



Problems and Countermeasures of Computer-Assisted Translation (CAT) Courses in Chinese Universities

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ABSTRACT: Computer-assisted translation (CAT) technology, which evolved in the 1980s, has become an indispensable tool in the translation industry. This paper delves into the current status, existing problems, and improvement strategies of CAT courses in Chinese universities. The research reveals that there are numerous issues in the course settings, teaching content and methods, practical teaching links, as well as the teaching staff and resources of CAT courses in Chinese universities. These problems include an imperfect course system, a disconnect between teaching content and market demand, weak practical teaching, and insufficient teaching staff, among others. In response to these issues, this paper proposes countermeasures such as strengthening the construction of the course system, updating teaching content, and enhancing practical teaching, improving the level of teaching staff, and enriching teaching resources. The aim is to provide references for the optimization of CAT courses in Chinese universities, to cultivate high-quality translation talents that better meet market demands, and to promote the coordinated development of translation education and the translation industry.

KEYWORDS: Computer-assisted translation (CAT), higher education, translation technology, countermeasures

I. Introduction

With the continuous deepening of globalization and the rapid development of information technology, computer-assisted translation (CAT) technology, which emerged in the 1980s, has quickly grown into an essential tool in the translation industry. It has not only greatly improved translation efficiency and reduced translation costs but also played a key role in ensuring translation quality [1]. In recent years, with the continuous integration of technologies such as artificial intelligence and big data, the intelligence and automation levels of CAT technology have been continuously improving, bringing unprecedented changes to the translation industry. In the coming years, AI will become the mainstream tool in the

translation industry, especially in large-scale projects and cross-language automated translation, where the application of CAT technology will be more extensive and in-depth [2].

However, despite the increasingly important role of CAT technology in the translation industry, Chinese universities face many challenges in the setting and teaching of CAT courses [3]. At present, the course settings of CAT courses in Chinese universities often lack systematicness and integrity, making it difficult to cover all aspects of CAT technology comprehensively; in terms of teaching content, there is often a disconnect with market demand, failing to reflect the latest developments and industry applications of CAT technology in a timely manner; in the practical teaching links, there is often a lack of sufficient practical opportunities and guidance, making it difficult for students to apply the knowledge they have learned to actual work; in terms of teaching staff and resources, there are also widespread problems such as insufficient teaching staff and scarce teaching resources. The existence of these problems seriously restricts the teaching quality and talent training effects of CAT courses in Chinese universities.

Therefore, this paper aims to explore the current status, existing problems, and improvement strategies of CAT courses in Chinese universities. By conducting a comprehensive analysis of the problems existing in the course settings, teaching content and methods, practical teaching links, as well as the teaching staff and resources of CAT courses in Chinese universities, this paper proposes countermeasures such as strengthening the construction of the course system, updating teaching content, enhancing practical teaching, improving the level of teaching staff, and enriching teaching resources. These countermeasures are intended to provide references for the optimization of CAT courses in Chinese universities, with the hope of cultivating high-quality translation talents that better meet market demands and promoting the coordinated development of translation education and the translation industry. Through the research of this



paper, it is expected to provide beneficial references and insights for improving the teaching quality and talent training effects of CAT courses in Chinese universities.

II. The Evolution of Computer-Assisted Translation (CAT) Technology

Computer-assisted translation (CAT) technology refers to a suite of technologies that utilize computer software tools to aid human translation activities. Since the 1980s, with the development of computer technology, CAT technology has gradually matured and been widely applied in the translation industry.

During the nascent period of CAT technology (the 1960s to the early 1980s), although machine translation research declined, translation technology research based on corpora and statistics began to emerge. Text retrieval translation and the concept of multi-level computer-assisted translation systems came into being. At this time, computers initially ventured into the field of translation assistance, mainly relying on dictionaries and grammatical rules to translate words and phrases, with the concept of translation memory banks just beginning to appear. However, both the scale and functions were limited. Due to the technological level at the time and insufficient understanding of the complexity of language comprehension, there were many challenges in this stage. Rule writing was not only difficult but also failed to cover all linguistic phenomena, resulting in less accurate translation outcomes and a lack of contextual understanding. The technology performed poorly when dealing with long and complex sentences and content with cultural connotations.

