

Research on the "Foreign Language+" Curriculum System in Universities with Industrial Features

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Abstract

Under the background of the construction of the new liberal arts, the traditional curriculum system for foreign language subjects cannot meet the market demand. The development space of foreign language majors is increasingly compressed, and the quality of graduates is generally declining. The situation of foreign language majors in universities with Industrial Features is even more difficult due to the weakness of their disciplines, the limited teaching staff and the lack of language learning environment. In this paper, we use literature research and questionnaires to explore the development of "foreign language +" courses in universities with Industrial Features with industrial characteristics, by adjusting course hours, diversifying course settings and offering cross-disciplinary courses. This article provides some ideas and suggestions for the development of foreign language courses and curriculum reform in universities with Industrial Features.

Keywords: "foreign language +", curriculum, industry-specific in universities with Industrial Features.

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1. INTRODUCTION

Under the background of the construction of the new liberal arts, students majoring in foreign languages are unable to meet the needs of social change, which directly leads to quality decline of these students, and a disconnection between curriculum and social practice, as well as the severe employment situation of graduates. The situation of foreign language students in universities with Industrial Features is even more difficult due to less discipline strengths, the limited number of faculties and the lack of language learning environment. In view of the above situations, universities with Industrial Features should actively innovate, combine their professional characteristics with market demand, give full play to their disciplinary advantages, improve the ability and quality of foreign language majored students, and better adapt to the needs of social development, and the "Foreign language+ " program has provided us with a valuable way to adapt the curriculum. In recent years, foreign language majors in industry-specific institutions have been offering a series of unique "foreign language+" courses based on industry needs. The setting of these courses relies on the advantages of the institution, the full use of current technology, together with bold and innovative ideas. The unique training programs that aim

at "application-oriented talents" have emerged consequently. Generally speaking, these universities with Industrial features tend to offer more traditional courses focusing on the basic foreign language skills such as "listening, speaking, reading and writing" in the early years, and set up elective courses with distinctive industrial characteristics to popularize the basic knowledge of the industry. In the senior years, specialized courses are offered and innovative skills are developed. So far, a large number of Chinese scholars have conducted detailed studies on this issue and obtained abundant results. For example, Feng Chuanyuan (2015) in School of Foreign Languages, Southwest University for Nationalities proposed the establishment of additional basic science and technology courses, arguing that such universities can establish a model of "English + science and technology foundation" to broaden the social adaptability of students in English majors, and therefore the objective condition of limited teaching time at the undergraduate level can be fully utilized. The study provides a good solution to the current dilemma of foreign language majors, and the term "complex foreign language talents" emerging many times in the study has become a major trend in foreign language education. The research

methodology and main steps in this study provide a good example for subsequent researches.

In this paper, we will focus on the curriculum of foreign language majors in universities with Industrial Features. In addition to improving the quality of traditional "listening, speaking, reading and writing" curriculum, we will also promote the integration of special polytechnic subjects with foreign language majors to foster a complex model of foreign language education in the context of the "new liberal arts".

2. RESEARCH QUESTIONS AND RESEARCH METHODOLOGY

2.1 Research Questions

This research takes the teaching of foreign language majors as the research object relying on the characteristics and advantages of polytechnic colleges and universities, through the analysis of students' intentions about curriculum setting, it also summarizes the specific plan suitable for the current curriculum reform and explores the development path of "foreign language +" discipline.

2.2 Research Objectives

The purpose of this research is to explore the development path of the "foreign language +" subject, combine the foreign language subject with the characteristic major of the college, strengthen the comprehensive degree of the foreign language major's curriculum, and explore the new foreign language talent training plan, such as the teaching of professional courses in advance, such as "Translation Practice" or "Introduction to Linguistics", etc., let students understand the knowledge of relevant fields as soon as possible, divert majors in advance, increase the proportion of second foreign language classrooms, try to condense the homogeneous curriculum, and strengthen the construction of high-level teachers (Wang Huan, 2022), and finally cultivate a group of the compound and application-oriented outstanding foreign language professionals who serve the current social development.

