

Construction of ESP Corpus Resources in Behavioral Medicine

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Abstract: Behavioral medicine is a new and interdisciplinary subject, which integrates the knowledge of behavioral science and biomedical science. It has only been more than ten years since its emergence in China. However, with the progress of science and technology and the improvement of people's living standards, behavioral medicine has developed rapidly. How to provide a solid reserve of intellectuals for this subject and how to solve the special vocabulary used in behavioral medicine teaching are the problems we must think about. Corpus-based reform of ESP classroom teaching mode is the requirement of the reform and innovation of higher education in China, as well as the requirement of the Ministry of Education for the teaching of college English course. Advanced information technology should be widely used to promote computer-based and network-based English teaching, so as to provide students with a good language learning environment and conditions for specific practice. Because of its own characteristics, ESP (English for Specific Purposes) needs to be supported by corpus linguistics to carry out in-depth research. And ESP classification corpus will be constructed more comprehensively, more automated and more perfect due to the requirements of ESP researchers. ESP and corpus building interact and promote each other.

1. Introduction

1.1 An overview of behavioral medicine

Behavioral medicine is a new and interdisciplinary subject which integrates the knowledge of behavioral science and biomedical science. It has only been more than ten years since its emergence in China [1]. However, with the progress of science and technology and the improvement of people's living standards, behavioral medicine has developed rapidly [2]. For a long time, behavioral medicine in China has carried out extensive research work on the pathogenic effects of behavioral types, lifestyles and emotional stress, the harm of tobacco, alcohol and addictive substances to health, and the prevention and treatment of psychosomatic diseases and physical and mental disorders [3]. Psychological health has also been carried out, and cognitive behavioral therapy, stress therapy, biofeedback therapy, behavioral correction, relaxation therapy, aversion therapy and intelligent therapy have been implemented. At present, behavioral epidemiology, behavioral prevention, clinical behavioral medicine, psychosomatic medicine, medical psychology, behavioral pathology, behavioral pharmacology and medical behavioral management have been formed [4].

1.2 The present situation of ESP teaching

ESP is the abbreviation of English for Specific Purposes, which is commonly referred to as "English for Specific Purposes" or "English for Special Purposes", including tourism English, business English, financial English, medical English, engineering English as shown in Fig.1 [5].

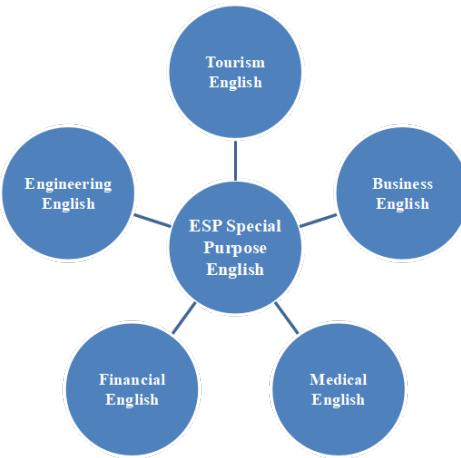


Fig.1. Classification and composition of ESP

At present, most of the teachers engaged in ESP teaching are composed of professional teachers who have graduated in recent years with a better English level [6]. The teaching hours are generally less. Although the ability and level of professional teachers to use English or bilingual teaching are constantly improving, the mastery of English teaching methods and means is not comprehensive enough, and the teaching effect is difficult to meet the requirements of the syllabus [7]. How to change this passive situation is an urgent problem for ESP teachers in various schools [8].

2. ESP and Corpus Construction

2.1. The Promotion of corpus analysis to ESP language description

Contemporary corpus linguistics provides an unprecedented vast base for the systematic description of language [9]. Therefore, it has a more scientific and perfect description function. Corpus not only reflects the real situation of language use, but also reflects the frequency of language use. The tens of thousands of examples retrieved from a special categorized corpus reflect the characteristics and trends of a special language, which can be used to demonstrate or support the scientific basis of a theory or a point of view [10]. When discussing the logical motivation of ESP existence, Fan Yi drew a conclusion that the largest information genre in a professional literature is professional vocabulary, not ordinary vocabulary, by referring to scientific dictionary, English-Chinese dictionary, searching the content of scientific vocabulary in the dictionary and extracting the three main motivations of human word-building [11]. If Fan Yi has ESP classified corpus to support, it will be more convincing to take the frequency, total amount and content of professional vocabulary in the real textbank as an example. As Fan Yi put forward, "To become an independent discipline, knowledge must have a set of basic concepts that describe its research object, purpose, method, law and theorem." These concepts are reflected in language as professional terms and vocabulary in ESP professional literature.

