The Components and Development of Translation Competence of Translator in the Information Age

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Abstract: Translation competence has become one of the indispensable core qualities that translation professionals must be equipped with in the era of information technology. With the emerging technology of computer science, cloud computing, big data and artificial intelligence, translation has witnessed huge changes in the language service industry in terms of translation paradigm and process. This article argues that translation competence is composed of linguistic competence, field specific ability, strategic competence, translation technology competence, cross cultural knowledge and skills, theoretical and practical knowledge about translation, and translation project management ability. The seven components work together to ensure the production of high quality target language from source language. Both student translators and translation professionals are expected to be equipped with all the components of the translation competence aforementioned in the information age. At last, the development of translation competence in student translators is proposed.

1. Introduction

Translation competence is one of the critical factors determining the quality of translation outcomes. However, the understanding of translation competence changes with the times. Faced with today's reality of translation industry, the understanding of translation competence, compared with that from the traditional viewpoint, has changed considerably in many aspects. Many new features of translation competence has emerged in the information age. Thus, adopting more effective strategies to teach translation competence to meet the demands of these emerging features are undoubtedly crucial to the cultivation of translation talents.[1]

Informatization and technologization, as two of the most important features in the 21st century, has been represented as the surge in the quantity of information, the soaring speed of information dissemination, and the broadening and deepening of the scope and degree of information application. The process of informatization and technologization has witnessed great changes in the development of today's society, especially in the areas of cloud computing, big data and artificial intelligence, which in turn has had a profound impact on translation activities in the language service industry. Facing the opportunities and challenges brought by the globalized market, there is an urgent need for high-quality translation talents who can adapt themselves to meet the new requirements of today's language service industry. Translation competence, especially translation technology skills, has become one of the core qualities for high-quality translators in the new age.

2. Literature review

It is of great significance to undertake a review of the previous studies on translation competence prior to identifying and clarifying the key components of translation competence that qualified translators are expected to be equipped with. Therefore, this section begins with the definition, conceptualization and complex nature of translation competence and then followed by research into the models and components of translation competence.

2.1 Translation competence

2.1.1 Definitions of translation competence

Over the past few decades, the definition and investigation of translation competence have attracted considerable attention and triggered extensive research. The academic debate over translation competence to some extent originated from the need to draw clear theoretical boundaries between Applied Linguistics, Linguistics, Comparative Literature, and the emerging field of Translation Studies which claims for itself the status of an independent discipline. Therefore, translation competence, being as a distinctive competence, has drawn great attention of scholars who have put a lot of effort and energy into its conceptualization and definition.[2]

Although the definition process itself guarantees a thorough comprehension of the nature and boundaries of the concepts, defining a concept is by no means an easy task. Like many definitions, this one of "translation competence" has generated a great deal of controversy and led to a range of conceptualizations and models that are contradictory, overlapping, or mixed together. But the large body of research on translation competence conducted over the past sixty years aims to provide a solid theoretical foundation for both translator training and the professional practice of translation, not just a theoretical or speculative discussion.[2]

How to define and decompose translation competence has always been one of the focuses of scholars in the field of translation studies.[3] Drawing upon different theoretical assumptions, translation competence has been defined and conceptualized from a broad range of perspectives at different research stages. Many scholars have defined the concept of translation competence from different perspectives, identified its core elements, and constructed many theoretical and practical models.

Translation competence is more of a cover term and inclusive concept for the overall performance abilities which are not easy to define and conceptualize.[4] When it comes to the terminology of translation competence, a variety of words have been used by different scholars, for instance, translation competence, translation skills, translation proficiency and so on. The term "Competence" is used in a more general way, while "skills" and "proficiency" are used more often in the fields of training and education.

According to PACTE,[5] translation competence is defined as "the underlying system of knowledge needed to translate", which includes declarative and procedural knowledge, with the latter in a predominant position. It contains the ability to conduct the transferring process from the understanding of the source text to the rephrasing of the target text while keeping the translation goal and the target text readers' characteristics in mind. Composed of five sub-competencies, i.e. translation knowledge, extra-linguistic, bilingual, instrumental, and strategic competence, translation competence also triggers a range of psycho-physiological processes.