From 1980s to the early 1990s, CAT technology enter the stable development period. In 1984, Trados and the Star Group, the world's first two computer-assisted translation companies, were established, releasing Multiterm and Star Transit respectively. During this period, translation support systems (TSS) were born, and translation memory and terminology bank technologies further developed. Translation resources could be stored and utilized more efficiently, significantly improving translation efficiency and consistency. Commercial computer-assisted translation software also began to emerge, bringing convenience to translators. However, there were still shortcomings in computer-assisted translation technology at this stage. Statistical models were highly dependent on corpora, the quality and scale of which directly affected the translation results. The technology had insufficient processing

capabilities when facing rare words and special sentence structures, and the translation quality needed further improvement.

In the rapid development period from the 1990s to the early 21st century, translation technologies and tools became increasingly diversified, with functions such as corpus alignment, machine translation, and project management continuously improving. In 1999, the first domestic computer-assisted translation system, Yaxin CAT, was launched, marking the commercialization of China's independently developed computer-assisted translation technology. Many software and systems broke free from the constraints of word processing software plugins, adopting independent operation interfaces. They could run on multiple computer operating systems and were compatible with dozens of file formats. They also had new functions such as automatic quality checking, translation matching, and user interface localization. However, from an academic perspective, the training of neural network models in this stage required a large amount of computing resources and time. The models were complex and prone to overfitting. The translation accuracy for special fields and professional terms still needed improvement, often requiring manual intervention and adjustment.

From the early 21st century to the present, computer-assisted translation technology entered a period of vigorous development. A variety of CAT software, systems, and platforms have emerged. They usually have independent operation interfaces, support multiple file formats, various translation modes, and different project deployment modes, greatly promoting the improvement of translation quality and speed. In the past decade, with the emergence of technologies such as cloud computing, big data, and artificial intelligence, these CAT products have further integrated with them. Nowadays, CAT translation tools can not only automatically identify the language style and emotional tendency of the text to provide personalized translation services but also closely integrate with other artificial intelligence application scenarios such as voice translation and image translation, bringing convenient and diversified translation experiences to users. With the help of functions such as translation memory, machine translation, and terminology management, computer-assisted translation software has been widely used in many fields such as international trade, information technology, equipment manufacturing, cultural exchange, and finance. It has effectively improved translation quality and efficiency, ensured the consistency of the translation while reducing costs.



However, although CAT translation has greatly improved translation quality, it still cannot do without human intervention when dealing with content such as cultural connotations, metaphors, and humor. In addition, data privacy and security issues have become increasingly prominent, with a large amount of translation data at risk of leakage or misuse. The further development of intelligent translation systems in the future is costly, requiring continuous investment of a large amount of human, material, and financial resources.

III. The Necessity and Practical Significance of CAT Courses

Analyzing from the perspective of the translation market's demand for CAT software, with the deepening of economic globalization, international business interactions and academic exchanges have become increasingly frequent. The scale and complexity of translation tasks have shown a significant upward trend. Business documents of large enterprises, such as contracts, tenders, and technical documents, as well as scientific research literature from academic institutions, are not only numerous but also cover a wide range of professional fields. They impose extremely high requirements on the accuracy, professionalism, and timeliness of translations. CAT software, with its powerful memory bank function, can automatically recognize and reuse previously translated identical or similar segments, effectively reducing repetitive labor and significantly improving translation efficiency. At the same time, the terminology bank function ensures the consistency and accuracy of term translations, which is crucial for the translation of professional texts and can significantly enhance translation quality. Numerous industry reports and market research data indicate that the translation market has an urgent need for professionals skilled in CAT software. Therefore, it is an inevitable choice for universities to offer computer-assisted translation courses in line with the development trend of the translation market.

