

# A Summary of Research on Informatization of Specialized Language in the Framework of Sino-foreign Cooperative Education\*

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**Abstract**—This paper narrates firstly characteristics of specialized language teaching, educational informationization and Sino-Foreign cooperative education. Then it reviews briefly the research situation of informatization of specialized language both at home and abroad, introduces the development of specialized language teaching in colleges and universities in China. This paper mainly discusses the content of research on informatization of specialized language teaching with a specific case, and proposes that the problems of specialized language teaching could be solved with the aid of educational informationization.

**Index Terms**—specialized language, educational informationization, Sino-foreign cooperative education

## I. INTRODUCTION

In the last decades, the foreign and domestic scholars, such as Hoffmann (1987), Pudzuhn (1994), Fluck (1996), Zhu & Zimmer (2003), Schade (2009), Hoberg & Zhu (2011), Hammrich (2014), Michalak (2014), Chen (2012), Du (2016), have been discussing the specialized language and, especially, the teaching of specialized language. Teaching of specialized language is often interpreted as a foreign language teaching activity pertinent to a certain discipline. It is a version of the foreign language teaching with special teaching purposes. It aims to cultivate and improve the learners' foreign language capacities in other specialties. These foreign language capacities include a correct understanding of the implications of the content in the professional articles in the target language and correct, clear and distinguishing expression of the disciplinary professional knowledge in the target language.

The specialized language course is an important part of foreign language teaching. It plays a very important role in cultivating the comprehensive quality and interdisciplinary learning and working abilities of the foreign language majors. The specialized language teaching differs from the traditional language teaching and teaching of professional courses due to its own interdisciplinary characteristic.

The Communist Party of China and the Chinese government have always been attaching high importance to educational informationization since the 21st century. The Communist Party of China and the Chinese government have proposed synchronous development of "Four Modernizations" and incorporated informatization into the national strategies. The General Office of Ministry of Education (2014) noticed that "Driving educational modernization by educational informationization" is vital to the reform and development of the higher educational cause in China. It is an integral part of further comprehensive reformation of the higher education field. It helps promote educational equality and improve the educational quality.

Informationization in education is a practice with many diverse forms. Among of it, there is a form that has come into practice within the last century and has begun to get a lot of recognition, which is "E-learning". According to Rosenburg (2000), E-learning is a relatively new education form through the use of computers as an instructional medium. E-learning is used to educate people of all different ages. It has been around for decades and is used for students in primary school, middle school, high school and even college or university. In the process of higher education, some colleges and universities, in some ways, actually have tried to take courses over the computer as a way to learn more about majors or exercise on new programs. The information from e-learning need to be familiar with, then knew, and finally mastered. As an aid for the learning or studying, the students are expected to be able to teach themselves from the materials they are given. Often these materials include mainly online activities, like Internet, website, e-mail, online social forums, and digital materials, like E-book, corpus and computer software etc. E-learning offers many new challenges, but also many great opportunities. According to Stennes (2009), although the E-learning have

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disadvantages like (1) it requires the learner to obtain new skills to achieve success, (2) it is a learning form lack of social integration, (3) not everyone is able to afford the technology needed, (4) it costs more to develop, its advantages are also obvious and significant: for the learners there are (1) possibility of student-centered teaching approaches, (2) combination of new ideas, development of a solid foundation for learning, sharing of opinions, (3) offer of additional layer of instructor accessibility, (4) provision of 7-24-hour accessibility to course materials; for the instructors (5) addition of pedagogical benefits, (6) more helpful for instructors.

## II. INFORMATIZATION OF SPECIALIZED LANGUAGE AND SINO-FOREIGN COOPERATIVE EDUCATION

It is necessary to deeply integrate the specialized language teaching and informatization, study the correlation between the information technology and the development and reform of specialized language teaching, integrate and optimize allocation of the information technology resources, build an informatization learning platform, promote sharing of high-quality educational resources, innovate the talent cultivation mode, serve the specialized language teaching practice, and lay a theoretical foundation for informatization of specialized language teaching. It could say that Informatization of specialized language plays a decisive role, especially in the framework of Sino-Foreign cooperative education.