2.2. The enhancement of ESP research methodology by corpus analysis

Leech pointed out: "From the perspective of scientific methods, corpus research is a more powerful method because the results are verifiable." According to statistics, more than 1,000 linguistic studies have been completed on the publicly published corpus, covering vocabulary, semantics, syntax, phonetics, stylistics and pragmatic analysis, etc. Researchers have chosen corpus to describe and summarize human language behavior. ESP categorized corpus can be used by researchers in different ESP directions to query linguistic features, test language assumptions, count term frequencies, co-occurrence context, or conduct comparative analysis vertically and horizontally. ESP theorists can use corpus to validate those predicted language rule systems or obtain a large number of language examples from corpus for research and teaching, for instance, the computer science corpus of Hong Kong Polytechnic University has been built, which integrates 1000000 words of corpus. The development of corpus classification, tagging and computer retrieval

makes it easier to quantify words and sentences. ESP researchers can objectively describe the phenomena of special words and sentences that were discussed by physiological judgment in the past through quantitative analysis. John Kirk of Queen's University in Belfast has studied English variants for many years. When instructing his students to use the corpus, he did not use traditional examination methods to assess their level, but asked them to do research, that was, to use the classified corpus to discover the similarities and differences between general English and variants, to discover their particularities, and to summarize their regularities.

2.3. The Promotion of corpus analysis to ESP teaching

ESP learners mainly learn vocabulary, expressions, idioms and so on, which are totally different from EGP (English for General Purpose 3) or EGAP (English for General Academic Purposes) in basic textbooks. The main task ESP teachers face is to teach learners the language that really belongs to this major. Teachers can find textbank of related specialties through classified corpus, choose progressive and representative texts for learners to read, and transfer the statistical repetition information, collocation information and frequency information of professional words to learners by compiling exercises, compiling textbooks and compiling vocabulary lists, so as to reduce the difference between actual use and classroom teaching. General grammar books and dictionaries can describe the grammatical functions and meanings of vocabulary comprehensively and adequately. The study of ESP classification corpus is an important supplement to ESP description because it provides a statistical basis for the meaning and usage of words and sentences in various ESP variants.

Finally, if conditions permit, ESP learners' writings and professional papers can be input into the computer to establish a learner corpus, which can be compared with the corpus of native language authors. By searching, similarities and differences in word and sentence formation can be found, which can provide ESP learners with the most convincing data collection and the blueprint to follow, and also help improve ESP teachers' professional writing and adaptation level.

2.4. The promotion of ESP to the development of corpus linguistics

Overseas ESP has made a multidimensional exploration and in-depth research results, and the system is becoming more and more complete. However, the essence of ESP is to meet the different needs of different learners, so foreign ESP achievements can only be used for reference rather than copy. The motivation, environment, conditions and requirements of ESP learners in China are obviously different from those of ESP learners in the West, requiring us to analyze learners' needs, design courses, formulate outlines, compile textbooks and explore teaching methods according to the actual situation of our country and the way of ESP. All of these require higher and higher requirements for corpus classification and retrieval software. When talking about the development of corpus, Leech pointed out that "future analysis maps should include some kind of 'consultation' process, so that interested members in a particular professional circle can consult with each other to ensure that the tagged corpus can be used by as many potential users as possible."

3. The Impact of ESP Corpus Construction on Behavioral Medicine

In recent years, the development of behavioral medicine in China has laid a good foundation for the future development of behavioral medicine. However, behavioral medicine is a rapidly growing discipline in adversity, especially in China, its history is just beginning. Macroscopically speaking, the long-term nature of the primary stage of socialism determines the complexity of the composition of social economy and social strata in China. Not only traditional medical problems need behavioral medicine, but also new behavioral medicine problems will constantly arise. Microscopically speaking, problems such as cardiovascular diseases, tumors, accidental deaths and unhealthy lifestyles also play an important role in affecting the health, disease and death of our people. Behavioral medicine is of great value in dealing with these problems. In addition, there are many behavioral medical problems in the activities of only child, male and female, family planning and so on. Therefore, behavioral medicine is of great practical significance and scientific value. It not only

helps health services to bring greater health and social benefits at less cost, but also promotes the construction of spiritual civilization and the rapid introduction and establishment of medical science itself. The development of behavioral medicine is an urgent matter in the medical field of our country. How to integrate Chinese behavioral medicine research with international practice, absorb leading theories from all over the world in time, and construct ESP corpus resources of behavioral medicine to create behavioral medicine theory research that conforms to China's national conditions is a breakthrough.

In recent years, researchers have paid more attention to the analysis of linguistic phenomena from the perspective of linguistic functions, communicative characteristics and discourse genres, and have introduced the professionals of the discourse community in ESP classification corpus to prove their analysis, thus putting forward higher requirements for the construction of corpus. Future corpus construction will be more comprehensive, specialized ESP classification corpus will be more economical and effective, and semantic and pragmatic annotation will be carried out. In addition, the better ESP classification and translation software suited to China's national conditions may be developed and integrated into ESP classification corpus or bilingual corpus to provide better and more convenient help for behavioral medicine researchers.

4. Conclusion

It is urgent to establish ESP corpus of behavioral medicine. How to provide a solid reserve of intellectuals for this subject and how to solve the special vocabulary of behavioral medicine research and teaching are the problems we must think about. Corpus-based reform of ESP classroom teaching mode is the requirement of the reform and innovation of higher education in China, as well as the requirement of the Ministry of Education for the teaching of college English course.

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