2.1.2 Complexity of translation competence

One of the reasons why it is so difficult to define translation competence lies at the complex

nature itself. According to Xiao, translation competence is a theoretical assumption about the translator's intrinsic ability that governs effective translation behavior by observing translation behavior and results.[3] The construct of translation competence is quite complex, encompassing many aspects such as language, transformation, strategy, encyclopedic knowledge, cognition and CAT tools.

Although scholars at home and abroad have different opinions about the components of translation competence, they have reached a certain consensus to a certain extent that translation competence consists of multiple components and multiple factors, such as linguistic competence, cultural competence, subject matter knowledge, etc. rather than the traditionally so-called bilingual competence.[6,7] But when it comes to the specific components of translation competence, different categories of translation competence have been represented from different research perspectives.[8]

On the other hand, some scholars attempted to simplify the composition of translation competence as much as possible, and proposed a special translation competence that only involves translation itself. In his view, Pym argued that the training of translators was aimed at developing the ability to generate multiple actionable texts in target languages for a single source language text and the ability to select from multiple target texts efficiently and confidently. In other words, translation is a process of production and selection.[9]

As a matter of fact, translation competence is still developing and undefined, as evidenced by the numerous studies that have attempted to define its components and suggest different sets of standards. Several multi-dimensional models of translation competence have been investigated and supported by various empirical findings about the behaviors and mental processes of interpreters and translators.[10]

2.1.3 Translation competence studies outside China

Scholars have long proposed multi-dimensional theory of translation competence. Bausch decomposes translation competence into three categories, namely linguistic competence, specific competence and translator competence. Linguistic competence refers to the grammatical and communicative competence of a language; specific competence refers to knowledge about the world; and translator competence is a spontaneous competence that exceeds the ability of complex reading and writing.[3] As one of the pioneering research, Bausch's translation competence model made its contribution to the development of translation studies back then, however, it has its limitations. There is much overlapping between its sub-competencies and its components do not take translation industry and technology into account.

According to Deslile, translation competence includes linguistic ability, translational ability, methodological ability, field specific ability and technical ability. Linguistic ability refers to the ability to understand the source language and to produce a high-quality target language. Translational ability is the ability to extract meaning from the source language and translate it into the target language without interference. Methodological ability refers to the ability to gather information and master terms in a given field. Field specific ability is the ability to translate subjects such as economics, computer science, law, etc. Technical ability refers to the ability to use translation resources and tools, for example, the use of text processing, terminology database, text-to-speech transferring tools and so on.[3]

With the advancement of translation studies in the 21st century, scholars' understanding of translation competence has become more and more profound and sophisticated. Neubert[11] claims that translation competence is composed of five sub-competences, i.e. linguistic competence, textual competence, thematic competence, cultural competence, and transformational competence. Transformational competence dominates over the other sub-competences, in other words, the transformational skill integrates all the knowledge of language, text, and culture in order to achieve

the purpose of transformation from source language to target language. In addition, he identifies seven characteristics of translation competence, i.e. complexity, heterogeneity, proximity, openness, creativity, situationality, and historicality.[11] Although Neubert's study on translation competence has taken a step further than the previous of its kind, it has not been comprehensive enough as it neglects the professional skills and cognitive abilities of translators.

According to Fraser, the translation competence of professional translators consists of six skill areas: excellent language skills, discourse skills, cross-cultural skills, non-verbal skills, attitude skills, and the application of translation theories. Among them, non-verbal skills refers to skills in research, terminology, information technology, project management and the like.[12] Samuelsson-Brown categorizes translation skills into six areas: cultural understanding, communicative competence, linguistic competence, strategy selection, information technology, and project management. Among them, information technology involves the application of hardware and software electronic document management, and e-commerce employed in the process of translation.[13]

One of the most sophisticated studies of translation competence has been conducted by the PACTE research group (Process in the Acquisition of Translation Competence and Evaluation), which was founded in 1997 to investigate the acquisition of translation competence in written translation into and from source language. PACTE research group has carried out a series of special studies on the process of acquisition and assessment of translation competence. Translation Competence Model mainly consists of procedural knowledge and declarative knowledge that are needed for translation activities. Specifically, the model is composed of the following five sub-competencies:[5]

