

Study on the Teaching Reform of Translation Technology in the Context of New Liberal Arts

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Abstract: At present, the world is in a period of great change and development. Driven by emerging technologies such as artificial intelligence, big data, and the Internet of Things, the translation technology requirements for translation talents are higher. The study of translation technology has become the core curriculum of translation major, which has a profound impact on translation education under the background of the construction of new liberal arts. Guided by the new requirements of the development of language service industry, this paper discusses in detail the teaching mode of the core course of translation technology under the background of the new liberal arts from the aspects of the dilemma of translation curriculum, the principles of the design of translation technology curriculum, course content, teaching methods and course assessment. This paper explores how to reform the translation technology curriculum and realize the innovative development of education and teaching.

Keywords: New Liberal Arts; Translation Technology; Teaching Methods.

1. Introduction:

With the advancement of globalization, the links between countries have been strengthened, and the degree of openness in China has been further expanded. Accordingly, the important position of language service industry has been highlighted. As an important support and language foundation for China's foreign exchanges, the language service industry has a broader market prospect, increasingly rich language types, and more vast translation service targets, and is developing in the direction of globalization, diversification, intelligence and innovation. The continuous innovation of translation technology provides a good opportunity for the intelligent development of the language service industry, but it also puts forward new requirements for the translation talents compatible with the translation technology.

At the same time, the proposal of the new liberal arts aims to improve the development and quality of culture, art, humanities and other fields through the cross-disciplinary research and practical application, so that technology and humanities blend, which is the inevitable product of the development of digitalization and information technology to a certain stage. From the analysis of the essential attributes of translation and the needs of the country's external communication strategy, high-level human translation is still irreplaceable, and translation education still shoulders the important mission and responsibility of talent training, but the transformation of translation education and the reform of translation teaching are imperative. In this context, translation education needs to return to the essence of the translation task, improve the teaching goal from skill training and knowledge transfer to the cultivation of higher-order thinking, and train technology-adapted translation talents.

At present, the education mode of Chinese colleges and universities cannot fully meet the needs of talents in the translation market, and students lack the experience and ability to cooperate with machines, which is a point worth noting in the curriculum of colleges and universities. Therefore, this study aims to explore the technicalization of translation courses from the perspective of the new liberal arts,

and promote the innovation and development of translation technology education in Chinese language service disciplines.

2. New Liberal Arts Education Background

Since 2018, the construction of new liberal arts has entered a new stage of comprehensive launch from its initial appearance. Promoting the construction of new liberal arts has become a positive response to adapt to world development, China's development, educational reform and development, and the international orientation of China's higher education (Wu Yan 2019:5).

The new era, new changes, new development and new pattern call for the construction of the new liberal arts, which has been given a new mission, and has become a guiding concept for the construction of the new liberal arts by cultivating interdisciplinary, high-quality and composite innovative talents. At present, human society is experiencing the fourth industrial revolution with artificial intelligence and big data as the core, and the explosive growth of language technology has prompted major changes in the industrial structure of the language service industry and the pattern of translation education. For the first time, "Translation Technology" is listed as one of the "core professional courses" in the Undergraduate Guide, which describes the course objectives and teaching contents in detail, and clarifies the status of translation technology as a compulsory course in the undergraduate education of translation majors (Zhao Bi and Feng Qinghua 2019:17).

It is a general trend to strengthen translation technology teaching in the future. In order to give full play to the important role of translation technology in translation education, based on the concept of the construction of the new liberal arts, this paper focuses on exploring the teaching model of the core course of translation technology that meets the needs of the new liberal arts.

3. Difficulties Faced by Traditional Translation Teaching

3.1. Inefficient Acquisition of Teaching Resources

Traditional translation education is faced with many challenges, and the inefficient acquisition of teaching resources is one of the main difficulties. Traditional translation education often needs a lot of educational resources, including textbooks, curriculum design, language resources, learning tools and so on. However, access to these resources usually requires a lot of time and effort, which also limits the diversity of teaching content and innovative development. Especially in multilingual and non-common language teaching environments, it is more difficult to find high-quality educational resources. Traditional teaching resources often have a certain lag, and it is difficult to provide comprehensive translation teaching resources covering various professional fields, so it is difficult to meet the ever-changing needs of the translation market and translation teaching.