The employment market's requirements for the capabilities of translation students also necessitate that universities incorporate computer-assisted translation courses into their teaching systems. Through text analysis of a large number of translation job advertisements, it can be found that employers, in addition to focusing on traditional language skills such as bilingual listening, speaking, reading, and writing levels, and language conversion abilities, place great emphasis on whether candidates are proficient in CAT tools. CAT software represented by Trados and MemoQ has become an essential tool for

many translation companies and institutions. Students who are proficient in these software programs can demonstrate stronger competitiveness in the job market, thereby obtaining more high-quality employment opportunities. In order to enhance the employment competitiveness of translation students and meet the employment market's demand for composite translation talents, it is particularly necessary for universities to offer this course.

In the information age, the mode and nature of translation work have undergone profound changes, which puts forward higher-level requirements for translation students. Translation is no longer limited to the traditional paper-and-pencil or purely mental translation mode, but is deeply integrated with various information technology means. Students need to learn how to use corpora for translation research, and by analyzing a large amount of authentic corpora, obtain accurate language expressions and translation strategies. At the same time, they also need to learn to use project management tools to effectively organize, coordinate, and manage team translation projects to ensure the smooth progress of translation projects. This information-based and digital translation work mode is characterized by a fast pace and heavy tasks. Only by mastering computer-assisted translation skills can students better adapt to the requirements of new-era translation work and achieve long-term development in the translation field.

In summary, based on the actual demand of the translation market, the employment market's requirements for the capabilities of talents, and the changes in the translation work mode in the information age, it is of great necessity and urgency for universities to offer computer-assisted translation courses. This not only helps to cultivate high-quality translation talents that meet the development requirements of the times but also contributes to the development and improvement of the translation discipline.

Offering computer-assisted translation courses in universities has far-reaching significance in students' career development, the construction of translation disciplines, and the progress of the industry.

Firstly, in terms of students' career development, this course broadens their career prospects. In today's competitive job market, mastering computer-assisted translation skills has become the core competitiveness of students. Through course learning, students can skillfully use CAT software such as Trados and MemoQ to complete translation tasks efficiently and accurately. This not only helps students stand out in job hunting but also lays a good foundation for their career,



helping them quickly adapt to the workplace environment, cope with large-scale and high-difficulty translation projects, and achieve career promotion.

Secondly, from the perspective of the development of translation disciplines, this course promotes the innovation of the discipline. It prompts the translation discipline to expand from traditional language research to interdisciplinary fields, integrating knowledge from multiple disciplines such as computer science and information technology, enriching the theoretical system of the translation discipline, and providing new perspectives and methods for translation research. For example, the research and application of corpora have deepened the understanding of translation laws and promoted the innovation of translation teaching methods. At the same time, the implementation of the course promotes interdisciplinary research of translation disciplines, providing theoretical and practical support for the cultivation of composite talents.

Finally, in terms of the overall development of the translation industry, professional talents with computer-assisted translation skills trained by universities inject new momentum into the industry. These talents promote the digital transformation of the translation industry and improve the overall translation efficiency and quality of the industry. In the context of globalization, they can meet the market's demand for high-quality translations, help enterprises carry out international exchanges and cooperation, lead the industry to continuously innovate in technology application, and promote the translation industry to move towards intelligence and specialization.