● *The bilingual sub-competence. Predominantly procedural knowledge needed to communicate in two languages. It includes the specific feature of interference control when alternating between the two languages. It is made up of pragmatic, socio-linguistic, textual, grammatical and lexical knowledge in the two languages.*

● *Instrumental sub-competence. Predominantly procedural knowledge related to the use of documentation sources and an information and communication technologies applied to translation: dictionaries of all kinds, encyclopaedias, grammars, style books, parallel texts, electronic corpora, searchers, etc.*

● *Strategic sub-competence. Procedural knowledge to guarantee the efficiency of the translation process and solve the problems encountered. This is an essential sub-competence that affects all the others and causes inter-relations amongst them because it controls the translation process. Its functions are: (1) to plan the process and carry out the translation project (choice of the most adequate method); (2) to evaluate the process and the partial results obtained in relation to the final purpose; (3) to activate the different sub-competencies and compensate for deficiencies in them; (4) to identify translation problems and apply procedures to solve them.*

● *Extra-linguistic sub-competence. Predominantly declarative knowledge, both implicit and explicit, about the world in general and special areas. It includes: (1) bicultural knowledge (about the source and target cultures); (2) encyclopaedic knowledge (about the world in general); (3) subject knowledge (in special areas).*

● *Knowledge about translation sub-competence. Predominantly declarative knowledge, both implicit and explicit, about what translation is and aspects of the profession. It includes: (1) knowledge about how translation functions: types of translation units, processes required, methods and procedures used (strategies and techniques), and types of problems; (2) knowledge related to professional translation practice: knowledge of the work market (different types of briefs, clients and audiences, etc.)*

● *Psycho-physiological components. Different types of cognitive and attitudinal components and*

psycho-motor mechanisms. They include: (1) cognitive components such as memory, perception, attention and emotion; (2) attitudinal aspects such as intellectual curiosity, perseverance, rigour, critical spirit, knowledge of and confidence in one's own abilities, the ability to measure one's own abilities, motivation, etc.; (3) abilities such as creativity, logical reasoning, analysis and synthesis, etc.

On top of the work by the PACTE group, Kelly identified two additional components in her translation competence model, i.e. communicative and textual competence and interpersonal competence. The remaining components are professional and instrumental competence, subject area competence, strategic competence, cultural and intercultural competence, and psycho-physiological or attitudinal competence.[14]

A translation competence model was put forward by Göpferich,[15] which includes the following components: strategic competence and motivation, communicative competence in source and target language, domain competence, tools, and research competence, translation routine activation competence, and psycho-motor competence. These models clearly suggest different aspects of translation competence, each with a unique focus and some shared components.[10]

2.1.4 Translation competence studies in China

Many domestic scholars have also conducted a series of in-depth studies on translation competence. Liu claims that translation competence is composed of the ability of two-way expression, language analysis, cultural discrimination, aesthetic judgment and logical correction. It is worth mentioning that he put the ability of aesthetic judgment into the core element of translation competence, thus enriching the connotation and broadening the vision of translation ability.[16]

Based on the existing studies of translation competence, Wen[17] proposed that translation competence should include language/text competence, strategic competence and self-assessment competence. Furthermore, he also elaborates on each components of the translation competence in the context of English-Chinese translation.

Miao has conducted a systematic research on translation competence, which includes cognitive competence, linguistic competence and communicative competence. Cognitive competence refers to intuition, logical reasoning and information processing and the like. Linguistic competence covers language choice, language expression, language coordination, rhetorical ability and cultural awareness and so on. Communicative ability refers to knowledge expression, operational skills, creativity, flexibility, etc. In her model of translation competence, Miao divides translation competence into three categories and specified the concrete components of each category. Moreover, she claims that cognitive competence of translators plays a fundamental role in translation activities and is a key component of the whole translation competence.[8]

Drawing upon the research on translation competence by both domestic and international scholars, Feng explored the composition of translation competence from the cognitive perspective. He argues that translation competence should be composed of two major categories: translation schema and cognitive mechanism, of which the latter plays a role in regulating the former. Specifically, translator's translation competence includes cultural translation schema, linguistic translation schema, textual translation schema, stylistic translation schema, aesthetic translation schema, thematic translation schema, instrumental translation schema and professional translation schema.[18]