2.3 Research Methods

To have a more comprehensive understanding of the situation of foreign language teaching in universities with industrial characteristics, this research firstly used literature collection as the basis to understand the current status of foreign language education reform in science and technology colleges. Secondly, the research used questionnaires to analyze the causes and solutions of the problems in the current curriculum reform in the subject reform. Thirdly, through data integration, using the Internet as a mean to compare and learn from the experience of science and engineering colleges and universities combined with classic successful cases across the country. Incorporating the industry characteristics of the institution, put forward feasible countermeasures.

Finally, learn the effectiveness of this research through the form of interview questionnaires.

This research mainly used the literature research and the questionnaire survey. When discussing the theme of "Exploration of the "Foreign Language +" Discipline Development Path of Industry-specific Colleges and Universities", the team members first collected a large number of relevant research documents for sorting and analysis for the discussion on foreign language education model. At present, many science and technology colleges based on industry needs mainly are actively exploring the direction of a foreign language major reform, school characteristics and development needs, and discipline characteristics. For example, the School of Foreign Languages of Shanghai Electric Power University divides foreign language courses into three categories: general education and compulsory courses such as "College English", professional courses such as "Comprehensive English", general elective courses (Zhao Yueqin, 2021); Taiyuan University of Technology meets the needs of students' individual development, creates modular unit courses, and combines students' individual development needs with a broad goal, combining nature and professionalism, explore the establishment of a multi-level, cross-type and integrated foreign language professional curriculum system (Wang Huan, 2022).

In this study, more than 100 questionnaires were distributed to students of the Department of Foreign Languages of North China Electric Power University. North China Electric Power University is a famous science and engineering college of the Department of Electrical Engineering and has typical characteristics of the industry. There are 59 valid questionnaires collected this time. The questionnaire settings mainly focus on students' willingness to minor in the second major, and suggestions for increasing or decreasing related professional courses.