3.2. Limited Teaching Interaction

Teaching methods are often unitary and lack of innovation. For example, traditional classroom teaching and written assignments may not fully stimulate students' interest and motivation in learning. In addition, the lack of opportunities for practice and interaction also limits students' learning effectiveness. Traditional translation classroom teaching is often carried out in a one-way way, in which teachers impart knowledge to students and students passively accept it. The existing teaching activities are mostly designed and homogenized interaction, which cannot stimulate students' enthusiasm and creative thinking.

3.3. Backward Teaching Feedback Mechanism

The traditional teaching feedback mechanism usually relies on human resources to evaluate and correct students' translation assignments, which is prone to feedback lag and has a negative impact on students' learning progress. Traditional teaching assessment is usually limited by traditional examinations and tests, and it is difficult to fully assess students' language ability and translation skills.

Looking at the training objectives of many language colleges and universities, it is not difficult to find that the problems of the same goals, too empty generalization and not in line with the regional reality abound. Although the training objectives of some universities include many aspects such as political moral accomplishment, language level, employment direction, translation ability, knowledge structure, talent positioning, etc., the elaboration of each aspect is relatively brief.

The target has not been further refined. To solve this problem, universities should use an international perspective and look for a global model of the detailed objectives of translation technology education. First of all, universities should look at the world, strive to learn advanced educational experience, and train translation talents in line with international standards. Secondly, colleges and universities should avoid monotonous repetition and empty talk about goals, and reasonably formulate training goals based on their own teachers, the distribution and needs of different languages in the region and the foundation of students. Finally, colleges and universities should have the courage to innovate,

not to stick to the rules, blindly pursue those big and empty goals, but to refine the training program to provide positive and beneficial guidance for students' learning and teachers' teaching work.

3.4. Slow Improvement of Digital Literacy

In the past, it often took a lot of time and hands-on opportunities for students to learn new digital tools and technologies. At the same time, teachers also need to spend extra time and effort to learn and teach these tools and techniques and integrate them into the teaching process.

Due to human-machine integration and cooperative translation, the translation mode has become the trend of The Times. The future translation industry requires translators to have the ability to use translation technology flexibly, so it is necessary to set up translation technology courses. In the EU's 2017 revised European Master of Translation Competence Framework, the five aspects are language and culture, translation, technology, personal and interpersonal, and service provision, where technology is placed between language competence and translation competence, and the keyword machine translation is mentioned in both aspects of "translation" and "technology", which is enough to indicate the prominence of translation technology. Therefore, colleges and universities should make adjustments based on the existing curriculum of language majors, not only expand and supplement the original curriculum resources, enrich the learning resources of students, provide students with a broader learning space and give students the right to choose, but also constantly adjust according to the actual situation in the field of translation and add new curriculum items. For example, courses such as fundamentals of machine translation, pre-translation/post-translation editing, computational linguistics, etc., serve as the basis for assisting students to develop translation skills. Only students who have learned to collaborate with artificial intelligence in translation when they were students can quickly familiarize themselves with the work content after going to work, adapt to technological development, and improve their work efficiency with the help of translation technology to become high-quality talents needed by society.

In addition to the above problems, there are also many challenges such as single teaching means, difficult implementation of personalized teaching, and difficult tracking of teaching effects. Traditional translation education has been unable to cope with the above problems and challenges (Wang Huashu and Liu Shiji, 2023:47). In the era of artificial intelligence, making full use of new technologies has become the only way to promote the innovation and development of translation professional education.

4. Orientation and Principles of Translation Technology Curriculum

The orientation and design of the core course of translation technology under the background of the new liberal arts should respond to the needs of the national language strategy, and train professional, practical and professional translation talents who understand translation and technology for the industry, society and the country.

4.1. Basic Positioning

The official release of the Undergraduate Guide clarifies the status of translation technology as a core course in

translation education, highlights the degree of emphasis on translation technology, reflects the development trend of the integration of new technology and translation education in the context of the new liberal arts, and has important practical significance for promoting the innovation and development of translation education. Through the systematic analysis of translation technology curriculum, four basic positioning characteristics are found:

1) Technical. In a specific technology teaching environment, students participate in and transform the technical practice of the translation world through translation technology and tools, which is an organic link between technical entities and translation activities, reflecting the integration of instrumental rationality and value rationality.

