Exploring Pathways for the Internship and Employment of English Majors under the Digital New Quality Productive Forces

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Abstract: With the rapid development of digital new quality productive forces, digital transformation has become an important force driving economic and social development. However, on the road of development, opportunities and challenges coexist. This study focuses on the internship and employment issues of English majors in Sichuan science and engineering colleges, analyzes the changes and challenges brought about by the current digital new quality productive forces, and based on the regional and industrial characteristics of Sichuan, this paper explores the predicaments faced by such students during their internships and employment. It proposes corresponding breakthrough paths, aiming to provide theoretical support and practical guidance for improving the internship quality and enhancing the competitiveness of English major students majoring in science and engineering colleges in Sichuan.

1. Research significance

China is a populous country. The large population not only brings abundant labor resources but also causes the job market competition fiercely. In the backdrop of the global digital wave, digital new productive forces are reshaping the patterns of various industries at an unprecedented speed. Digital new productive forces are dominated by innovation and possess significant characteristics such as high technology, high efficiency, and high quality. They are driving the transformation and upgrading of traditional industries and the vigorous development of emerging industries. Sichuan, as an important economic province and a strong educational province in China, has a large number of universities and abundant educational resources. Among them, the English major in science and engineering universities plays an important role in cultivating interdisciplinary talents with professional technical background and English communication skills.

However, under the influence of the new quality productive forces in the digital field, students majoring in English-related subjects at Sichuan University are currently facing new challenges and opportunities in their internship and employment. On one hand, emerging industries such as information technology, artificial intelligence, and bio-medicine are rapidly developing in Sichuan, and these industries have an increasing demand for skilled professionals who possess both technical knowledge and proficiency in English; on the other hand, the traditional training model and employment concepts have become unable to meet the development requirements of the new quality productive forces, resulting in a mismatch between the knowledge students have acquired and the actual needs of enterprises, making it difficult for them to find jobs[1]. Especially for English majors who study literature and language, they do not have an advantage in employment.

Therefore, in-depth research on the breakthrough paths for the internship and employment of English major students is of great significance for improving the employment rate, promoting students' employment, and promoting social and economic development.

The purpose of this thesis is to explore the employment breakthrough paths for students majoring in science and engineering in the current era and to answer the following questions: In the context of the development of digital new productive forces, what are the key factors that promote students' employment? How can the three participants - students, schools, and enterprises - achieve better

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mutual connection? The exploration of these questions helps to gain a deeper understanding of the internship and employment needs and career development paths of students majoring in science and engineering in the current technological context, as well as the role and function of schools in internship and employment guidance.

In addition, this study sees the wood for the tree. By conducting in-depth research on the current situation and problems of internship and employment for students majoring in science and engineering, it can provide valuable references and insights for schools and enterprises, helping students better adapt to market demands and career development. At the same time, the research results can also offer suggestions for decision-makers on improving internship and employment guidance, promoting students' professional growth and career development, and achieving the integration of education and social needs.

In summary, the research objective of this thesis is to explore the current situation and problems of internship and employment for students majoring in engineering in Sichuan. This is in the hope of providing useful insights and references for understanding students' employment difficulties, improving the school's employment guidance work, and promoting students' professional growth and career development. Thus, it will further promote the alignment of higher education with social needs, and facilitate the all-round development and career success of students.

2. Overview of Digital New Quality Productive Forces

2.1 Definition and Characteristics

Digital new quality productivity is a new form of productive force in contrast to traditional productivity. It emphasizes the role of innovation-driven forces and is based on digital technology. By integrating other production factors, it promotes the development of productive forces[2]. For students majoring in engineering in Sichuan, digital new quality productivity not only enhances their professional skills but also broadens their employment opportunities and internship chances.

2.2 Analysis of the Current Employment Market by Digital New Quality Productive Forces

Digital transformation in the job market has sharpened the mismatch between traditional internship-employment routes and emerging demands, making integration imperative.

2.2.1 Integration of Digital New Quality Productive Forces with Traditional Internship Employment Paths

Digital new quality productive forces have driven the vigorous development of emerging industries such as digital economy, intelligent manufacturing, and artificial intelligence, which have created a large number of new job opportunities[3]. At the same time, it has given rise to new employment models such as remote working and flexible employment, providing more learning, employment, and practical opportunities for interns.