In the context of the information age, the globalization development is particularly important. One of the typical manifestations in the educational field is Sino-foreign cooperative education. Wang (2005), Hu (2010) and Xu(2015) argued that the Sino-foreign cooperative education has begun to take shape, achieved more rational distribution, optimized the disciplinary specialty structure, and entered a rapid, stable, and high-quality developmental stage over the course of time, particularly since promulgation and implementation of the educational planning outline. So far, there have been more than 2000 Sino-foreign cooperative education institutions and programs. At present, one of the tasks faced by the Sino-foreign cooperative education is introduction of high-quality educational resources and improvement the overall strength of cooperative education. Each of the Sino-foreign cooperative education institutions and programs is challenged by cultivation of internationally-oriented interdisciplinary talents. It is important to improve the quality of foreign language teaching and classroom efficiency. The foreign language teaching in Sino-foreign cooperative education has its own characteristics relative to common foreign language teaching. On one hand, we can directly contact with cooperative overseas colleges and universities, integrate the teaching resources, and improve the advantages of the teaching efficiency; on the other hand, the existing 11 disciplines involved in cooperative education are dominated by the field of nature science. Unlike the traditional foreign language teaching, in addition to the language necessary for daily life and communication, the students should also learn specialized language to meet the demands of their major. Vom Brocke (2012) pointed that German University of Münster and New Zealand Massey University mix and group the students from the two countries and complete different tasks by using various communication tools such as voice and video chatting etc. on an open network platform. The students will always participate in interactions during the process. However, difficulties still exist in selection of working languages, conflicts of interests etc.

At present, the Sino-foreign cooperative education in China is still in the exploratory stage. The foreign language teaching has a short development course. The foreign language teaching is largely in the pure basic language teaching stage. It has not mobilized the available resources and lacked teaching exploration of the professional language necessary for cooperative education. The informatization of specialized language could provide a new thought for the future development of Sino-foreign cooperative education.

## III. RESEARCH SITUATION OF INFORMATIZATION OF SPECIALIZED LANGUAGE TEACHING BOTH AT HOME AND ABROAD

The research on the informatization of higher education in China dates back to 1990s. The early research is primarily based on the foreign advanced experience. Guo and Xi (2002) noticed that under the inspiration and influence of Campus Computing Project (CCP), a research program of informatization in U.S. colleges and universities, Peking University and University of Hong Kong jointly initiated the first international higher education informatization research program in Asia in 2002: Asian Campus Computing Survey (ACCS). Since then, the research on informatization of higher education in China has started and exhibited a trend of multi-dimensional development. The early research focused on introduction of experience, such as *Concept of Higher Education Informatization in Russia* by Li Tianze in *Digest of Management Science* in 1996. Subsequent research focused on comparative research on combination between overseas experience and domestic actual construction and similarities and differences in educational informatization among different regions in China, such as *Comparative Research on Development of Higher Education Informatization in U.S., China, and Japan* by Zhao Guodong in *comparative education research* in 2004 and *Comparative Research on the Informatization Development Situations in Colleges and Universities in Hong Kong and Mainland* by Ye Song in *Educational Informationization* in 2005. According to Shen & Chen (2003), Zhao(2003), Ye(2005) etc., currently, the higher education informatization in China focuses on the specific implementation steps, management modes, facilities allocation, talent cultivation etc. of domestic reform and development based on the actual situations for preliminarily establishing of the educational informatization system with Chinese characteristics and approaching the international advanced level. The research involves multiple participation,

multi-dimensional development trends, and combination of microscopy and macroscopy and primarily focuses on strategic planning, resource construction and management, development and training of teacher education informatization. The informatization starts later in China but it develops rapidly. Of course, there exist some issues. Department of Instructional Technology of Peking University has explained the current development situations of the colleges and universities in China in term of educational informatization and analyzed related issues in the informatization survey for colleges and universities in China. Jiang Dongxing et al. from Tsinghua University have explained the common problems during the process of higher education informatization. Informatization of specialized language teaching has been increasingly arousing attention from the domestic academic theory circle. More and more experts and scholars have studied and discussed the current situations, modes, management, promotion measures etc. both theoretically and practically. In recent years, they have been increasingly focusing on integration and optimization of the educational resources of specialized language, combination of internationalization and informatization, and leapfrog development. Thus, cross-over studies on informatization and Sino-foreign cooperative education, informatization and specialized language teaching have appeared. According to Xu (2003), Qin (2006), Wang (2007), Xu (2009) etc., the studies involve classroom teaching, resource construction, talent cultivation, present situations and counter measures etc.