IV. The Current Status of Computer-Assisted Translation (CAT) Courses in Universities

4.1 Current Status of Course Settings

The current status of Computer-Assisted Translation (CAT) courses in Chinese universities is characterized by diversity and continuous development. Most universities name the course "Computer-Assisted Translation," but some refer to it as "Translation Technology" or "Modern Translation Technology" to more accurately reflect the course content and industry trends. CAT courses are typically offered in schools of foreign languages or translation, as required or elective courses for translation majors or related language service programs. Some universities, such as Peking University, also offer CAT-related courses in software engineering or computer technology programs to cultivate interdisciplinary talents. The number of class hours

varies among different universities but generally ranges from 32 to 48 hours. For example, at the author's university, the course consists of 40 class hours and is worth 2 credits. The course hours are divided between lecture and practical sessions to ensure that students can both grasp theoretical knowledge and engage in practical operations.

The goal of the CAT course is to cultivate students' information retrieval skills, tool operation capabilities, and project and quality management abilities [4]. The course content includes not only the learning and application of CAT software, the creation and application of terminology banks, corpora, and memory banks, but also information mining. Additionally, some courses emphasize the operationalization of technology and real-world responsiveness, as well as multi-layered capability enhancement, such as professional ethics and translation technology, theoretical knowledge and practical operations. The practical component also holds an important place in CAT courses in Chinese universities. For instance, some universities require students to complete at least 100,000 words of translation practice during their studies.

4.2 Teaching Content and Methods

Through the author's investigation, it has been found that there is not much difference in the teaching content and methods within the current CAT teaching system in universities, and they are generally quite similar.

In terms of teaching content, it covers several key areas. Firstly, the basics of CAT software operation, including detailed explanations of the installation, interface operation, and core functions of mainstream software such as Trados and MemoQ, such as creating projects, managing translation memory banks, and terminology banks. Secondly, translation project management, teaching students how to plan project processes, assign tasks, track progress, and control quality, while introducing the use of project management tools such as Trello and Asana. Thirdly, the construction and application of corpora, involving channels for collecting corpora, processing methods, and using corpora for translation research. Lastly, attention to the forefront of translation technology, such as artificial intelligence translation and post-editing of machine translation, to keep students informed about industry development trends.

In terms of teaching methods, various approaches are adopted to enhance teaching effectiveness. Project-driven teaching uses actual translation projects as a basis, encouraging students to exercise their practical and team collaboration



skills in the process of problem-solving. Case teaching deepens students' understanding of CAT technology applications by analyzing typical translation cases. Blended online and offline teaching utilizes online platforms to provide learning resources, while offline classrooms focus on practical guidance and communication. In addition, inviting industry experts to give lectures and guiding students to participate in actual projects enhances students' professional quality and practical abilities [5].

4.3 Faculty and Teaching Resources

The faculty of CAT courses in universities have diverse professional backgrounds, including those with IT backgrounds and those with foreign language backgrounds, but the majority are still teachers with foreign language professional backgrounds [6]. Teachers with IT backgrounds tend to focus more on technology-driven elements in their teaching, while those with foreign language backgrounds pay more attention to the creation and use of corpora, memory banks, and terminology banks related to language, as well as translation project management. This diverse background helps enrich the teaching content of CAT courses from different perspectives.

University teachers exhibit different teaching characteristics in CAT teaching, which are often related to their educational backgrounds and work experience. For example, some teachers may have in-depth research in machine translation and post-editing, while others may have rich experience in the creation, application, and research of corpora. In addition, some teachers enhance the practicality and applicability of teaching by integrating actual translation projects into the curriculum through cooperation with enterprises.

The investment in CAT teaching resources by universities is gradually increasing. The past decade has seen the vigorous development of translation majors, with many universities increasing their investment in translation programs. Many universities have established dedicated CAT laboratories, introduced professional translation software, platforms, and advanced training equipment, such as Beijing Normal University and the University of International Business and Economics. At the same time, various online platforms have emerged, offering a wealth of teaching resources. For example, Yima Network, Tmxmall, Douyin, Bilibili, and other multimedia platforms all have a variety of resources that can be utilized, greatly facilitating the conduct of CAT courses. In addition, universities cooperate with enterprises to introduce actual translation projects, allowing students to learn and apply CAT technology

in a real market environment.

