning activities. It also can make students get emotional satisfaction and fulfillment of success.

Currently, the international academic conferences usually use English as working language. In this situation, the extrinsic conditions and motivation of acquiring English academic thesis writing can be formed accordingly. But the extrinsic driving force can work only under the control of learners' intrinsic motivation. Therefore, in the process of acquisition, students need to pay more attention to the cultivation of intrinsic motivation and also the meaning and fun in writing academic papers.

**Discovery Learning of Stylistic Features in Academic Papers.** English academic paper doesn't regard the artistic beauty of language as a goal, but focuses on the logical clarity and thinking preciseness. It is featured by unambiguous semantic, precise structure, coherent arrangement and simple style. These features are presented through the linguistic elements such as wording and phrasing, grammar in articles, which forms distinguishing features of vocabulary, syntax and semantic from the common English.

**Lexical Features.** Firstly, more professional and semi-professional vocabularies are generally used in writing English academic paper due to the paper's particularity. Secondly, special usages of some non-professional vocabularies are also applied. Thirdly, in order to prove the objectivity and authenticity of the viewpoint in papers, symbol, formula and diagrams are usually employed to add the credibility and reliability. In brief, the understanding of the lexical features in academic papers will have a guiding significance for the acquisition of the ability in writing English academic papers.

**Semantic Features.** English academic paper has its unique semantic features. In the first place, the pronoun "it" and demonstrative pronoun "this" are widely used. The usage of pronouns avoids the repetition in context, and also adds the coherence of the article. Secondly, nouns are repeated with a high rate of frequency. In order to emphasize a certain conception and opinion, the same noun appears over and over again. Thirdly, conjunctions are used frequently. For the purpose of adding the article's logic, a large amount of logical connectives are applied, such as therefore, thus, on the one hand, on the other hand, etc. Fourthly, figures of speech are rare. The academic paper is an objective description of scientific researches and it doesn't need any modification for the purpose of preciseness and accuracy. For this reason, in the process of writing academic papers, excessive modification and ambiguous expression should be avoided as far as possible. In this vein, the objectivity and preciseness of academic results can be reflected. In short, students need to pay attention to the acquisition of these semantic features as much as possible, upon which unnecessary mistakes in vocabulary and expression can be avoided in English academic thesis writing.

**Grammatical Features.** Based on the researches in EI, SCI and NCBI, English academic papers are of the following characteristics: Firstly, long sentences and declarative sentences are used largely, making clearer the explanation of research questions. Secondly, impersonal sentences are also employed largely, making the research results more objective and more reliable. Thirdly, more non-finite structures and prepositional phrases are applied. Fourthly, the employment of

nominalization becomes not uncommon. Fifthly, the simple present tense is also used frequently. Sixthly, more subjunctive mood are used. In short, students can achieve better results of writing academic papers by having an understanding and acquisition of these grammatical features.

**The Output Mode of Academic Papers.** Input-Internalization-Output Theory. From the perspective of Krashen, comprehensible input is a key to the success of second language acquisition, and upon which he puts forward input hypothesis. He proposes the "i+1" mode, of which "I" refers to the existing knowledge level. According to Krashen, "i+1" refers to the knowledge level higher than the existing one, but it is yet within a comprehensible range. In the meantime, the level of comprehensible input can be improved and then reach that of "i+1" through the learner's attitudes, feeling, emotion and confidence, for the final purpose of language acquisition. After acquiring the language, students will internalize and process it to construct their own structure and system of knowledge by the virtue of the self-cognition and also existing knowledge structure and level. With regards to Swain, he puts forward comprehensible output hypothesis on the basis of Krashen's comprehensible input hypothesis. From his point of view, learners aim to communicate by learning language. To this end, the simple comprehensible input is unable to realize a precise, proper and coherent expression. In this situation, learners need to do comprehensible output relying in comprehensible input, as comprehensible out can promote them to test and think the language application by language.

**The Output Mode of Academic Papers.** Writing is a conscious activity for man to express opinions and record information. It needs a large amount of comprehensible input. It requires learners to internalize and devour the inputted information to construct their own unique system of knowledge. In this case, learners can finally make a rational, complete and accurate expression in the comprehensible output way. These are the whole processes of writing. Academic writing is a traditional writing style and also has its own special characteristics. As a beginner of academic writings acquisition, students first had better get used to the thinking and cultural ways in academic discourse community. The way of input is necessary for learners to better and faster fit in the community and master the ways of acting and thinking in the community. Moreover, students have different unique interpretation to the inputted knowledge. They will assimilate the knowledge by taking advantage of the existing structure and system, and finally output it in the form of academic papers, to the end of an ideal effect. In these veins, the output mode of academic paper is formed.

## Conclusions

In order to improve students' English academic thesis writing skills and help them to meet the international requirements, we should pay attention to stimulate their intrinsic motivations, and make students aware that the acquisition of English academic thesis writing could be output in line with the international requirements. Since their desire of English academic thesis writing, as well as the acquisition of language, culture, rules and some other elements that involved in it, has been driven, they would actively input and accumulate knowledge, and finally intake it. Therefore, they could output better English academic thesis that meets international requirements, which solve Chinese students' problem of thesis writing.

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