

# Research on the Teaching of Computer-Aided Translation

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**Abstract:** With the development of the modern language service industry, modern translators are required to have certain translation skills. The course of Computer-Aided Translation has received more and more attention and has become a required course for the major of translation. Due to the particularity of this course, it is different from the traditional translation courses in the teaching process. Based on the objectives and characteristics of the course, this article discusses the teaching practice of the course of Computer-Aided Translation, with a view to improving the teaching effect of the course and student's translation skills.

**Keywords:** Computer-Aided translation; Course; Teaching

## 1. Introduction

### 1.1. Computer-aided translation course introduction

In the National Standard on the Teaching Quality of the Major of Translation in Higher Education Institutions published in 2014, the Computer-Aided Translation course is explicitly included as a required course for the major of translation. In 2015, the Ministry of Education of the People's Republic of China issued guidance on the transformation of application-oriented local colleges and universities, and put more emphasis on the cultivation of application-oriented translation talents. Computer-Aided Translation is one of the important skills of translators, and the role it plays in translation practice becomes more and more important. As more and more universities set up Computer-Aided Translation course, more and more teaching discussions has been emphasized on this course. However, as a new course, Computer-Aided Translation still has many problems that need to be solved, and there are a lot of places need to be improved.

## 2. Course Objectives for "Computer-Aided Translation"

The teaching objectives of translation major is to cultivate applied students who have strong interpretation and translation skills and can engage in translation practice in specialized industries and fields. Computer-Aided Translation is a course created in accordance with the development of the information age and the trend of translation technology. We need to cultivate students to be proficient in mainstream computer-Aided translation technologies and tools and be able to efficiently solve common translation technology problems in translation practice. So how should teachers teach such a translation technology course that is different from traditional translation courses and how to teach in order to achieve a cer-

tain teaching effect, this is a topic that the academic community should pay attention to. The author believes that the objectives of computer-Aided translation courses can be pursued from the following aspects.

### 2.1. Take computer-aided translation course as a course of translation technology instead a course of software learning

In the eyes of many people, when referring to Computer-Aided Translation, it is inevitable to think of Computer-Aided Translation softwares such as SDLTrados, MemoQ, etc. However, this is only Computer-Aided Translation from a narrow perspective. Computer-Aided Translation in a broad sense contains a wide variety of content and is a magnificent world.

With the development of Internet information technology, the demand for language service in the new era has changed dramatically, and the translation process has been continuously improved. At present, the project tasks of the language service industry are no longer a book or a document. Instead, what takes a large percentage of the language service industry are engineering documents, with a million or even millions of words each, but the delivery time is shorter. Faced with such a huge translation workload and urgent delivery time, translators in the new era need to master certain translation techniques to improve the efficiency and quality of translation. Modern translator's translation technology capabilities mainly include three aspects: first, information technology basics; second, information technology tools applied in the translation process, including Internet search engine, corpus technology, electronic dictionary; third, CAT technology in narrow and in broad sense. In the teaching of "Computer-Aided Translation", Teachers should not only teach the operation of mainstream Computer-Aided Translation softwares, but also ensure students master certain transla-

tion techniques to improve the efficiency and quality of translation. To be more specific, the course should include the following content. First, the basic information technology, namely the basic computer application skills, including the principles of computer composition, the application of Office softwares, and hot topics on computer. Secondly, Internet search technology, also known as information retrieval technology, is an important component of translation technology capabilities. With the development of computer and Internet technologies, global information and data have grown exponentially. In the past 20 years, the total amount of information produced by mankind has exceeded the total amount of information produced by mankind since its creation. In a survey, 93% of translators considered web search to be a translation skill to better understand the original text. The advanced search functions of Internet search engines and other technologies can not only effectively shorten the time for translators to query information, but also ensure the quality of the translation. In addition, electronic dictionaries and corpus retrieval techniques are also sharp tools for translators. In translation, by querying the monolingual corpus, you can help the translator choose the appropriate vocabulary or expression and avoid the translationese. A monolingual corpus can be used to help users choose between synonyms, identify usage information, decide which style is more suitable for translation, and play a positive role in improving the accuracy and efficiency of translation language. Finally, Computer-Aided Translation in a narrow sense includes translation memory technology, terminology technology, translation process management, etc, and computer-aided translation tools in the broad sense include speech recognition, optical character recognition, word processing software, quality assurance, localization, machine translation and other Translation technology.

## **2.2. Focus on computer-aided translation principles teaching**

The "Computer-Aided Translation" course does not aim at teaching students to master Computer-Aided Translation softwares. It is more important to show students all the information technology related to translation technology, to understand the characteristics of the current language service industry, and to cultivate students basic skills on information technology. Although Computer-Aided Translation is a highly practical course, without theoretical foundations, it is difficult for students to grasp the essence. In the teaching of each chapter, we include two parts. First, we will explain to students how the translation tools work, that is, why translation tools can be applied for us, and why it cannot be applied. What we need to focus on is its working principles behind the scene. Secondly, it requires students to master the mainstream translation softwares on the market, to reach the

level of proficient application and apply them creatively in translation practice. As we all know, translation memory technology and termbase technology are two core concepts in the field of Computer-Aided Translation technology. The principle of translation memory is simply "There is no need to do translations that you did before". The working principle of Computer-Aided Translation softwares started with the additional modules in a word processing software and gradually developed. We will explain the content of translation memory separately, and introduce the development history of translation memory, the specific division of translation units, the storage, acquisition and application of translation memory, and the calculation of sentence similarity. The purpose is to allow students to master translation softwares and the working principles, enabling students to quickly grasp the use of these softwares and be able to master these tools even in the face of frequent softwares upgrading.