V. Problems in Computer-Assisted Translation (CAT) Courses in Chinese Universities

5.1 Incomplete Course System

According to the results of a literature survey, it has been found that there is a significant deficiency in the construction of teaching resources for Computer-Assisted Translation (CAT) courses in Chinese universities, a point acknowledged by 67.2% of teachers. Specifically, this resource scarcity is mainly manifested in four key areas: laboratory facilities, translation technology textbooks, practical teaching cases, and translation technology teaching platforms. The lack of these resources directly affects teaching quality and students' learning experiences.

Regarding textbook usage, the issue is equally prominent. The survey shows that 73.6% of teachers believe that the existing textbook cases are insufficient to meet teaching needs, 68% of teachers point out that the textbooks lack supporting resources, and 36.8% of teachers think that the content of the textbooks is outdated. These textbook issues not only limit students' understanding and application of the latest translation technologies but also affect the effectiveness and foresight of teaching [7].

Moreover, the content of CAT courses in some universities is repetitive and lacks systematicness. This may be due to the failure to fully consider students' actual needs and industry development trends during course design, resulting in unreasonable course content settings, lacking coherence and depth. This irrationality in course content not only affects students' learning outcomes but also weakens their competitiveness in the translation industry after graduation.

5.2 Disconnection between Teaching Content and Market Demand

Although CAT technology is gradually becoming popular in the translation industry, CAT courses do not hold an important position in the curriculum system of foreign language and translation majors in Chinese universities. This situation leads to the possibility that students may not be able to directly meet the market's demand for translation talents proficient in information technology after graduation. The CAT courses in some universities have little connection with other translation practice courses, resulting in the isolation of CAT courses, making it difficult to effectively help students improve their translation technology capabilities. In addition, the teaching content of CAT



courses in some universities often fails to keep up with the speed of market technology iteration in a timely manner. For example, some universities still focus on teaching traditional CAT tools, while emerging artificial intelligence translation technologies and cloud translation platforms are rarely covered, leading to a disconnect between what students learn and the actual industry needs.

5.3 Weak Practical Teaching Links

According to the survey, there is a significant deficiency in the construction of teaching resources for Computer-Assisted Translation (CAT) courses in Chinese universities, which directly affects the training and improvement of students' practical abilities. Specifically, nearly half of the universities have not established translation technology laboratories, which limits the training of students' practical abilities. Among the universities that have established laboratories, most are only open during class hours and cannot meet students' after-class practice needs. Moreover, some teachers are not familiar with the laboratory teaching system, leading to a high idling rate of the laboratories. This situation not only limits students' proficiency in CAT tools but also affects their ability to apply the knowledge they have learned to actual work.

In addition, some universities also have deficiencies in providing practical and internship opportunities. The teaching content of many courses is mainly theoretical explanation and basic software operation, lacking real translation project practice. Although students have mastered the use of tools, they are often at a loss when facing complex text types, diverse customer needs, and strict time limits in actual projects, and cannot flexibly apply the knowledge they have learned to actual work [8]. This may lead to students' inadaptation to the job market after graduation. Some universities have failed to fully understand the difference between MTI and traditional academic master's programs under practice-oriented guidance, and have failed to achieve a balance between practical activities and academic research in the training process, causing the talent training of MTI to deviate from the actual social needs.

5.4 Insufficient Faculty and Teaching Resources

A review of the literature found that among the teachers currently engaged in the teaching of MTI translation technology courses, 36.16% have no teaching practice experience in translation technology, and 45.98% of teachers are only "generally" familiar with translation technology. In addition, 70.98% of teachers have a background in linguistics, and only

6.25% of teachers have a background in computer science or interdisciplinary studies, showing a relatively simple professional background for translation technology teachers [9]. This indicates that teachers in universities who value both translation theory and practical application often lack the experience of working in language service companies, have insufficient control over the operation process of actual translation projects, and have limited practical experience with computer-assisted translation tools, making it difficult for them to handle deeper-level issues.