2.2.2 The Empowerment of Long-term Stability of Internship Employment by New Quality Productive Forces

The integration of digital new quality productive forces into the internship employment process can provide students with lasting and stable internship and employment opportunities. Through continuous learning and mastering new technologies, students can effectively maintain their core competitiveness in the digital wave and gain an advantage in the fierce competition of the digital era.

3. Employment Status of English Majors from Science and Technology Colleges in Sichuan Region

3.1 Analysis of Market Demand for English Talents in Sichuan

The market demand for English talents in Sichuan Province has shown significant structural changes under the new trends. The in-depth implementation of the "Belt and Road Initiative" and

the rapid development of the cross-border e-commerce industry have given rise to diversified demands for English talents. The market has demonstrated a shift from a single language skill to a "English + specialty"[5] composite ability, especially lacking applied talents who possess both English proficiency and industry knowledge.

The cross-border e-commerce sector needs a large number of comprehensive talents who master English operations, overseas market expansion, and cross-border logistics knowledge; the international cultural tourism industry continues to grow in demand for small language tour guides, cross-border study tour mentors, etc.[4]; the translation and localization industry places greater emphasis on professional technical document processing, cultural adaptation, and human-computer collaboration capabilities.

Research shows that there is a continuous demand in the current market for composite English talents with cross-cultural communication skills, industry expertise, and technical application capabilities, which provides a clear direction for English talent cultivation and employment.

3.2 Employment Difficulties

Compared with comprehensive universities or specialized foreign language universities, the employment difficulties of English majors from science and technology universities does not originate from an absolute disadvantage in language skills. Instead, it lies in the unique competitive landscape shaped by their background as science and technology institutions.

3.2.1 Insufficient recognition of language majors in science and technology universities

In science and technology universities, the English major is often regarded as an auxiliary discipline and lacks distinctiveness. When students apply for pure language positions in the job market, their professional credibility is often lower than that of graduates from English language institutions, and they face "academic pedigree bias"[6].

3.2.2 Deficiency in Talent Cultivation

Science and technology universities tend to have students master language knowledge while integrating the advantageous knowledge of their own science and technology disciplines. However, they often ignore the reality fact that students generally face a high threshold for science courses and difficulty in truly integrating into the field, ultimately falling into a dilemma of "Neither engineering nor English can be master". The scientific and technological knowledge is far from sufficient to handle technical positions, making them a caught in the middle.

3.2.3 Lack of Multilingual Learning Atmosphere

Specialized institutions for cultivating language talents have a strong multilingual cultural atmosphere, providing students with an immersive language environment. In science and technology universities with a strong engineering environment, their campus culture, student activities, and recruitment entities are all oriented towards science and technology, and internship opportunities are mostly tilted towards engineering majors. As a result, English majors have very few internship opportunities; moreover，English majors in science and technology universities have difficulty obtaining targeted language practice platforms, and the opportunities for cross-cultural communication and professional skills training are significantly fewer than those in specialized language schools, leading to a lack of practical experience in interviews and actual work.

4. Overview of New Job Opportunities from Digital New Quality Productive Forces

4.1 Digital Education and International Collaboration

4.1.1 Course design and bilingual teaching on online education platforms

In science and engineering colleges, digital transformation is becoming the core driving force for promoting digital new quality production. English majors can utilize new-generation information technologies such as big data, artificial intelligence, and cloud computing to participate in the

research, design, and evaluation of digital textbooks, online courses, and AI teaching software[4]. The scientific and technological advantages of science and engineering colleges provide a solid foundation for these projects, while the language and education background of the English major ensure the academicity and reliability of the content. As a result, a new type of interdisciplinary talents who are proficient in both English and educational technology have emerged, opening up a new employment direction for English majors.

