Exploration and Practice in the Innovative Cultivation Mode for Applied Translation Talents in the Guangdong-Hong Kong-Macao Greater Bay Area in the Era of AI

Lihua Qing^{1a}, Hai Wang^{2*}

^a65993576@qq.com, wanghai 68@163.com*

South China Business College, Guangdong University of Foreign Studies, Guangzhou, China¹ School of Interpreting and Translation Studies, Guangdong University of Foreign Studies, Guangzhou, China²

Abstract: Under the background of the construction of the Guangdong-Hong Kong-Macao Greater Bay Area, the demand for applied translation talents has increased significantly, while the contradiction between supply and demand for applied translation talents has gradually become prominent in the era of AI. Based on the existing contradictions between the cultivation of translation talents in universities and the market demand, this study draws on the experience of training models of applied talents from foreign countries and puts forward specific strategies for reform and innovation of cultivating applied translation talents by combining government, enterprises, university and research institutions and construct the innovative cultivation mode for applied translation talents in the Greater Bay Area in practice, so as to provide translation services for regional economic development better and help the economic and social development of the Guangdong-Hong Kong-Macao Greater Bay Area.

Keywords: the Guangdong-Hong Kong-Macao Greater Bay Area; translation talent; supply-and-demand contradiction; countermeasures

1 Introduction

The market demand for applied translation talents in the Guangdong-Hong Kong-Macao Greater Bay Area (hereinafter referring to the Greater Bay Area) is gradually increasing, especially for applied translation talents in special professional fields. With the opening up and development of the Greater Bay Area, exchanges in economy, culture and education between countries are becoming more and more frequent, which prompts an increase in the demand for applied translation talents. In the era of AI, the traditional translation profession calls for more qualified translators and interpreters who not only have proficient translation and interpreting competence but also master translation technology and quickly adapt to the new mode of language service. As a consequence, with the rapid development of the Greater Bay Area, the demand for applied translation talents in special professional fields will show a growing trend. Over the past several years, many scholars have actively discussed the cultivation of translation talents, but they have not conducted systematic and in-depth studies

on the reform and innovation of the cultivating practice of translation talents through government-industry-university-research cooperation. Based on the contradiction between the supply and demand of translation talents in the Greater Bay Area, this paper proposed specific countermeasures for reform and innovation of cultivating applied translation talents to construct the Government-Industry-University-Research innovative cultivation mode for applied translation talents in practice.

2 The Main Models of Training Applied Translation Talents by Integrating Production and Education in Foreign Countries

Foreign higher education institutes developed earlier in the fusion of institutions and education. With different social backgrounds and educational concepts from different countries, different models of integration of production and education appeared. On the whole, there are some common characteristics in Western countries with the fusion of industry and education, such as having relevant policies and systems, strong support from the government, and enterprises actively participating in the implementation of integration. By summarizing the models of the fusion of industry and education abroad, there are the model of the dual system in Germany, the model of CBE (Competency Based Education, basic vocational Education) in the United States, the sandwich model in Britain, and the model of TAFE (Technical and Further Education, Technical and Continuing education) in Australia.

2.1 The Model of Dual System in Germany

The Model of Dual System in Germany takes vocational education as the core, closely combining the theoretical teaching of universities with the practice of enterprises. It aims to mainly train technical management personnel, and courses learning in the enterprise and school are alternative. Students spend about two-thirds of their time in the enterprise, and one-third of their time in colleges and universities, the choices of course content in universities cover all the theories required for professional knowledge with a wide range and strong comprehension. The system in Germany not only focuses on the cultivation of basic professional ability but also on social ability and comprehensive ability. There are three characteristics of the Model of Dual System in Germany. First, it is closely integrated with production, the training objectives are strictly in line with the needs of enterprises. Secondly, the enterprises participate in the whole process of personnel training program formulation. Thirdly, the students participate in the enterprise practice in the real production environment, where they have access to the most advanced technologies and equipment, and can be close to the content of future work [1]. The system can truly achieve the training goal of cultivating the technical management competence required by enterprises and is recognized by major enterprises.

2.2 The Model of CBE in the United States

The Model of CBE in the United States focuses on cooperation projects between universities and employers, supported by the government, relevant social departments, and professional technicians sent by relevant employers to provide practical guidance to students [2]. The CBE model has two basic implementation patterns in the United States. The first is the integration training model between industry and education that requires both theoretical knowledge and professional skills, and the typical representative is Antioch University. The second is to emphasize the practical operation of the educated students, the typical representative is Cincinnati University.

2.3 The Sandwich Model in Britain

The work-study alternation model in Britain began to develop after the Second World War. By recruiting graduates from secondary schools to enterprises, the enterprises conduct skills training and various kinds of college basic education alternately, where technical talents are cultivated for enterprises and society. Some scholars also called it the "sandwich plan". This model requires universities to carry out relevant social investigation activities in the process of setting up majors. First, they survey market demand, then set up a major according to the survey, and finally carry out teaching activities according to the needs of employers for talent development. In the process of students' internship, they are required to participate in the internship training activities in the enterprises and reach certain working hours before they can return to school and are qualified for graduation. This model strengthens the close cooperation between enterprises and universities.