2) Practicality. The practical application of translation technology focuses on machine translation, computer-aided translation, post-translation editing of machine translation, translation memory, technical tools, platforms, and technical ethics (Wang Chuanying, Kong Xinke 202:75). The course takes computer experiment and digital practice as the basic learning mode (Cui Qiliang 2019:84). The teaching process combines theory with practice, adopts the project case-driven approach, and allows students to practice various translation technologies and tools on the laboratory computer room or personal computer, constantly summarizes and skillfully uses skills in practice, and cultivates students' ability to use technical means to solve practical translation problems.

3) Professionalism. Modern language services tend to be industrialized, process-oriented, intelligent and collaborative, which puts forward new requirements for talents' professional ability in translation technology.

4) Interconnectivity. Translation technology courses and other translation courses can be related to each other, complement each other and promote each other, and other courses can integrate translation technology content. For example, translation teachers encourage students to actively use translation technology in various translation projects or exercises, which can not only improve translation efficiency, but also increase the practicality and interest of the course, so as to promote the continuous improvement of translation teaching effect.

4.2. Design Principles

The teaching design of the core course of translation technology is the key to the success of the teaching system, and good teaching design should follow the scientific principle. With reference to the basic positioning characteristics of the course above, the following principles are summarized:

1) Align macro policies. Curriculum design should draw on the spirit of the Declaration on the Construction of New Liberal Arts and the Guiding Outline for the Construction of Ideological and Political Construction of Curriculum in Colleges and Universities, actively promote the cross-integration of artificial intelligence technology and translation courses, and at the same time increase the knowledge and humanity of the curriculum, improve the leading, contemporary and open; Integrate the guiding opinions in the two teaching guides, systematically plan the elements of curriculum setting, teaching content, teaching objectives, teaching resources, teaching environment, teaching evaluation, etc., so that the course design has rules to follow and the course implementation has evidence to follow.

2) Serve realistic needs. The curriculum should be based on the needs of the country and the industry. The core courses of translation technology should meet the needs of the country's foreign cultural communication, the "Belt and Road" language service strategy, international communication capacity building, and the large-scale, multi-language and multi-modal language service needs generated by new formats and technologies in the language service industry, and focus on cultivating talents with diversified capabilities of "translation" and "technology".

3) Highlight school-based characteristics. Officially promulgated in 2018, the National Standards for the Teaching Quality of Undergraduate Majors in ordinary Colleges and Universities (Foreign Language and Literature) clearly states that colleges and universities can determine the direction of their talent training according to their own educational conditions and advantages, which provides beneficial conditions for highlighting school-based characteristics. Therefore, all colleges and universities should give full play to their own advantages, establish assessment and evaluation index systems and standards suitable for the development of colleges and universities, subject development should obey the positioning of schools, serve the local economy and serve the overall situation of the country. For example, colleges and universities with translation and communication or language intelligence majors and directions use intelligent language technology to build big data and multilingual diplomatic public opinion monitoring and analysis corpus platforms to provide strong technical and cutting-edge theoretical support for accelerating the informatization construction of foreign discourse system and international communication capacity building.

4) Design different levels. Courses should be designed hierarchically for different teaching objects based on the knowledge system of translation technology to avoid the situation of "one size fits all". In terms of curriculum difficulty, it should have "dynamic echelon", that is, from simple to complex, from low to high form a number of dynamic rising cognitive steps. The study of translation technology should take into account four aspects: ontology, methodology, practice and instrumentalism. In technical practice, we should be able to "carry the way with the device" and "bend the way". In addition to proficiency in the application of software and tools, it is more important to understand the basic principles and mechanism of translation technology, follow its core nature such as regularity, ideality and value, and be able to proficiently apply technical thinking modes to solve technical problems in translation practice.

5. Teaching Methods of Translation Technology Courses

As Lu You said, "The ultimate understanding of paper is shallow, and it is absolutely necessary to practice the matter", a complete theory system only provides students with the cornerstone of translation, and the cultivation of translation ability needs to be carried out in practice. To cultivate excellent translation officers, it is far from enough to rely on universities alone, and translation practice is not enough only in universities. Universities should strengthen multi-party cooperation, build school-enterprise cooperation platforms, actively contact social welfare forces, and jointly help students improve their translation skills. On the one hand, colleges and universities should bring in advanced translation