4.1.2 Tutors and accompanying teachers

The development of digital new quality productive forces has also stimulated the rapid growth of the demand for the tutoring market in international knowledge subject competitions. For example, the AMC American Mathematics Competition, the IMO International Mathematics Olympiad, and the PUPC Princeton University Physics Competition. These markets focus on training for specific subject knowledge competitions, with high levels of course development and teaching specialization. They may adopt the form of video recording for teaching. In addition, for some customers with special needs, they will provide competition accompanying services. This not only focuses on the imparting of subject knowledge and training of problem-solving skills, but also focuses on the entire learning follow-up, psychological counseling, time planning, and communication feedback with parents, equivalent to a deep academic companion service. The development of digital technology provides more efficient and personalized services and creates new job demands.

4.2 Intelligent Language Services and AI Technology Creation

The basic translation is greatly influenced by AI, but post-editing is indispensable. Because professional students can leverage their solid language skills and use AI tools such as Deep L and Chat GPT to complete the initial draft, and then review and optimize the translation to ensure the quality of translation in professional fields. At the same time, they can also engage in language intelligence processing work, participate in the training of AI translation models, filtering of language materials, annotation, and be responsible for evaluating the content quality and verifying the semantic logic of the AI-generated text[6] to improve the performance of the language intelligence system.

4.3 Cross-cultural Digital Content Creation

4.3.1 International Operations of Cross-border E-commerce Platforms

Cross-border e-commerce operations require a large number of English talents. English majors can be responsible for building overseas stores and planning the English content of the pages. By leveraging their English advantages, they can expand overseas customer bases, negotiate with foreign suppliers and clients, search for international market trends and competitor intelligence in English, combine with AI data analysis tools to formulate product promotion strategies that are suitable for overseas consumers, and promote products in the global market[7].

4.3.2 International Communication Content Creation

Under the backdrop of media convergence, there is an exuberant demand for English-language content creation from English-speaking We-Media and international news information platforms. English majors can use their language skills to write in-depth international commentaries, English articles on overseas cultural stories, and produce English podcast programs. They can also obtain topic inspiration through AI, optimize titles, use AI video editing tools to improve creative efficiency, and convey unique viewpoints and content in the international public opinion field.

5. Conclusion

Through the analysis of the current situation of internship and employment of English majors specializing in science and engineering at universities in Sichuan, this study finds that these students faced numerous challenges during the internship and employment process, such as limited

internship opportunities, insufficient employment competitiveness, and mismatch between professional skills and market demands. Through in-depth discussions of these issues, this study proposed a series of solutions, including strengthening school-enterprise cooperation, enhancing students' comprehensive qualities, and strengthening employment guidance. These measures aim to effectively help students solve problems in their internship and employment, providing them with effective internship and employment guidance and more development possibilities. This will significantly increase the employment rate in society and further promote the development of the national economy.

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References

[1] Wang Yang. Research on the Cultivation Strategies of Innovation and Entrepreneurship Literacy for Business English Majors [J]. Talent Intelligence, 2025, (16): 73-76. DOI: CNKI: SUN: CAIZ. 0. 2025-16-019.

[2] Li Xiaohua. The Main Characteristics and Formation Mechanism of New Quality Productivity [J]. People's Forum, 2023, (21): 15-17. DOI: CNKI:SUN:RMLT.0.2023-21-004.

[3] Tan Rihui, Fang Yingying. Enabling High-Quality Development of New Employment Forms through New Producers' Power: Theoretical Logic and Practical Pathways [J]. Journal of Hangzhou Normal University (Social Sciences Edition), 2024, 46(06): 101-104. DOI: CNKI:SUN: HSXX. 0. 2024-06-015.

[4] Fang, W. (2021). Employment prospects of college English majors in the context of the "Internet +" era. Education Observation, 10(14), 47-49.

[5] Sun J ,Wang L .Research on the College English Teaching Model of "English+Major+Application" Based on OBE Philosophy—Taking Artificial Intelligence Majors as Samples[J].Curriculum and Teaching Methodology, 2025,8(6):DOI:10. 23977/CURTM. 2025. 080602.

[6] Lyu, Y. H., Hu, Y. J., Yue, H. L., et al. (2022). Employment analysis and suggestions for English majors in science and engineering universities: A case study of China University of Geosciences (Beijing). Employment and Security, (11), 115-117.

[7] Zhang, S. H. (2011). On expanding employment channels for foreign language majors under the new situation. Journal of Tai'an College of Education (Daizong Academic Journal), 15(4), 70-71.