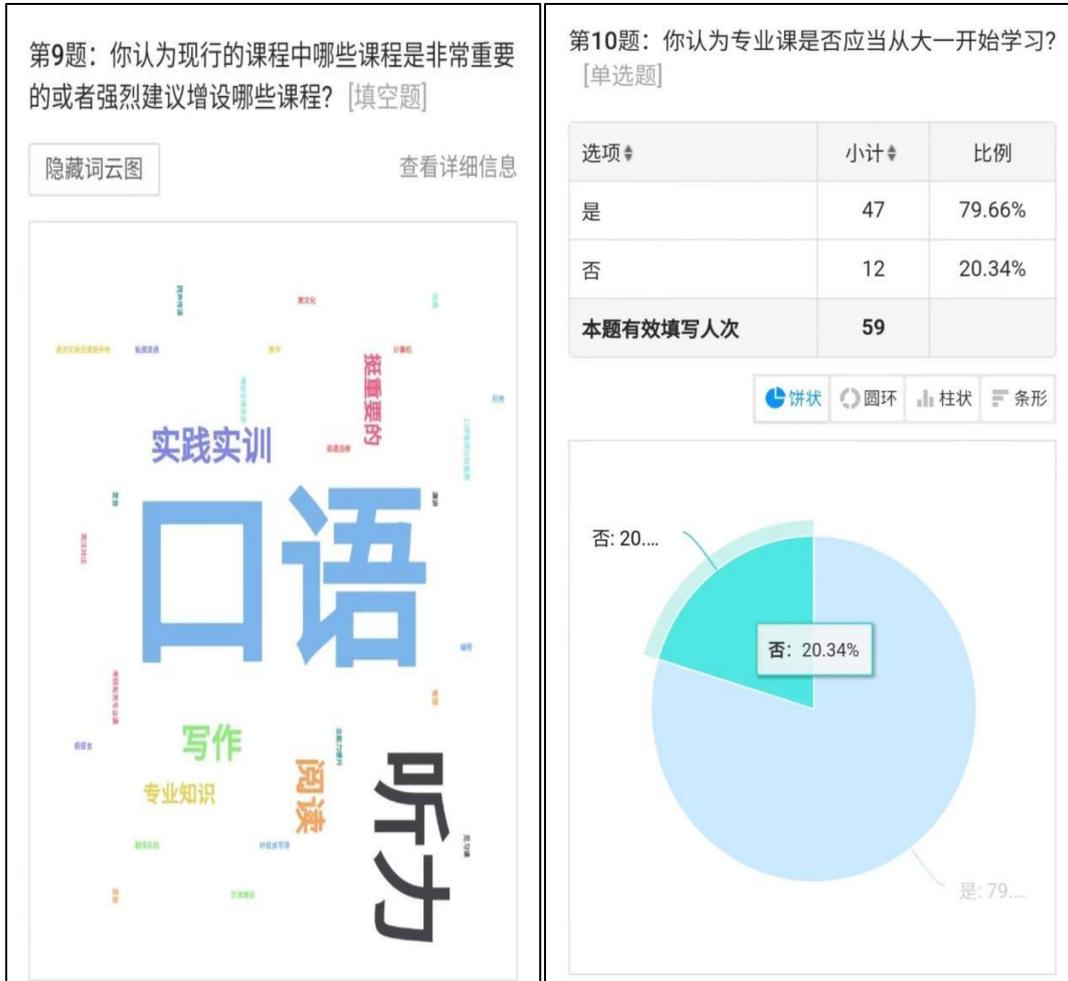
3. RESEARCH PROCESS AND SOLUTIONS

During the preliminary investigation, through collecting and collating a large amount of literature on related topics, we initially understood that industry-specific colleges and universities often have problems such as unclear training objectives, biased training modes and professional curriculum settings (Yang Guoqi, 2011), while in liberal arts majors are often not valued in universities and are at risk of being marginalized (Wang Zhenping and Dai Zhaofeng, 2019). After a preliminary understanding of foreign language majors in these colleges and universities, we selected students of foreign language majors in industry-specific colleges and universities as the target of the survey, and their opinions and suggestions on the curriculum were investigated in the form of questionnaires distributed to them. Among all questionnaires, there were 59 valid questionnaires, and the respondents included foreign language majors of the

20th grade in North China Electric Power University, China University of Geosciences, Jiangxi University of Technology and other institutions with industry

characteristics. Through this questionnaire, we drew up following suggestions.