Teaching resources play a fundamental and pioneering role in translation technology teaching. 67.2% of teachers believe that the most needed improvement is in the construction of educational resources, and the shortage of educational resources is mainly manifested in four aspects: laboratory equipment, translation skills courses, practical teaching cases, and translation skills education platforms. More than half of the universities do not have translation technology laboratories, and in the few laboratories that exist, most can only be used during class hours and cannot meet the needs of students for practical ability training [10]. In addition, some teachers cause the idling of laboratories due to their unfamiliarity with the internal teaching systems of the laboratories. In terms of textbooks, there is a shortage of related textbooks on the market, lacking rich cases and supporting online resources, and they have not received enough attention from educational authorities. Even though a large number of usable resources appear on the Internet, there are still few systematic and high-quality teaching resources.

VI. Countermeasures

6.1 Strengthening the Course System Construction

Translation technology competence is an essential element of the translator's ability system in the new era. It should be divided into technical development ability, application ability, and research ability, and the course content should be designed based on this. This study suggests dividing translation technology courses into basic and advanced levels. The basic courses enable students to grasp the basic concepts and functions of translation technology, while the advanced courses focus on in-depth teaching of specific topics and technical directions to meet the needs of different professional orientations. Translation technology courses should be set as "professional required courses" or "professional elective courses" in the master's program of translation, and be offered in the first semester of MTI teaching. At the same time, it is necessary to avoid the "islandization" of translation technology courses,



ensure mutual promotion with other translation courses, and encourage students to apply the learned translation technology in other translation practices.

Institutions such as the Translators Association of China should strengthen top-level design, build independently developed core translation technologies, and create a domestic translation technology service ecosystem. It is necessary to focus on the difficult and painful problems that restrict the development of translation technology, and build and continuously improve the standards and specifications in aspects such as computer-assisted translation quality evaluation, human-computer collaboration mode, data security, and technical ethics. Computer-assisted translation technology developers should grasp the trend of technology and development opportunities, and accelerate the digital and intelligent upgrading and transformation of the translation industry through the integration and application of technology [11].

6.2 Updating Teaching Content

To meet the needs of real translation projects, the teaching content should include the use of online translation platforms, the cultivation of compilation skills and typesetting skills, to adapt to the market's demand for professional compilation and typesetting of translation products. Through cooperation with enterprises, introduce the latest translation technologies and software, so that students can be exposed to the cutting-edge tools and platforms in the industry. Enterprises can provide part-time teachers to share practical work experience, and at the same time, university teachers can also go to enterprises for further studies to learn the latest technological applications.

Update the course content to meet market demand. The course content should include the learning and application of CAT software, the creation and application of terminology banks/corpora/memory banks, and information mining as basic components, and dynamically adjust according to market demand and industry development trends. Drive teaching through real translation projects, so that students can learn translation technology in practical operations and improve their practical operation ability. Before students start learning and practicing the basic skills of CAT, focus on cognitive priority. On the basis of students' full understanding and recognition of the basic concepts of CAT, focus on the learning and operation of related CAT technologies, and introduce project management concepts to carry out translation practice.