Wei believes that translator's competence is a dynamic and complex competence system consisting of six competence elements: translation practice competence, translation strategy competence, technical competence, learning competence, psychophysiological competence, and service competence, which involves the four main dimensions of beliefs, thinking, knowledge and skills. Translation competence is a dynamic and synergistic state manifested by the interaction of

the six competence elements based on the four dimensions.[19]

Based on the literature reviews of a wide range of translation competence models and Yang and Li[20] discussed the key components of competence, performance, declarative knowledge and procedural knowledge, which manifests the nature of translation competence. They argue that translation competence is a mixture of declarative and procedural knowledge. Accordingly, they proposed a pedagogical model of translation competence which is made up of bilingual competence, pragmatic competence, profession-related competence, transfer competence, and strategic competence.

Although a consensus has been reached among scholars in-and-outside of China, there exists a disparity between the understanding of models of translation competence in the Chinese and international contexts. Xiao has made a distinction between the studies of models of translation competence proposed by both domestic and international researchers.[3] She claims that research on the models of translation competence abroad has been conducted mostly from a macro perspective, which mainly focuses on professional translation, emphasizing instrumentality and mainly focuses on translation competence in practice, and is mostly taking the model of communicative language competence as the theoretical foundation. On the other hand, domestic research on translation competence models has been carried out mostly from a micro perspective, which mainly centers on literary translation, emphasizing aesthetics and cultural awareness and focuses on the cultivation of translation competence in teaching, and is mostly based on researchers' observation and introspection.

2.2 Translation competence in the information age

With the process of the informationization era and the development of modern technology, some overseas scholars of translation competence have paid much attention to the important role of technological competence in the understanding of comprehensive translation competence since the beginning of this century.[3]

American scholar Angelelli points out that whether one can skillfully use translation tools or not has become a big difference between novice and advanced translators.[21] Modern professional translators have long since gone beyond the use of e-dictionaries, the Internet, electronic reference materials, and CAT (Computer-Aided/Assisted Translation) tools (including translation memory, machine-assisted translation, etc.) which can greatly improve the quality and efficiency of translation. A qualified translator should not only know how to use these tools, but also know when to use them. A qualified translator should also know how to search for information on the Internet efficiently and know what information is reliable and what is not. A qualified translator should not only know how to use translation-related tools, but also learn to create and maintain his own library of translation tools.[3]

Due to the rapid advancements in computer science, information technology, artificial intelligence, and big data, significant progress has been made in the field of language and translation technology in recent years.[22] These technical developments have produced more advanced and effective language and translation systems than in the past, which are proven to be an effective instrument for enhancing translation performance.[23] The utilization of these tools has emerged as a crucial element that combines with other proficiency to enhance translation competence. Thus the translation industry has undergone a substantial upheaval as a result of this shift, which has made translation techniques more effective and efficient.

In the context of translation education in China, domestic scholars in the early days did not mention that translation can rely on technical tools and that professional translation must rely on technical tools, letting alone the ability of translation knowledge. The previous models of

translation competence still remain the model of literary translation in general.[24]

In recent years, with the growing emphases placed by international scholars on the instrumental role played in promoting translation competence and the development of modern technology, domestic scholars have also begun to pay attention to the important role of technical competence in translation competence. Therefore, more and more scholars begin to integrate CAT tools or technical competence into the core components of translation competence.

As a result, new theoretical models or frameworks of translation competence must take into account technical factors in order to ensure the full understanding of the operational mechanism of translation. [25] Some scholars have already put forward the technical competence models for translators, which specifically includes technical knowledge, instrumental ability and technical thinking.[26] From the perspective of the historical development of translation practice, translation competence is a dynamic composition of diverse components, which so far has been impacted greatly by machine translation. In recent years, thanks to the development of artificial intelligence, translation technology and CAT tools have also been through refinement and upgrading, and have made great progress, and becoming an important part to ensure more effective translation results. Driven by technological change, the structure of translators' translation competence needs to be adjusted and upgraded accordingly to better adapt to the requirements for translators in the context of the technology-enabled era. Therefore, some scholars also believe that the technological turn in translation research and practice has redefined translation competence, which largely explains the increasingly important role of technical competence and technical thinking in today's professional translation practice.[19]