3.1 Additional Speaking-Related Courses and Early Delivery of Specialized Courses

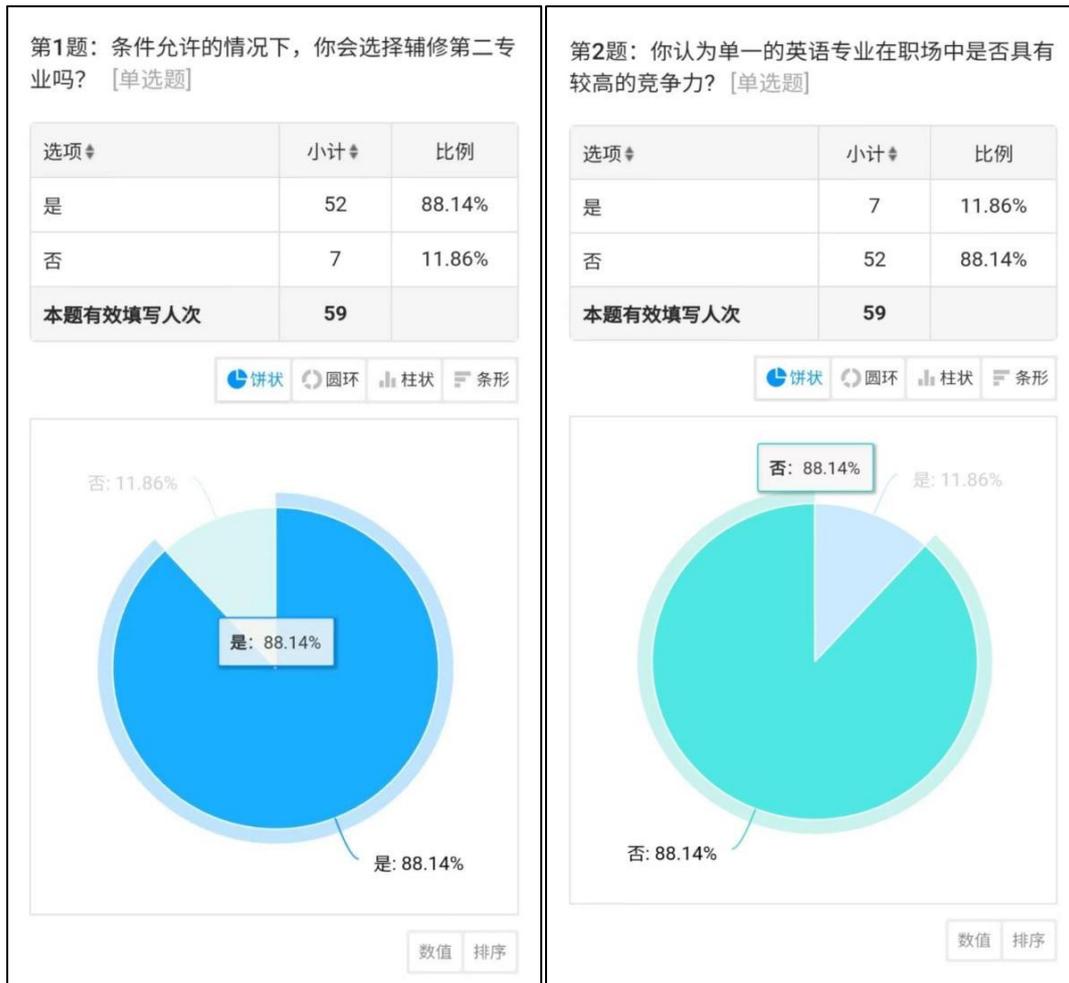


(The first chart shows the word cloud of important courses in the minds of foreign language students) (The second chart shows a survey of when specified courses should be offered)

According to the word cloud, speaking courses are important and slightly under-represented in the minds of the foreign language students surveyed, with most speaking courses lasting three to four semesters, concentrated in the freshman and sophomore years. Most speaking courses are taught by foreign teachers and are very popular among students. Therefore, given the lack of language practice, industry-specific

institutions should increase the length and number of speaking courses so that students can continue to be immersed in oral communication throughout their time at university. At the same time, 79.66% of students believe that professional courses should begin in the first year of study, with the fact that start of professional courses in foreign languages currently concentrated in the second half of the sophomore year and throughout the junior year, while focusing on the basics in the first year of study. Early exposure to foreign language courses helps to deepen the understanding of the subject and to acquire professional skills and social practice earlier.

3.2 Actively promote cross-faculty exchanges and encourage interdisciplinary electives for foreign language students "foreign language + interdisciplinary electives"