The overseas educational informatization starts early and has achieved great success. Such countries as U.S., UK, Germany, Russia, Japan etc. invest substantially in educational informatization and have many research directions, including "Survey of the Current Situation of Computer Application on Campus" in U.S., "Survey of the Current Situation of Multimedia Application" in Japan, virtual university of Michigan in U.S., practice in University of Hong Kong (MVU) etc. The research on educational informatization in Germany highlights an all-round mode including application methods, innovation capacity, information prediction capacity etc. and involves establishing multiple web portals for informatization research. Vascoda (a web portal for scientific information) is a typical example. It provides extensive retrieval and convenient acquisition of the information of different disciplines and full text data and supports disciplinary retrieval and interdisciplinary retrieval.

Based on the research on the current development situations both at home and abroad, it has been found that the research problems regarding informatization of specialized language teaching mainly include three aspects: (1) The research scope for informatization focuses more on the major fields and less on the interdisciplinary fields such as cooperative education. (2) The research perspective for informatization of specialized language teaching focuses more on the domestic current situation and less on combination with international development, not reflecting the trend of combination of globalization and localization. (3) The research achievement of informatization of specialized language teaching has no prominent characteristics and partial research achievement is not transformed.

#### IV. DEVELOPMENT OF SPECIALIZED LANGUAGE TEACHING IN COLLEGES AND UNIVERSITIES IN CHINA

At present, the development of the specialized language teaching in China primarily involves English. In 2003, the Ministry of Education initiated reform of college English teaching and proposed that we should attach importance to cultivation of the listening and speaking ability and application of the computer technology in college English teaching in response to the weak links in English teaching. Gu(2010) , Zhu & Shen (2010) noted that the ESP (English for Specific Purposes) teaching is based on the need of the learners. It involves conducting demand analyses, interest analyses, and objective analyses and designing development courses for individual learners. Wang (2010) argues that there are many questions to be studied, such as the theoretical basis for existence of ESP, teaching material construction for ESP, teaching methods, teaching means, construction and utilization of network resources, tests and assessment, faculty development etc. Over the past several years, ESP has developed rapidly in college English teaching in China but it has also faced many difficulties such as lack of powerful faculty and proper teaching material. The information-based teaching is on-line, open, and shared. It can relieve the pressure of colleges and universities in terms of faculty and teaching material to a great extent.

#### V. CONTENT OF RESEARCH ON INFORMATIZATION OF SPECIALIZED LANGUAGE TEACHING

The informatization of the specialized language teaching is a huge systematic project. From the macroscopic perspective, it involves such fields as management, teaching, scientific research, social service etc. of the higher educational institutions. From the microcosmic perspective, it covers information infrastructure construction, teaching resource construction, talent team construction, management system building etc. for the colleges and universities. Currently, the level of specialized language teaching in China needs to be improved. The internationalization and modernization needs to be combined. We focus on the informatization and microcosmic perspective, analyze an specific example, namely Chinesisch-Deutsche Technische Fakultät of Qingdao University of Science and Technology, implementing Sino-foreign cooperative education, and study the informatization and specialized language teaching in a leapfrog manner.

Firstly, improve the classroom efficiency of specialized language teaching using the information technology The multimedia teaching resources and platforms are applied to the classroom teaching of foreign language to study the

effect of information-based teaching on the efficiency of foreign language class and verify the cause-and-effect relationship between use of information technology, frequency of use, how to use and the classroom efficiency.

Secondly, information construction for specialized language teaching resources: Integrate and develop information technology and multimedia teaching resources more appropriate for specialties learned by the students in cooperative education.

In the research on informatization of specialized language teaching, special attention should be paid to the following two aspects: (1) We should combine the informatization and specialized language teaching and search the multimedia resources necessary for specialized language teaching in cooperative education relying on the platform of Sino-foreign cooperative education. We should also construct an information-based teaching platform and teaching resources for the remote teaching platform. Data collection and statistics should be performed for the changes in the quality of the specialized language teaching after introduction of information-based teaching. (2) There are numerous and varied multimedia resources. Different multimedia resources should be classified and analyzed in the context of specialty and language complexity. Appropriate resources are utilized.