Ye et al. argue that in addition to professional knowledge and translation skills, translators should also be equipped with machine translation knowledge and ability, post-editing ability, terminology management ability, translation memory database establishing and application ability, programming skills, information literacy, translation project management ability, document processing ability and so on.[27]

By analyzing the current situation of translation technology development, Wang and Ji elaborated translation technology capabilities that translators should have in the era of artificial intelligence which includes computer operating, information searching, CAT tools, terminological competence, post-editing and the ability to manage a translation project. They also explained the translation technology skills that translators should possess in the age of artificial intelligence by examining the state of translation technology development today. These skills include computer operation, information searching, using CAT tools, terminological competency, post-editing, and project management.[28]

Drawing on the findings of the existing studies, Li, Gao and Liao proposed a translation technology competence with six elements which include machine translation, post-editing, information literacy, terminology management, translation memory, and computer-aided translation.[10]

3. Components of translation competence in the information age

General translation competence was the main focus of the previous studies. A number of scholars have proposed multi-factor translation competence models and have identified the components of overall translation competence. Sub-competences in technology such as instrumental competence were included in some models. However, there hasn't been much focus on identifying the particular components of translation technology competence in translators.[10]

In their study in 2019, Esfandiari et al. surveyed 456 freelance translators with at least five years of experience using the 2009 model.[29] The competencies deemed most necessary for professional

practice were found to be language competence, thematic competence, and intercultural competence. These were followed by technological competence, translation service provision competence, and information mining competence.[30]

Drawing upon the existing studies of translation competence by scholars both at home and abroad, this article argues that translation competence should be made up of linguistic competence, field specific ability, strategic competence, translation technology competence, cross cultural knowledge and skills, knowledge about translation theory and practice, and translation project management ability. The seven components work together to ensure the production of high quality target language from source language.

3.1 Linguistic competence

Linguistic competence refers to the mastery of a language's phonetics, vocabulary, grammar and discourse knowledge, such as language choice, language expression, language coordination and rhetorical ability. In translation activities, linguistic competence refers to the skillful mastery of linguistic knowledge and utilization of both source language and target language, which is usually referred to as bilingual competence.[17] Although bilingual competence is the foundation of translation between two languages, translators also need to have the ability to communicate in source language and target language. Although bilingual competence is the foundation of translation work, translators also need to have the ability to translate effectively between two languages, that is, the ability to understand the source language and the ability to produce high-quality target language. According to the PACTE research group, bilingual competence refers to the procedural knowledge required for bilingual communication, which consists of bilingual pragmatic knowledge, sociolinguistic knowledge, discourse knowledge, grammar and lexical knowledge.[5]

Translators need to activate language-related schema during the translation process, which includes phonetics, vocabulary, rhetoric, syntax, semantics, pragmatics, language contrast, etc. Therefore, translators not only need to master the usage and characteristics of source language and target language, but also understand the similarities and differences between the two languages in order to translate the connotation of the source language into effective target language for readers to understand.[31]

In addition, in the translation process, linguistic competence also refers to the level of knowledge and skills that translators possess in editing, revising and quality assessment in bilingual conversion. Translators need to be proficient in bilingualism and translation skills, understand the guiding role of different styles of discourse such as purposefulness, informativeness, acceptability, articulation, coherence, etc. in translation practice to make sure the successful translation between the source language and the target language. High level of proficiency in language skills can help translators accurately decode the source language and quickly identify the match between the source language and the target language in order to produce high quality work of translation.[19]

Linguistic competence plays a foundational role in high-quality translation, however, there is also a general consensus that the mere possession of linguistic knowledge in two or more languages does not guarantee the translation competence of translators.[4] It implies that other competences are indeed indispensable to make qualified translators.