6.3 Strengthening Practical Teaching

From the school level, first, it is necessary to increase the proportion of practical courses. Schools should adjust the structure of computer-assisted translation courses and increase the proportion of practical teaching hours to 60% - 70% of the total hours. For example, if the original theoretical and practical courses each account for 50%, the theoretical courses can be compressed to 30%, leaving more time for practical teaching. At the same time, distribute the practical courses throughout the semester to avoid the situation where concentrated practice leads to excessive student pressure and poor learning effect. Second, build a group of practical courses. Focusing on computer-assisted translation, create a series of practical courses, such as "Computer-Assisted Translation Tool Combat", "Localization Project Practice", "Translation Technology and Project Management Practice", etc. These courses are interconnected and gradually guide students from mastering basic tool operations to being able to independently complete complex localization translation projects, and learn to use project management skills to coordinate team completion of translation tasks. Third, the school should invest funds to build a dedicated computer-assisted translation laboratory [12]. The laboratory should be equipped with high-performance computers, install mainstream translation software such as Trados and MemoQ, as well as corpus tools and quality inspection tools. At the same time, provide each student with an independent workspace, ensure the high-speed and stable network, so that students can conveniently access cloud resources and carry out team collaboration. Finally, the practical part of the teaching should set up a simulated translation company working scene. Students can experience the whole process from accepting translation tasks, communicating needs with customers, making translation plans to finally delivering results in such an environment, and enhance their understanding of the actual translation work process.

6.4 Improving the Level of Faculty

Universities should regularly organize teachers to participate in domestic and foreign translation technology training, such as the national higher education institution translation professional teacher training hosted by the Translators Association of China and the China Institute of Translation, to improve teachers' translation technology application ability and teaching concepts. Encourage teachers to obtain translation professional qualification certificates and translation technology skill certification certificates to enhance their professional



practical ability. Teachers should also participate in actual translation projects, such as public welfare brochure translation, energy translation, tourism translation, science and technology translation, etc., to accumulate practical experience and feedback to teaching, or use winter and summer vacations to take up posts in translation enterprises and participate in the actual translation projects and management work of enterprises. In this way, teachers can deeply understand the latest technological applications and work processes in the industry, and bring the experience from actual work back to classroom teaching [12].

Teachers should participate in more scientific research projects, publish academic papers, publish monographs, participate in translations, apply for invention patents, etc., to promote the updating of teaching content and the innovation of teaching methods through scientific research. Adopt diversified teaching methods such as case learning, task-driven, problem-oriented, such as flipped classroom, experimental teaching method, school-enterprise collaborative teaching method, etc., to improve the interactivity and effectiveness of teaching.

6.5 Enriching Teaching Resources

Universities can start from the following three aspects to enrich teaching resources. First, on the basis of introducing computer-assisted translation software such as Trados and MemoQ, sort out and integrate the existing computer-assisted translation textbooks on the market, select textbooks with detailed operation explanations and rich cases, and recommend them to students as basic learning materials. Let students become familiar with these widely used tools in the industry through actual operations. Second, introduce resources from multimedia platforms such as China's university MOOC platform, Bilibili, and Tiktok, let students explore and learn different tool usage skills and translation technology frontiers, and broaden students' horizons [13]. Finally, cooperate with translation enterprises to jointly build teaching cases. Teachers can introduce the background, translation difficulties and solutions of these cases in detail in the classroom, so that students can learn from actual cases.

VII. Conclusion

This paper has conducted a comprehensive and in-depth analysis of the current status of Computer-Assisted Translation (CAT) courses in Chinese universities, revealing numerous issues in course settings, teaching content and methods,

practical teaching links, as well as faculty and teaching resources. Corresponding improvement strategies have been proposed. The research findings indicate that despite the increasingly widespread application of CAT technology in the translation industry, the construction of CAT courses in Chinese universities still faces many challenges. These include an imperfect course system, a disconnect between teaching content and market demand, weak practical teaching links, a singular professional background of faculty, and a scarcity of teaching resources. The existence of these problems not only affects students' learning outcomes and application abilities in CAT technology but also restricts universities' capacity to cultivate high-quality translation talents that meet market demands.