technology and first-class translation experience, smooth the channels for students to communicate with the outside world, and promote students to keep pace with The Times. Colleges and universities can negotiate with enterprises to try out some translation systems within the school, so that students can use and modify them by themselves, understand the differences between human and machine translation, and have a better understanding of artificial intelligence translation. Colleges and universities can invite some authoritative translation experts to come to the school, and provide students with opportunities to learn from predecessors in the translation field in the form of lectures, symposiums, discussions, etc. Students ask questions, and experts share their experiences and answer them, which can promote the enrichment of students' experience. On the other hand, colleges and universities should promote their students to "go out" and find practical opportunities in society and enterprises. Colleges and universities should have the courage to let their students take on great responsibilities, withstand the exercise, and give students the opportunity to boldly try and make mistakes. Only in the failure or success again and again, students will really touch the door of translation, or in the failure to learn lessons, continue to move forward, or in the success to enhance self-confidence, bold forward, which is beneficial for students to grow.

5.1. Classroom Method Reform:

The course of translation technology is characterized by technology, content, new cases, quickness and emphasis on practical operation. It is completely different from traditional translation teaching in terms of teaching purpose, teaching content, teaching means and teaching core, and its teaching methods must be diversified.

1) Classroom explanation: Teachers explain and guide the important and difficult contents of the course modules, demonstrate the main operation steps, teach and interact with each other, and encourage students to propose plans to complete all tasks independently. Multi-modal files such as videos, reference materials, case presentations, course handouts, and group mind maps recorded or downloaded in advance will be uploaded to the platform for students to preview before class, practice during class and review after class.

2) Group display: Each group will display their results by making PPT, recording video and other means according to the selected topic, which can not only ensure the enthusiasm of the group members, but also foster the spirit of group cooperation and sharing.

3) Teacher's comments: The teacher will make reference and evaluation according to the demonstration of each group, analyze and answer the operational problems encountered by the students in the preparation process, and discuss various situations in the practical operation together to form the effect of teaching and learning.

4) Case-driven: Using typical translation projects to conduct case analysis and sand table exercises, students will be introduced into a professional environment, in-depth understanding of industry norms, customer requirements, translation processes and other content, and enhance their understanding of the application of translation technology.

5) Group discussion: Each group uses Process On, Mind Master and other online collaboration platforms to build a mind map or conduct in-depth discussion on a topic in the form of offline, express their opinions, form group views and

present them collectively. Brainstorming can also be carried out, in which each student can think independently for a specific problem and make a comprehensive evaluation of a certain technology. In the process, they can constantly stimulate their own innovative thinking and form a deep understanding and a more comprehensive solution.

6) Group mutual evaluation: Each group objectively evaluates the exhibition of other groups in terms of explaining objectives, explaining content, explaining cases, explaining display tools and means, and making courseware

Teachers play the role of screenwriter, intermediary and catalyst, and conduct inquiry and cooperative guidance with students before, during and after class through a mixture of online and offline methods, and timely interactive questions and answers.

5.2. Project Learning Method:

Project learning is a practice-based and project-based learning method. In the course of Computer Aided translation, project learning can help students better understand the technology of computer aided translation, master the corresponding tools and skills, and improve their practical ability and teamwork ability. To be specific, project-based learning has the following impacts on computer-aided translation courses:

1) Help students understand the application of theoretical knowledge. In the project learning, students are required to apply the theoretical knowledge they have learned to complete the practical translation work. This can help students better understand the technology and application methods of computer aided translation and deepen their understanding of theoretical knowledge.

2) Improve students' practical ability. Project learning enables students to accumulate practical experience in specific projects and master relevant tools and skills through their own practical operations, which can enhance students' practical ability and hands-on ability.

3) Cultivate teamwork ability. In project learning, students need to form groups and work together to complete project tasks, so as to cultivate teamwork ability, enhance collaboration ability and communication ability.

4) Enhance students' innovation ability. In project learning, students need to make innovative solutions according to the actual needs of the project, so as to enhance their innovative ability and problem-solving ability, and develop innovative thinking.

In short, project learning can make the course more practical and targeted, and help students better master relevant skills and tools, and cultivate their practical ability, teamwork ability and innovation ability.

5.3. Project-based Learning in Computer-aided Translation Courses

Computer aided translation is the application of computer technology to the translation process. The teaching and implementation of computer-aided translation courses can be carried out through the following steps:

1) Determine the translation project. In the Computer Aided Translation program, students are required to improve their translation abilities and skills in using computer aided translation tools through practice in practical translation projects. When determining the translation project, it is necessary to select the appropriate type and difficulty of the translation project based on the students' actual situation and

current ability level, so as to ensure that students can improve their practical ability and teamwork ability in the actual translation project.