3.2 Field specific ability

Field specific ability refers to the ability to use the knowledge related to a specific industry field or discipline, such as the political, economic, cultural, scientific and technological, legal, pharmaceutical, tourism, publishing, engineering and other fields, which is helpful in completing translation tasks. Field expertise can help translators become more competitive in the translation

market, which of course requires the long-term accumulation of specialized knowledge in a given field.[31]

3.3 Strategic competence

Strategic competence refers to the total sum of the translator's decision-making ability, prediction ability and evaluation ability for the purpose of comprehensively improving the editing efficiency and translation quality, including the ability to evaluate CAT tools employed, the ability to evaluate the quality of machine translation, the ability to identify, categorize and correct errors in machine translation, the ability to accurately make decisions about the degree of post-editing, and the ability to formulate post-editing processes based on specific text types, subject areas and customer needs.[19] Strategic competence is the ability to ensure the successful running of the translation process and effective solutions to problems arising in the translation. Strategic competence is crucial because it links the other sub-competencies and coordinates the entire translation process, which plays a role in planning, implementing and evaluating the results of translation projects, coordinating the major elements of translation competence, promoting effective solutions to problems, and ensuring the successful completion of translation tasks.[5]

3.4 Translation technology competence

Thanks to the constant advancements of information technology and computer science, particularly the breakthroughs in the application of artificial intelligence in natural language processing, machine translation has entered into a new stage. The language service industry is witnessing the indispensable use of translation technologies in its translation practices.8 The industrial transformation has entailed translators' mastery of technology competence.[10]

Increasingly, it is essential for translators and interpreters to possess a high level of proficiency in technological tools to get their work done, as technology is becoming an integral part and new normal of the translation industry. Because traditional manual translation is becoming inefficient and expensive compared to modern demands in language service, researchers and educators have focused a great deal of effort on identifying and developing translation competencies, among which translation technology competence is gaining increasing attention.[10]

Translation technology competence is the instrumental element in the translation competence system, providing technical support for other competences. Technology competence refers to the technical literacy of translators in utilizing a variety of technical tools to solve translation problems and ensure the completion of translation tasks with high quality. Translation technology competence includes basic computer skills, CAT tools skills, information literacy, terminology competence, corpus competence, machine translation ability and post-editing ability. Basic computer skills are the ability to use office software for document processing, including file conversion, document layout and editing. CAT tools skills refers to the mastery of the basic knowledge and main function of computer-assisted tools and to use them to assist in translation practice. Information literacy means the ability to use different search engines to obtain the information on the Internet for the purpose of better translation results.

Terminology competence is the ability of translators to utilize terminology tools and methods based on terminology theory and to solve terminology-related problems occurring in translation work. It includes the ability to collect, extract and sort terms as well as the ability to create, manage and maintain terminology databases. Corpus competence refers to the ability of corpus processing and application, including the collection, cleaning, alignment of translation corpus and the conversion of different file types. Machine translation ability refers to the ability to master the basic principles of machine translation and common machine translation systems, and the ability to

skillfully use machine translation systems to accomplish translation tasks. Post-editing ability is the ability to process and modify the results of machine translation, including correcting the language errors in spelling and grammar and improving the accuracy, fluency and readability of the translated text.[32]

With the professionalization, networkization and informatization of translation industry, professional translators must have the ability to use translation technology tools, which has become one of the core components that competent translators must be equipped with in the global era.[31]

3.5 Cross cultural knowledge and skills

Translation is not only the conversion between two languages, but also the exchange between two cultures. Therefore, the translation process itself is a kind of a cross-cultural communication behavior. Cross cultural knowledge and skills include cultural knowledge, cultural understanding, and communication skills. During the translation process, translators must be familiar with the cultural knowledge behind source language and target language, such as beliefs, values, lifestyles, etc. and produce high-quality translation work so that target language readers can truly understand the connotation of the source language culture conveyed in the target language.