In the research on informatization of specialized language teaching, the selection of the research methods is also very important. The theoretical analysis method and the empirical analysis method should be combined. We should understand the latest material data on development of educational informatization both at home and abroad and the latest development of specialized language teaching. Meanwhile, the quantitative data should be collected and integrated by using questionnaire surveys, contrast tests, classroom interviews, questions and answers by teachers and students etc. The statistical method should be used to study the relationship between utilization of informatization resources and the effectiveness of specialized language teaching.

## VI. CHALLENGES FACED BY INFORMATIZATION OF SPECIALIZED LANGUAGE TEACHING

In the process of the development of the informatization of specialized language teaching, there are both opportunities and challenges. Among them, the challenge is mainly manifested in the following aspects:

### A. *Level of Campus Informationization Construction*

The campus informationization construction, including wireless network coverage, network transmission performance etc. determines the possibility of teaching informatization implementation.

### B. *Needs Analysis and Learner-centered Approach*

Some scholars have pointed out that the information-based teaching, such as Massive Open Online Courses (MOOC), substitutes the interactions and communication between teachers and students in class making it impossible to timely know the situation of the students. It is impossible to consider the students' needs. Thus, the designers of the specialized language informatization courses are required to analyze the students' needs and define goal-oriented tasks.

### C. *Quality of the Courses*

A specific analysis should be conducted to judge whether the content of the specialized language informatization teaching conforms to the needs of major background and language level. How to assess the students' learning outcomes and the course quality is another challenge. The famous German specialized language scholar Roelcke (2014) has proposed that the specialized language teaching should be divided into common specialized language and special specialized language, courses for students with disciplinary background and the courses for students without disciplinary background or students just started to learn the professional discipline, the courses for students of higher level of a foreign language and the courses for students of lower level of a foreign language, etc.

### D. *Teacher Training*

The most majority of the foreign language teachers in the colleges and universities in China are masters and doctors of linguistics and literature. Generally, they are not the students graduating from normal colleges. And they have not been trained for teaching methods before teaching. The ordinary foreign language teachers lack the academic background knowledge. It is very hard for these teachers to design course content and study the specialized language course. Dudley Evans and St. John (1998) proposed that qualified foreign language teachers should have the following five roles: 1) teacher, 2) course designer and materials provider, 3) collaborator, 4) researcher, 5) evaluator. Thorsten Roelck has also in 2010 stated that, a qualified specialized language teacher should have three core capabilities: The teachers should have a deep understanding of the levels of native languages, foreign languages, and specialized language of their students. They should also understand the professional knowledge of related specialties (in cooperation with related specialized teachers) and have the ability of language teaching. There is still a long way to go for construction of qualified teaching faculty.

## VII. CONCLUSION

The combination of specialized language teaching and information technology contributes to popularization and application of specialized language teaching. Based on informatization, the specialized language multi-media teaching

resources are collected to establish a multimedia database for foreign language teaching, which can be shared by a network platform. Establishing an informatization remote teaching platform by mobilizing the cooperative colleges and universities to participate in information sharing contributes to direct utilization of the foreign resources by the domestic students and promotion of the process of educational informatization of specialized language.