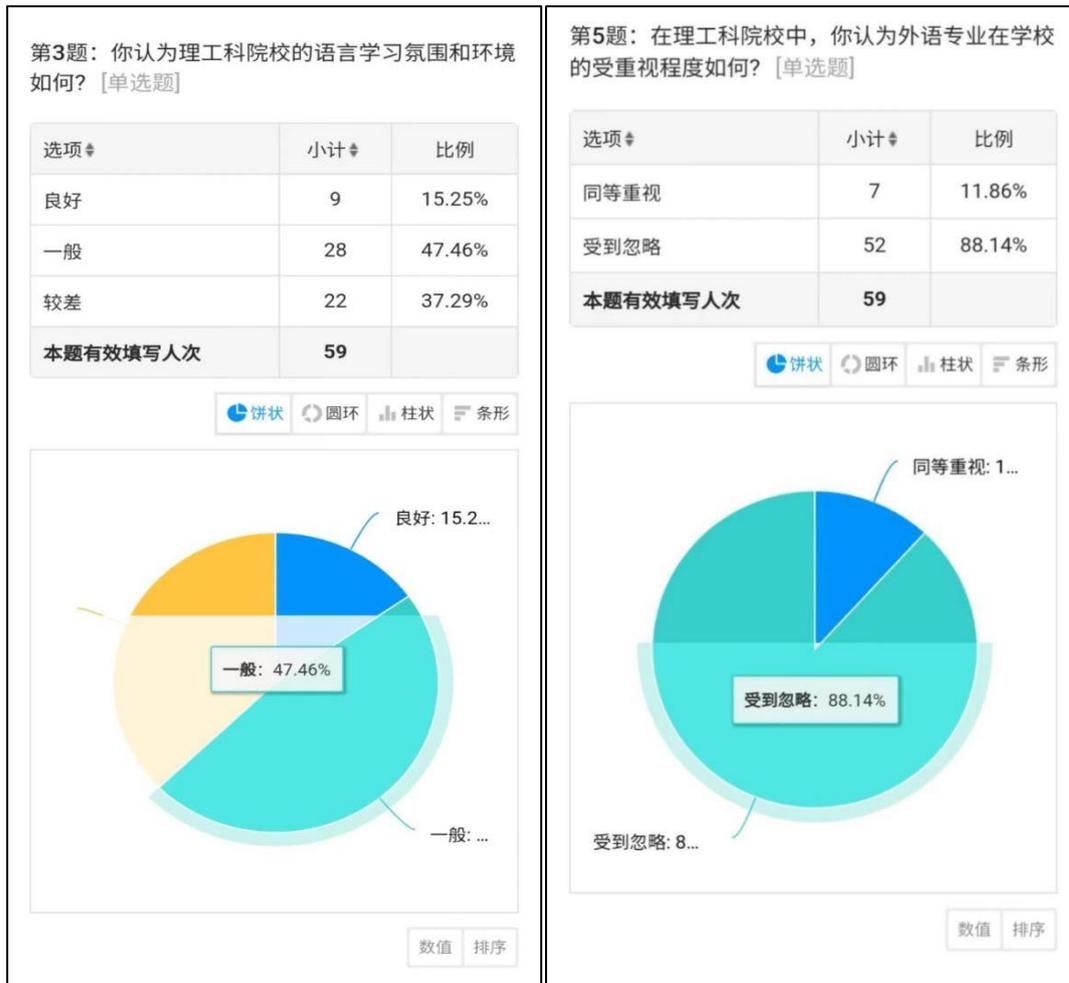


(The first graph shows a survey of foreign language students' intentions to have a second major) (The second graph shows a survey of students' opinions on the competitiveness of foreign languages)

According to the results of the survey, 88.14% of students have high enthusiasm and yearning for a major other than their own. The same 88.14% of students believe that it is difficult to develop a competitive capacity in workplace or find a relatively satisfactory job after graduation with only their professional knowledge. Therefore, polytechnics can make full use of their strong polytechnic atmosphere to encourage cross-disciplinary integration between foreign language departments and polytechnic departments, and encourage foreign language majors to take up interdisciplinary options that interest them if

they are able to do so, so that they can develop a polytechnic mindset and build up some basic knowledge of polytechnics while having language ability as their own advantage. At the same time, the university can also support foreign language students to use their expertise in collaborative projects with students from science and engineering faculties, such as the Challenge Cup, Internet Plus, and the American Student Mathematical Modelling Competition. Through cross-faculty exchanges and interdisciplinary electives, foreign language majors can more keep in touch with areas that they are interested other than their own expertise, cultivate and develop a science and engineering mindset, and meanwhile have a competitive advantage over ordinary foreign language major students after graduation.

3.3 Cooperation program with different types of universities to fill the shortcomings of the poor language environment ('foreign language + exchange experience')