2.4 The Model of TAFE in Australia

Australia's TAFE model is the most advanced and representative training mechanism for applied talents in the world. In this model, educators are proficient at people-oriented education, taking the needs of Australia's economic development as the education basis, training applied technical talents as the fundamental purpose of education, and taking the "key skills" of applied talents as the teaching content for students. Students spend 80% of their time in corporate business, and only 20% of their time learning theoretical knowledge in schools. Coordinators also highlighted a range of academically-oriented difficulties that their students faced in the transition from TAFE to higher education. The Model of TAFE in Australia is helpful for students to adapt to the working environment very efficiently. In addition, Australian government and universities have established smooth communication platforms. By establishing a perfect information resources sharing mechanism, on the one hand, the government can transfer the latest information of the current translation industry to universities in a timely manner, so that universities can make timely adjustments in training students; On the other hand, universities will report their training programs and students' employment to the government, which provide a good data for the government's macro-control [3].

3 Construction of the Government-Industry-University-Research Innovative Cultivation Mode for Applied Translation Talents in the Greater Bay Area

In order to reduce the disconnection between the supply and demand for applied translation talents in the Greater Bay Area and the information asymmetry between the supply and demand for translation talents, the government-industry-university-research cultivation mode for applied translation talents in Fig. 1 is put forward in the university where the author works.



Fig.1 the government-industry-university-research Innovative Cultivation Mode for Applied Translation Talents

In the government-industry-university-research cultivation mode, multi-subject division and cooperation is a main training approach in the context of New Liberal Arts[4]. The government mainly plays a guiding and supporting role by formulating relevant laws and regulations to protect the interests of universities, enterprises and research institutions, and create a good atmosphere and environment for innovation. Enterprises are the demanders of applied translation talents in colleges and universities, and also the practitioners who provide practice and internships for students. Universities are the main body of application-oriented talent training. The research institutions provide guidance and feedback to the translation industry and its research achievement can promote the teaching[5]. The fundamental purpose of the mode in Fig. 1 is to integrate the policy materials, educational resources, capital resources, technical resources and human resources from the government, universities, enterprises and research institutions, improve the level of teaching and scientific research, and cultivate high-level talents for the society [6]. The collaborative innovation of government, industry, university and research is a systematic project, which changes the traditional education mode of imparting knowledge in the classroom, gives full play to the advantages of the government, enterprises, universities and research institutions, and realizes the combination of various teaching resources. It can deal with the problems of contradiction between college education and enterprise needs, narrow the gap between talent training in universities and enterprise demands, and enhance the graduates' social adaptability and competitiveness [7].

4 Countermeasures on the Innovative Cultivation of Applied Translation Talents by the Government-Industry-University-Research Cooperation

The university where the author works has actively taken the following strategies to truly implement the government-industry-university-research innovative cultivation mode, improve students' practical operation ability and the capability to solve practical problems, and realize the seamless connection between majors in universities and professions in enterprises.

4.1 Jointly Building a School-Enterprise Collaborative Education Training Platform

With the fusion of industry and education as the starting point, it is necessary to jointly build a school-enterprise collaborative education training platform in the Guangdong-Hong Kong-Macao Greater Bay Area, including experimental teaching centers and off-campus practice bases. At present, the university where the author works has established university-enterprise collaborative education training platforms, including the Simultaneous Interpretation Experimental Teaching Demonstration Center and Computer-aided Translation Experimental Teaching Demonstration Center. We have established ten off-campus bases, including Yiguo Yimin Translation Group, Guangzhou Xinshi Translation Company, Ltd, Guangzhou Tailing Translation Company, Ltd, and so on. The practice bases provide students with practical teaching scenes consistent with the actual positions of enterprises and industries and provide a real training environment for students to deeply understand the production environment, corporate culture and work requirements of enterprises, so as to cultivate students' practical ability, analytical ability and innovation ability and realize the sharing of information resources between the universities and the enterprises.

4.2 Cultivating Translation Technology Talents Who Can Meet Market Demand

In the era of AI, simple translation and interpreting work can be done by machines which gradually take the place of the translators and interpreters in dealing with the basic material. The traditional translation and interpretation competence can no longer meet the market demand in the era of AI, and the modern translation industry needs translators and interpreters who not only have strong translation and interpreting capabilities, but also are very proficient in translation technologies, and quickly adapt to the new modes of language service. Growing acceptance of machine translation of both translation producers and consumers positions postediting of machine translation as a revenue-generating activity for language service providers[8]. Localization, terminology management, post-editing and other translation technologies have entered the scope of translation services. Therefore, it is crucial for candidates who master the basic translation technologies of some computer-aided software, like Trados, memoQ and Dejavu, ChatGPT and so on. What's more, translation project management competence is a critical talent for translators. A reference to the talents of a person does not point to current skills or other traits that a person may have, but rather to the future acquisition of these traits[9]. They should know how to employ the translation tools and software in post-editing and translation project management. The concept of talent is closely related to performance and achievement. Talents are what enable or facilitate future achievements.