## REFERENCES

- [1] Chen, Yu (2012). Verbessern chinesische Studierende ihre Sprechfertigkeit im Deutschen während des Fachstudiums in Deutschland? Eine empirische Untersuchung unter Berücksichtigung sozialer Aspekte. Zugl.: Duisburg-Essen, Univ., Diss., 2011. Frankfurt: Peter Lang GmbH, Internationaler Verlag der Wissenschaften (Duisburger Arbeiten zur Sprach- und Kulturwissenschaft, 91).
- [2] Dietmar, Rösler. (2015). Studienbegleitender Deutschunterricht in naturwissenschaftlich-technischen Studiengängen an Universitäten außerhalb des deutschsprachigen Raums. *Zeitschrift für Interkulturellen Fremdsprachenunterricht Didaktik und Methodik im Bereich Deutsch als Fremdsprache* 1, 7-20.
- [3] Du, Heng. (2016). The Information-Based Teaching Method for Scientific German Courses. *Anhui Literature* 1, 148-149.
- [4] Fluck, Hans-Rüdiger. (1996). *Fachsprachen. Einführung und Bibliographie*. 5., überarb. und erw. Aufl. Tübingen, Basel: Francke (UTB, 483).
- [5] Fluck, Hans-Rüdiger. (1997). *Fachdeutsch in Naturwissenschaft und Technik. Einführung in die Fachsprachen und die Didaktik/Methodik des fachorientierten Fremdsprachenunterrichts (Deutsch als Fremdsprache)*. 2., neu bearb. Aufl. Heidelberg: Groos.
- [6] Gu, Zhizhong. (2010). Analysis of the Status Quo of ESP Teaching in Colleges and Universities and Countermeasures. *Audio-Visual Instruction of Foreign Languages* 3, 25-29.
- [7] Guo, Wenge & Xi, Jianhua. (2002). Indigenization: Current Situation and Development Tendency of International Higher Education Informatization. *Open Education Research* 3, 13-16.
- [8] Hammrich, Tim. (2014). *Fachsprache Umwelt. Ein didaktisches Modell für den DAF-Unterricht unter besonderer Berücksichtigung des fachsprachlichen Fremdsprachenunterrichts in China*. Berlin: epubli.
- [9] Hoberg, Rudolf & Zhu, Jianhua (Hg.). (2011). *Germanistische Sprachwissenschaft und Deutschunterricht in chinesisch-deutscher Perspektive*. Frankfurt: Peter Lang GmbH, Internationaler Verlag der Wissenschaften (Deutsche Sprachwissenschaft international, 10).
- [10] Hoffmann, Lothar. (1987). *Kommunikationsmittel Fachsprache. E. Einf. 3., durchges. Aufl.* Berlin: Akad.-Verl. (Sammlung Akademie-Verlag, 44 : Sprache).
- [11] Hu, Jianhua. (2010). Theoretical Research on the Necessity of Practical Development of Sino-Foreign Cooperative Education: Review of Research on Sino-Foreign Cooperative Education in Higher Education. *Educational Research* 10, 105-106.
- [12] Jin, Limin & Zhang, Chao. (2016). Promoting Content and Language Integrated Learning: The Case of Seminar Courses. *Shandong Foreign Language Teaching* 1, 52-60.
- [13] Jin, Zhao & Antje, Stork. (2007). Hauptprobleme chinesischer Studierender in Deutschland. Ergebnisse einer Vorstudie zur Entwicklung interkultureller Kompetenz. *Deutsch als Fremdsprache* 3, 166-173.
- [14] Jörg, Schröder. (2004). Interkulturalität als Grundlage moderner Fremdsprachenmethodik und -didaktik. Konzepte und Übungsformen für den Unterricht Deutsch als Fremdsprache am Beispiel Wirtschaftsdeutsch in China. <http://ubt.opus.hbz-nrw.de/volltexte/2005/273/> (accessed 15/05/2016).
- [15] Li, Tianduo. (1996). The Concept of Higher Education Informatization in Russia. *Digest of Management Science* 10, 31.
- [16] Michalak, Magdalena. (Hg.). (2014). *Sprache als Lernmedium im Fachunterricht. Theorien und Modelle für das sprachbewusste Lehren und Lernen*. Baltmannsweiler: Schneider-Verl. Hohengehren.
- [17] Notice on Printing and Distribution of Key Points for Educational Informatization 2014 by General Office of Ministry of Education. <http://www.moe.edu.cn/publicfiles/business/htmlfiles/moe/s7062/201403/165870.html> (accessed 16/12/2014).
- [18] Pudzuhn, Manfred. (1994). Fachunterricht versus Sprachunterricht. Untersuchungen zum studienvorbereitenden Fachsprachunterricht (DaF) für Ausländer. Frankfurt am Main [u.a.]: Lang (Deutsch als Fremdsprache in der Diskussion, 2).
- [19] Qin, Meiqiong. (2006). Analysis of the Current Situation of Sino-Foreign Cooperative Education and Countermeasures. *Research on Higher Education* 5, 34-39.
- [20] Roelcke, Thorsten. (2014). Zur Gliederung von Fachsprache und Fachkommunikation. *Fachsprache* 3-4, 154-178.
- [21] Roelcke, Thorsten. (2010). *Fachsprachen*. (3., neu bearbeitete Auflage.) (Grundlagen der Germanistik 37). Berlin: Schmidt.
- [22] Rosenburg, Marc J. (2000). *E-Learning: Building Successful Online Learning in Your Organization*. Toronto: McGraw-Hill Companies.
- [23] Schade, Günter. (2009). *Einführung in die deutsche Sprache der Wissenschaften. Ein Lehrbuch für Deutsch als Fremdsprache mit Lösungsschlüssel*. 13., neu bearb. und erw. Aufl. Berlin: Erich Schmidt.
- [24] Shen, Xichen & Chen, Huaichu. (2003). Standard Specifications for Information Construction in Colleges and Universities. *Journal of Tsinghua University (Natural Science)* 43.4, 529-531.
- [25] Stennes, Barbara. (2009). Advantages And Disadvantages Of Web-based Learning. [http://www.selfgrowth.com/articles/Advantages\\_and\\_Disadvantages\\_of\\_Web-based\\_Learning.html](http://www.selfgrowth.com/articles/Advantages_and_Disadvantages_of_Web-based_Learning.html). (accessed 16/2/2016).
- [26] Vom Brocke, Christina, Walker, Ute. (2012). Agile Kommunikationskompetenz: Herausforderungen und Lösungsansätze für den Fachsprachenunterricht an Hochschulen durch Interaktion in neuen Medien. <http://www.researchgate.net/publication/272484791> (accessed 16/2/2016).
- [27] Wang Jianbo. (2005). *Transnational Higher Education and Sino-Foreign Cooperative Education*. Ji nan: Shandong Education Press.
- [28] Wang, Junjing. (2007). Construction of an Application Platform for Foreign Language Education in the Context of Educational Informatization. *Educational Technology* 1, 187-194.