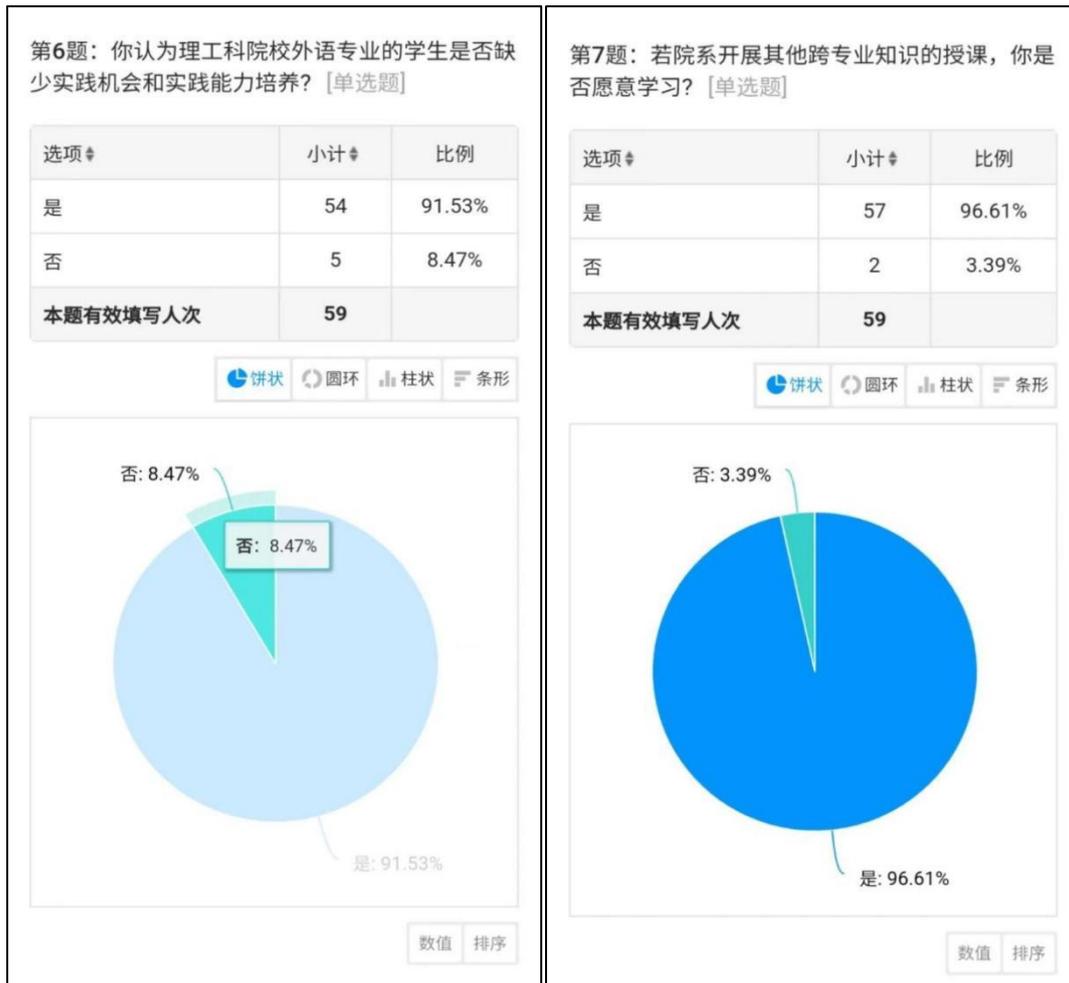


(The first chart shows students' evaluation of the language learning atmosphere) (The second chart shows students' evaluation of the importance of language department in the school)

According to the results of the survey, 47.46% of the students believe that the language learning environment created by their major is average, 37.29% believe that the language learning atmosphere is poor, and 88.14% of the students feel that foreign language majors are not valued and easily neglected in polytechnics. This is not surprising, as the science and engineering departments are the speciality of the university and are rich in resources, while the foreign language departments are relatively small in number and the faculty is relatively mediocre, making it difficult to compare the language atmosphere and

overall environment with that of the comprehensive and language universities. In the survey, 100% of students expressed a desire to study on exchange at the same level or at a better institution than their own. Therefore, polytechnics can work closely with different types of universities to strengthen cooperation and offer exchange program of six months to a year's duration. For example, they can cooperate with universities of the general category to send foreign language students to experience a better language atmosphere and teachers, and at the same time accept exchange students of science and technology from the general category universities so that they can experience a stronger science and technology atmosphere and teachers' teaching. This is a two-way export and full cooperation to fill the shortcomings of each.