In response to the aforementioned issues, this paper proposes strategies such as strengthening course system construction, updating teaching content, enhancing practical teaching, improving faculty standards, and enriching teaching resources. By dividing translation technology courses into basic and advanced levels, preventing course "isolation," and designating them as "professional required courses" or "professional elective courses" in the master's program of translation, to be offered in the first semester of MTI teaching, a solid technical foundation can be laid for students. Concurrently, teaching content should be updated to align with market demands, incorporating the latest translation technologies and software, emphasizing cognitive precedence, and introducing project management concepts to translation practice. Furthermore, practical teaching links should be reinforced by increasing the proportion of practical courses, constructing a group of practical courses, establishing dedicated computer-assisted translation laboratories, and setting up simulated translation company working scenarios, enabling students to enhance their skills through practice. In terms of faculty development, teachers are encouraged to participate in training, obtain certificates, engage in actual translation projects, and conduct research activities to improve their professional practice capabilities and teaching standards. Lastly, teaching resources should be enriched by integrating existing textbooks, introducing multimedia platform resources, and co-building teaching cases with enterprises, providing students with diversified learning materials.

In summary, the reform and optimization of CAT courses in Chinese universities is a systematic project that requires the joint efforts of universities, teachers, enterprises, and related educational institutions. By implementing the strategies proposed in this paper, it is expected that the existing problems



in CAT course construction can be gradually resolved, teaching quality and student learning outcomes can be improved, and more composite translation talents who master solid language skills and are proficient in information technology can be cultivated. This will meet the diversified talent demands of the 21st-century translation market, promote the coordinated development of translation education and the translation industry, and make a greater contribution to cross-language cultural exchanges in the context of globalization.

References

- [1]. Du Pengju, Research on Computer-Based Assisted Translation Technology. *Automation Technology and Application*, 2021. 40(2): pp. 167-169+185.
- [2]. Guo Mingyang, et al., Research on the Application of Artificial Intelligence in Machine Translation. *Journal of Henan University of Science and Technology (Natural Science Edition)*, 2021. 42(3): pp. 97-104+M0008.
- [3]. Yang Ronghua & Zhu Xiaolan, "Process + Output" Oriented Three-Dimensional Interactive Project-Based Translation Course Teaching Practice. *Research on Language and Education*, 2024. 8(1): pp. 30-36.
- [4]. Man Jing, Research on the Reform of Computer-Assisted Translation Courses Based on Project-Based Learning. *Computer Knowledge and Technology*, 2022. 18(1): pp. 139-140.
- [5]. Zhang Zhiyun & Hu Yinghua, Discussion on "Translation + Language + Technology + Field" Translation Teaching Concept and Practice under the Background of Educational Technology Change. *Overseas English*, 2024(11): pp. 96-98.
- [6]. Ai Tianyu & Chen Fu, Research on the Translation Skills of Translation Master's Students in the Era of Artificial Intelligence. *English Square (Academic Research)*, 2022(11): pp. 25-28.
- [7]. Yang Hui, Research on the Application and Reform of Computer-Assisted Translation in Translation Teaching. *Information Industry Report*, 2024(3): pp. 248-250.
- [8]. Wang Huashu & Wang Yun, Review of Domestic Computer-Assisted Translation Research (1980—2021). *Foreign Languages*, 2023. 39(2): pp. 130-138.
- [9]. Wu Xianfeng & Zhang Lifeng, Application of Computer-Assisted Translation Technology in Translation Teaching. *Journal of Jiamusi Vocational Institute*, 2023. 39(9): pp. 169-171.
- [10]. Jing Hulin, A Review of Translation Technology Teaching Research under the Background of Informatization. *Modern Linguistics*, 2023. 11(4): pp. 1690-1696.
- [11]. Sun Shengyong, Research on AI Translation Technology Application: Current Situation and Prospects. *Bohai Economic Outlook*, 2020. 34(4): p. 163.
- [12]. Hu Zhaojie, Application of Computer-Assisted Translation Technology in Translation Teaching. *Information Systems Engineering*, 2022. 35(2): pp. 161-164.
- [13]. Li Jinyun & Hou Yi, Analysis of the Role of MOOC in the Training of Master of Translation and Interpreting (MTI). *Examination and Evaluation*, 2021(3): pp. 89-94.