- [29] Wang, Shouren. (2010). Developing ESP Teaching and Promoting ESP Research in China-an address made by a Professor, Wang Shouren, at the opening ceremony of the seminar for the initial issue of ESP Research in China. *ESP Research in China* 1, 5-6.
- [30] Xu, Fang. (2003). Theoretical Review of Educational Informatization in Overseas Language Teachers and Enlightenment. *Foreign Language World* 6, 35-42.
- [31] Xu, Jingxue. (2009). Thoughts on Reform of Classroom Teaching in the Sino-Foreign Cooperative Education Programs-Taking the Sino-Australia Cooperative Education Program of Zhejiang Industrial and Commercial Vocational Technical College as an Example. *Journal of Zhejiang Industrial and Commercial Vocational Technical College* 8.2, 54-55.
- [32] Xu, Miao. (2015). Chinas Bildungsinternationalisierung. Eine Analyse chinesisch-deutscher Kooperationen im Hochschulwesen. Heidelberg, Univ., Diss., 2015.
- [33] Ye, Song. (2005). A Comparative Study on the Development of Informatization in Colleges and Universities in Hongkong and Mainland China. *The Chinese Journal of ICT in Education* 7, 68-71.
- [34] Zhao, Guodong. (2003). Colleges and Universities in the Information Age: Development of Higher Education Informatization and Its Enlightenment. *Modern Educational Technology* 13.5, 11-17.
- [35] Zhao, Guodong. (2004). A Comparative Study on the Development of Higher Education Informatization in China, the United States and Japan. *Comparative Education Review* 25.2, 28-33.
- [36] Zheng, Yu. (2015). Exploration of Professional German Teaching in Sino-Germany Cooperative Education Programs. *The Science Education Article Collects* 4, 211-214.
- [37] Zhu, Jianhua. (1987). Morphologie, Semantik und Funktion fachsprachlicher Komposita. Analyse von Fachtexten d. Silikattechnik Jianhua Zhu. Zugl. Bochum, Univ., Diss., 1987. Heidelberg: Groos (Sammlung Groos, 31).
- [38] Zhu, Jianhua. (1993). Mode of Communication in Scientific German. *Journal of Tongji University* 2, 97-103.
- [39] Zhu, Jianhua & Zimmer, Thomas (Hg.). (2003). Fachsprachenlinguistik, Fachsprachendidaktik und interkulturelle Kommunikation. Wirtschaft - Technik - Medien Jianhua Zhu ... (Hrsg.). Frankfurt am Main [u.a.]: Lang (Angewandte Sprachwissenschaft, 12).
- [40] Zhu, Meiping & Shen, Yiwen. (2010). Probe into Teaching Models of English for Specific Purposes in Foreign Language Colleges and Universities. *ESP Research in China* 1, 80-87.

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