3.4 Establishment of a center that studying on the subject background of the school in question and enrichment of practical experience ("foreign language + subject knowledge")



(The first graph shows a survey of students' responses to the practice situation) (The second graph shows a survey of students' attitudes towards interdisciplinary courses)

According to the results of the survey, as many as 91.53% of students agree that the major focuses on teaching traditional written knowledge and lacks real practical experience, while 96.61% of students are willing to learn interdisciplinary knowledge in lectures. They believe that they cannot develop a competitive edge in employment with just one language skill. In the context of the school's strengths in science and technology, foreign language majors could set up research centers about the school's disciplinary backgrounds. Schools can encourage students in the lower years who are academically able to actively join translation practice, while setting up translation practice in the research centers as a compulsory course for upper-year students. In this process, students not only develop their reading and translation skills, but also gain a deeper understanding of other disciplines. At the same time, professional teachers from foreign

departments can be invited to give lectures to foreign language students and provide them with guidance on translation practice. This measure can enrich the practical experience of foreign language students while broadening their knowledge and understanding of other disciplines.

4. INNOVATION POINTS

4.1 Establish International Communication Courses and Cultivate International Talents

Offer special international communication courses and tell Chinese stories in foreign languages. Under the background of "One Belt, One Road" and the new era of globalization, the development of foreign language majors in universities should strengthen cultural export rather than import. For example, the offering of special bilingual courses to enable foreign language students to understand the characteristics and development status of the university, to introduce the characteristics of the university in a foreign language, and to train foreign language talents with expertise in science and technology, such as: energy English translators, foreign trade talents and hosts or editors in

foreign economic channels are typical international communication acts with specific fields.

4.2 Establish Technology Courses and Meet the Requirements of the Internet Age

Offer courses related to "foreign language + technology to cultivate complex talents who meet the requirements of the times. Foreign language in universities with Industrial Features should focus on cultivating students' ability to use information technology to discover, analyze and solve language research problems, so information technology courses should be reasonably included in the curriculum. In universities with Industrial Features are generally rich in general technology teaching resources, and their English majors can add natural science fundamentals and engineering technology courses, such as the use of corpus technology, statistics, Python programming, and natural language processing, to their curriculum to form a general technology literacy course module that covers a wide range of topics and is not difficult for foreign language students to learn. (Wei Xiacong, 2021) In addition, in universities with Industrial Features can also make full use of the school's faculty to create a joint teaching team of teachers with a background in science and technology and the ability to teach foreign languages and English majors to develop generic technological literacy courses tailored to language research and practice scenarios in order to better meet the specific needs of English talent development. For example, a Python course offered for English majors could focus on content such as text acquisition and processing, data analysis and visualization. Specialist courses should be designed to incorporate the latest current technological developments, such as courses in translation technology and corpus linguistics. Following the trend of artificial intelligence technology and developing related courses is an important way to train foreign language talents that meet the needs of society.

4.3 Establish Diverse and Personalized Courses to Meet Students' development Needs

Give full consideration to the individual differences of each student, and offer diverse courses for students to choose from on the premise of keeping up with the huge social demand and in line with professional development. Explore the establishment of a multi-level, cross-cutting and integrated curriculum system for foreign language majors (Wang Huan, 2022) English majors in universities with Industrial Features can combine the school's own development characteristics and students' wishes to develop school-based professional courses to highlight the characteristics of talent training. For example, by investigating the future development directions students wish to pursue, such as finance, foreign trade, politics, Journalism and other fields, through faculty cross-faculty cooperation and recruitment of teachers with relevant disciplinary background to teach, open professional courses in different directional fields and

small class classification teaching, conditions do not allow, through market research, according to the popular areas of job search, discipline development direction and social demand in the scope of the institution's ability to open as many composite courses.

4.4 Increase the Proportion of Practical Courses and Strengthen the Cultivation of Practical Ability

English majors in science and engineering colleges should combine the demand for foreign language talents and the characteristics of running science and engineering colleges to carry out school-enterprise cooperation and open up the connection channel between students and enterprises. For example, translation courses can be set up in the direction of translation, with reference to industry standards to establish a corporate project management process, and organize teachers and students to undertake translation projects on and off campus, or cultivate students' practical translation skills through mock projects. Such practical courses can be divided according to difficulty and offered earlier in the semester. For example, in the lower years, the main focus is on understanding and experiencing translation work; in the middle years, translation skills are studied and practiced; in the upper years, students can undertake some translation work on their own, so that they can get to know and experience the working environment in advance, laying a foundation for choosing their future employment direction and adapting to market demand.