3.6 Knowledge about translation theory and practice

In translation activities, excellent translators should also have solid theoretical knowledge about translation and rich experience in translation. The theoretical knowledge of translation mainly includes translation strategies and techniques and solutions to translation problems. Practical knowledge about translation refers to the translator's ability to efficiently complete a translation, specifically including the operation of the translation process, the ability to collaborate with technical tools and knowledge and cultural literacy, the ability to complete the translation and deliver it successfully.[19]

3.7 Translation project management ability

Translation project management ability refers to translator's ability to manage translation projects throughout the entire process from searching for translation tasks to delivering them. It is an important component of translation competence. Translators should fully demonstrate their professional competence and customer awareness in the process of communicating with clients, being familiar with the translation market and industry demands, possessing marketing strategies, seeking target customers, clarifying customer needs and expected goals, being familiar with the translation process, interpreting translation reports, and determining budgets and quotations.[19]

In addition, the ability to manage translation projects also includes some knowledge related to professional translation activities, including translation management and translation market, translation purpose and process, translation product and quality evaluation, translation industry and editing and publishing, localization, translation workflow, and translator's professional ethics. In the meantime, translator also need to have strong ethical awareness of translation data and translation technology, strictly abide by professional ethics and standards, and ensure that translation work is carried out in an orderly manner.[31]

With regard to all the seven key components of translation competence, each of them are supposed to make a contribution to the overall competence. For instance, linguistic competence provides the foundation for effective bilingual conversion between the source language and target language. Translation technology competence plays an efficient role in doing translation tasks that are highly demanding in terms of heavy workload.

4. Development of translation competence of student translators

In view of the richness of the constituent elements of translation competence, the existing courses on promoting translation competence also need to be reformed and innovated in order to meet the demand for the cultivation of high-quality student and professional translators.

4.1 Optimizing the curriculum and teaching content

Translation competence itself is a complex and inclusive concept, so the curriculum of translation courses needs to be set up to cover the required core elements in combination with the real needs of today's translation industry and the objectives of translator training. In addition to linguistic competence and bilingual conversion ability, translation competence should also include intercultural competence, translation technology competence, project management ability and so on. In terms of curriculum, targeted courses aimed at cultivating different core elements can be offered separately according to the different components of translation competence, on the other hand, the development of several core elements can also be integrated into one single course.

4.2 Innovating teaching mode

In terms of teaching mode, the cultivation of translation competence can adopt a pattern of combining online and offline teaching. By making full use of modern information technology and multi-modal multimedia equipment, teaching objectives can be more effectively used through computer-aided translation tools, terminology management tools, machine translation software, and AI technology. Online teaching can provide students with flexible time and space through various online teaching activities such as mature high-quality video courses, virtual classrooms, and other resources. Offline teaching can focus more on practical translation practices and interactive communication between teacher-student and student-student. Through activities such as simulating real translation tasks through translation projects, students' skills in translation practice, teamwork playing and project management skills can be improved.

4.3 Adopting multiple-dimensional assessment

An effective evaluation method is the key to ensuring the effectiveness of teaching results. Given the complexity and inclusiveness of translation competence itself, traditional evaluation methods are not adequate enough to meet the requirements of accurate assessment of multi-factor translation competence today. Therefore, a multiple-dimensional method combining formative evaluation and summative evaluation should be adopted. The evaluation of knowledge about translation theory and translation target language texts can be done in the form of conventional exams. However, the process of translation, such as the selection and use of translation technology tools, needs to be assessed through students' reflective reports after their completing translation tasks. Teachers can also use interviews and scales to evaluate students' translation competence.

In addition, the evaluation of translation competence can also be achieved by way of the existing evaluation theories. As one of the competence assessment theories, dynamic assessment combines evaluation with teaching to achieve deep integration of teaching and evaluation. Its purpose is to explore the interactivity, time span, and students' potentials in translation, particularly how experienced teachers can guide and tap into individual learning potential, thereby exploring the promotion of students' all-round and sustainable development with appropriate support, designing more appropriate teaching methods to promote students' learning outcome of translation in a more effective way.

5. Conclusion

Over the past few decades, the studies of translation competence has been carried out from a wide variety of perspectives, disciplines, and fields. Many models or theories of translation competence has been proposed and constructed by researchers at home and abroad. With regard to the components of translation competence, there has been controversies over the composition among scholars from different perspectives. With the process of time and technological advancements in computer science, cloud computing, big data and artificial intelligence, translation has witnessed enormous changes in the language service industry in terms of translation paradigm and process, particularly the application of CAT tools in translation practice. This article put forward a new model of translation competence by taking into account of the technological competence demanded in the information age.

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