4.3 Building and Implementing a Practice Teaching System of "Three Levels, Three Modes and Three Platforms"

In order to improve the students' practice competence, we attempted to build a practical teaching system with three levels, three modes and three platforms on the basis of real translation projects in the practical teaching system, which can be seen in Fig. 2. To achieve the goal of training applied translation talents, the teaching of practical training for students is divided into three levels, which are basic practice level, professional practice level, and comprehensive practice level when the new training plan is formulated. The talent training module is divided into three modules: the science basic module, the professional skills module and the innovative education module. In terms of platform construction, three experimental platforms, namely, the on-campus

experimental and practice training teaching platform, extra-curricular practice teaching platform, and university-enterprise network information sharing platform, are built to strengthen students' hands-on ability, update course content and target requirements, adjust the settings of practical courses, and realize the smooth flow of university-enterprise information, so as to realize the sharing of information resources between schools and enterprises so as to ensure the goal of cultivating applied translation talents.



Fig.2 Practice Teaching System of "Three Levels, Three Modes and Three Platforms"

In the practice teaching system, practice teaching is carried out around the completion of the actual translation projects from the enterprise, and theoretical learning and practical application are combined, and a blended teaching mode with teaching, learning and doing is built. As one of the objectives of translator education is to foster individuals who can orient themselves in the processes of translation organisations and networks and who are able to create, to re-engineer and to manage such organisations and processes[10]. Therefore, students can apply the learning content from theoretical courses into practice promptly, find out the gaps in practice as soon as possible, and make an in-depth study on the missing parts in a targeted way to improve students' practical competence in translation and interpreting. Besides, based on the system, we have established an integrating sharing mechanism for the government, enterprise, university-research cultivation mode. By the mechanism in Fig. 2, the government, enterprise, university and research institutions can had a joint sharing and deep integration in resources, technology, achievements, hardware and software, and so forth[11].

4.4 Developing Talent Training Quality Evaluation System and Monitoring System of "Multiple Complementarity"

With the purpose of improving the quality of applied talent training as the focus, we develop a translation talent training quality evaluation system and monitoring system of "Multiple Complementarity". The universities, enterprises, the government, research institutions and the student's parents participate in the evaluation system and monitoring system together, and can play their roles complementarily. First, it can improve the quality evaluation standards for translation talents in the university; Secondly, the quality evaluation system for professional talent training involves off-campus enterprises and institutions, who are invited to evaluate and supervise the training quality of translation professionals occasionally. Thirdly, the talent quality evaluation indicators are formulated for students' practical competence, employment quality, innovation, and entrepreneurship ability, and a tracking and reporting mechanism takes shape.

4.5 Construction and Implementation of the Practical Teaching Quality Guarantee System of "Six in One"

With the training of applied translation talents as the center, the practice teaching quality guarantee system of "Six in One" in Fig. 3 has been constructed and implemented by drawing on the training experience of translation talents from foreign countries and combining it with the characteristics of the Greater Bay Area, which include six aspects of quality standards, quality outlook, quality elements, quality control, quality action and quality diagnosis as a system to improve quality of cultivating translation talents.



Fig. 3 Practice Teaching Quality Guarantee System of "Six in One"

Through the practice teaching quality guarantee system of "Six in One" in Fig. 3, the students' comprehensive competence cultivation can be ensured under the supervision of the higher education institutes and enterprises at the same time. In short, the contradiction between the supply and demand of translation talents in the Greater Bay Area requires active cooperation and joint efforts from the government, enterprises, universities, and research institutions, which can adopt various measures to solve the existing problems, promote the training and development of applied translation talents at multiple levels and aspects, and give full play to the role of translation and interpreting as the infrastructure of language services. The deep fusion of translation-based language services with various industries, will contribute to the high-quality development of the Greater Bay Area.

5 Conclusions

In the exploration and practice of the government-industry-university-research innovative training mode for applied translation talents, by drawing on the training experience from foreign countries, we put forward specific countermeasures, including the construction of a government-enterprise-university-research collaborative education training platforms, the training of translation technology talents that meet market demand, the construction and implementation practical teaching system of a "three-level, three-mode, three-platform", the development of a talent training quality evaluation system and monitoring system of "multi-complementarity", and the construction and implementation practical teaching quality evaluation from the government, enterprises, universities, and research institutions, the training quality of translation talents in colleges and universities has been greatly improved, and the positive interaction between education and

industry and the effective docking of talent training between the universities and enterprises can genuinely keep up with the changing demand in the talent market in the Greater Bay Area.

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