4.5 Strengthen Specific Department Corporation and Create a Diversified Learning Environment

Open University specific cooperation programs to make use of the strengths of universities with Industrial Features schools and make up for the shortcomings of the language environment. For example, for 2+2 domestic university exchange students, in response to the lack of a good and sufficient language environment in universities with Industrial Features schools, close ties should be established with other universities to strengthen cooperation between them. For example, universities with Industrial Features schools can cooperate with language universities at the same level and implement the 2+2 model, i.e. the first two years in language schools to practice basic foreign language skills and cultivate cultural literacy, so as to build up a solid language foundation, and the second two years in our university to conduct foreign language and interdisciplinary In the second two years, you will study a foreign language and an interdisciplinary subject at our university, with emphasis on interdisciplinary subjects such as foreign language + economics and management, foreign language + law, etc. It is important to note, however, that this type of course should be taught in a foreign language, so that you can practise your language skills and study an interdisciplinary subject at the same time. Alternatively, external language scholars and professors may give occasional lectures or seminars to give students a better

education and broaden their horizons, and in return, the University provides support to partner schools in strong science and technology subjects.

4.6 Curtail Basic English Courses and Increase Specialist Knowledge Courses

Courses with unclear teaching expertise should be reduced or abolished, e.g. grammar and vocabulary, English general reading, etc. Increase the proportion of cultural courses, such as English and American literature, British and American culture, etc.; for some courses that do not meet the development needs should be innovated and reformed, for example, the traditional English speaking courses ignore communicative and practical application ability, and should be gradually reformed into functional English communication, situational English communication, English speech, English debate and other speaking courses, and constantly infiltrate the knowledge of cross-cultural communication (Chang Junyue, 2014) to improve cultural literacy of English majors.

4.7 Increase the Number of Small Language Courses and Strengthen the Construction of Teachers

At present, there is an unbalanced situation that English is the only language in science and technology schools, which restricts the development of English majors. Although some schools offer second foreign language, they lack excellent teachers and foreign teachers to join them, and students cannot master second foreign language skillfully. Therefore, schools should offer multiple small language courses, train a strong team of teachers, improve teaching methods, not only adopt a foreign language + foreign language training programme, or even implement foreign language + two or three small languages, so that students have the opportunity to master multiple foreign languages, and for students who have the ability to learn, set up additional experimental classes in multiple languages (focusing on training the interactive translation ability of multiple foreign languages), for example, our school can try to train For example, we can try to train multilingual translators in the field of energy.

5. CONCLUSION

Based on the development path of foreign language majors, this research explores the feasibility of the "foreign language +" development model in industry-specific colleges and universities under the background of "new liberal arts". After decades of development, foreign language majors in polytechnic colleges have completed institutionalized and systematic construction, providing a sustainable development path for the development of foreign language majors and achieving brilliant results. But at the same time, due to the problems of academic management and school-running concepts in traditional characteristic colleges and universities, a large part of foreign language majors have not been paid attention to,

and the curriculum setting of foreign language majors has also been flawed for a long time. In this study, the data collected through the distribution of questionnaires summarizes and analyzes the current foreign language students' cognition of the existing problems in the curriculum. At the same time, the concept of "foreign language +" is introduced to guide students to actively change their attitudes and try an efficient and characteristic teaching model. This article mainly introduces three kinds of "foreign language +" curriculum reform and construction, the first is "foreign language + inter-professional elective", which encourages foreign language students to take inter-professional electives and promotes inter-departmental cooperation; the second is "foreign language + exchange experience", different colleges and universities set up cooperative projects to jointly build a positive language environment; the third is "foreign language + subject knowledge", schools can build subject background research centers according to their actual conditions to enrich students' practical experience. Under the guidance of the new liberal arts concept, foreign language majors in industry-specific colleges and universities should rely on the characteristics and advantages in terms of curriculum setting, realize the cross-integration of disciplines and featured majors, strengthen the cultivation of technical literacy, and create personalized learning opportunities for students, to meet the development needs of different students. Foreign language majors in science and technology colleges should open up a path of character development by cultivating compound foreign language talents with solid language skills, profound Chinese feelings, excellent cross-cultural understanding and communication skills, and good technical literacy (Zhao Hong, 2021).

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