## **2.3. Adopt mixed teaching method to stimulate students' enthusiasm**

It is important to integrate the advanced means of educational technology into the teaching of translation technology. The interactive teaching model is promoted, and students are encouraged to discover and use information from the internet in multiple ways. Take Jingdezhen Ceramic Institute for example, the Computer-Aided Translation course is conducted online and in the classroom. This course uses the rich MOOC resources on the Internet, we select the online course "Principles and Practice of Translation Technology" presented by Professor Yu Jingsong. In every class, we include multiple parts such as content abstract, lecture notes, MOOC resources, extended reading materials and homework. Before class, the teacher first sent courseware, reference materials and teaching plan to the class platform such as QQ for students to preview and set up pre-class thinking questions. In class, the teacher will explain difficult points and conduct discussions to address student puzzles. After class, students need to return to the platform to complete this week's homework. The teacher will give feedback on problems in the student's homework after class. Online course, classroom discussions and weekly homework can not only stimulate student's enthusiasm and enthusiasm for learning, but also improve teaching efficiency. Computer-Aided Translation course contains a wide range of technical content, and it is difficult to complete teaching tasks in the classroom alone. The MOOC platform provides strong support for translation technology teaching. Take Chapter 2 "Internet Search Engine" as an example, the teacher sent teaching courseware, MOOC resources, pre-class thinking tasks such as "How to retrieve the localization software Across" and "How to quickly retrieve the English translation of the 公民道德建设实施纲要" to

the platform for students to preview and think before class. In the classroom, the teacher carries out further explanation of key and difficult content of the "search engine classification" and "advanced search rules for search engines", gives more specific examples, conducts in-depth and careful discussions, and resolves pre-class thinking. At the same time, in order to understand whether students have learned and mastered the use of the rules, relevant post-class exercises are arranged, such as search "English translation of 景德镇国家陶瓷传承与创新试验区" and "English translation of 青花瓷" as coursework and post them to class platform.

With the assistance of a highly information-based course platform, the cost of translation technology teaching and implementation is significantly reduced, discussions and exchanges between teachers and students are more frequent and closer, and less time and energy are required to complete the same teaching tasks. And the students are significantly motivated, the collaboration of learning has been greatly enhanced, and the teaching efficiency of Computer-Aided Translation courses has been greatly improved.

#### **2.4. The combination of theory and practice, using a project-driven teaching model**

Project-driven method requires that in the teaching process, the teacher intertwined the teaching objective in each actual project. The teaching goal of the Computer-Aided Translation course is not only to teach students how to operate the softwares, but also to teach students the application of translation technology in all aspects of translation practice. In the teaching of "Computer-Aided Translation", we need to simulate real translation cases and place students in real translation task environments. Teachers can introduce the mode of project-driven teaching, integrate each teaching goal into each project, and the teacher carefully designs the project, the class completes the project in groups, and group members determines their roles such as project manager, translators, and reviewers. The project manager coordinates the translation project, including analyzing the word count of the project, perfect match, and the delivery time. At the same time, the project manager is responsible for the final presentation of the project in class. Translators are

responsible for the translation of each part, and the translation is finally confirmed by the reviewer. Taking Jingdezhen Ceramic Institute as an example, in the course, the teacher sets a translation project of ceramic product instructions, and sends the ceramic translation memory and termbase in advance to the class group, and requires students to submit the project before deadline. If they do not hand in time, they cannot submit through platform. Students are divided into groups of 4-5 people. Group members decide their own roles. The project manager coordinates the entire translation process. The translators use Computer-Aided Translation softwares to complete the translation project within a limited time. They are required to submit the project report expounding problems encountered and how to resolve them. This project management mode that integrates teamwork has greatly stirred student's learning interest in teaching practice, and enabled them to obtain a sense of satisfaction and achievement.

### **3. Conclusion**

The language service industry in the new era has undergone tremendous changes. The industry demands and translation project flow have also transformed. Various translation softwares have emerged and have gradually become mature, such as localization software, desktop publishing software, proofreading software, which are big challenges for translators. "Computer-Aided Translation" is a course that has emerged in response to the trend of the information age. Translators in the new era should not only master proficient bilingual skills and translation skills, but also master translation and information technologies, to become a translator proficient and skilled in language, culture, translation, and technology. As a relatively new required course of translation major, there are still many things that need to be improved, and there are still many problems to be solved.

### **References**

- [1] Lynne Bowker. Computer Aided Translation, University of Ottawa Press, Ottawa. 2002.
- [2] Frank Austemuhl. Electronics Tools for Translators, ST. Jerome Publishing, Manchester. 2001.