2) Set up the project team. After determining the translation project, students need to form a suitable translation project team and clarify the roles and responsibilities of the team members. It is necessary to establish a good communication and collaboration mechanism among team members, share information and opinions in a timely manner, solve communication barriers, and ensure the smooth progress of translation projects.

3) Implement translation projects. After setting up the translation project team, I began to implement the translation project and complete the translation task. In the implementation of the project, it is necessary to select the appropriate translation tools according to the needs of the translation project, understand the advantages and disadvantages of different tools, and enhance the application ability of computer-aided translation. In the process of translation project implementation, various problems and challenges will inevitably be encountered. Students need to adjust and improve the translation implementation plan in time and maintain the ability to adapt flexibly.

4) Supervise and control translation projects. During the implementation of the translation project, it is necessary to supervise and control, adjust and improve the translation implementation plan in time, and ensure that the translation project can be carried out smoothly according to the plan." In the implementation of translation projects, attention should be paid to safety and risk management to ensure that the translation process will not cause adverse effects on personnel or the environment, and quality management should be paid to ensure that the translation results meet the requirements and achieve the expected results.

5) Summarize and evaluate translation projects. After the completion of the translation project, it is necessary to summarize and evaluate it, sum up the experience and lessons of the translation project, and provide reference for subsequent similar translation projects. When summarizing and evaluating the translation project, students need to carefully summarize the experience and lessons of the translation project, and follow up the improvement measures in time.

Through the practice of the above steps, students can learn and apply relevant knowledge and skills in practical translation projects to enhance their translation ability and the ability to apply computer-aided translation tools. At the same time, through the practice of translation projects, students can have a deeper understanding and application of theoretical knowledge, and enhance the ability to solve practical problems.

5.4. Course Assessment

The purpose of diagnostic assessment is to understand students' needs, course readiness and technical cognition before or during the teaching activities, so as to take appropriate measures to promote the smooth and effective implementation of the teaching plan. Formative assessment is helpful to the realization of translation technology teaching objectives, the implementation of teachers' teaching concepts and the improvement of teaching effect. This kind of evaluation is in line with the teaching characteristics of interactive teaching, which is the subject of teachers and students, and can be used as an important part of collecting

course data, discovering students' learning problems, and improving teaching and learning methods

The final assessment is mainly based on the final examination, and two types of tests can be set. One is to summarize, theorize or carry out empirical research based on translation technology practice. Topics include but are not limited to basic translation research, types of translation technology, translation technology standards, translation tool evaluation, translation technology ethics, translation technology teaching, etc. (Wang Huashu, Liu Shiji 202:86) Another type of situational test is the objective part to test students' mastery of basic content, while the subjective question is based on setting different translation work scenarios. Describe the types of problems encountered. Students apply their knowledge to provide the best solution.

Situational testing: This method puts students in a virtual practice situation, can test the degree of students' mastery of theoretical knowledge and operational skills, and train students in advance to use technology and tools to solve problems in practical translation work in the future.

6. Conclusion

In this paper, under the background of the new liberal arts, education and teaching need to pay attention to practice, innovation and teamwork, and the integration of project learning and computer-aided translation courses can better realize the innovative development of education and teaching. The Declaration on the Construction of the New Liberal Arts encourages and supports colleges and universities to set up interdisciplinary and cross-disciplinary emerging courses and practical teaching courses, cultivate students' cross-field knowledge integration ability and practical ability, and point out the direction for the future integration and development of translation and technical education. In the context of the construction of new liberal arts, foreign language education should not resist technology, nor despise technology, but pay attention to technology and reform.

It is urgent to integrate global technology development and national language development strategies, strengthen translation technology education, and explore the teaching mode of core translation technology courses suitable for the construction of new liberal arts. At present, the world is in a period of great change and development, which requires people in it to have the ability to adapt to changes and integrate diversity, which is both an opportunity and a challenge for young students. Today's translation companies not only require candidates to have strong professional quality, but also require employees to have an understanding of the cultural background of different languages. In order to stand out in the competitive talent market, students need to balance both professional knowledge and translation skills, and have the ability to work harmoniously with AI. How to adapt to the changing needs of modern translation talents, improve the language level of students and improve the quality of translation education in schools is a problem worth thinking about in universities.

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