

## Chapter # 14

### THE APPLICATION OF KNOWLEDGE MANAGEMENT IN THE TEACHING OF TRANSLATION IN UNIVERSITIES

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#### ABSTRACT

With the development of information technology, the universities are faced with an increasing need to integrate the knowledge management in their translation teaching, to form students' integral translation abilities and better the teaching efficiency. This research first makes a literature review on the knowledge management and the translation teaching. Then, we discuss the traditional translation teaching in universities and formulates the teaching model of knowledge management for translators', which includes the curriculum design, the search, identification and acquisition of information, the organization of information and the creation of personal knowledge bank, as well as the application of knowledge bank in the practical translation tasks.

*Keywords:* knowledge management, translation teaching, competence formation, workshop teaching.

#### 1. INTRODUCTION

In the era of big data, the rich Internet platforms provide large amounts of information for the translators; meanwhile, due to the information resources of the sea, the overall body of the knowledge tremendous, so the knowledge management in translation is indispensable. The formation of translators in universities is also beginning to show new features with the fast development of technology and information. The texts to be translated contain large amounts of rapid-changing information. Moreover, the content is of wide range of coverage, and is more professional, more complex and more difficult to translate. Thus, the universities should explore new ways, like integrating knowledge management (KM) in translation teaching, to broaden the knowledge, form students' ability to use computer assisted tools and make them informed of up-to-date information.

#### 2. KNOWLEDGE MANAGEMENT AND TRANSLATION TEACHING: A BRIEF LITERATURE REVIEW

Knowledge is the key resource of the information age. The term "knowledge management" is used to describe everything from the application of new technology to the broader endeavor of harnessing the intellectual capital of an organization. (Sallis & Gary, 2012) KM has gained popularity in both the business and education arenas, and advances in information technology have served to assist in developing and implementing KM strategies.

Making a distinction between two different but important types of knowledge is crucial to KM, and to using knowledge effectively in the organizational context. The two types of knowledge are generally known as explicit and tacit knowledge. (Serban & Luan, 2002) Explicit knowledge is documented information that can facilitate action. This type of

knowledge is easy to articulate, write down, and share. Because explicit knowledge is the knowledge that can be most easily articulated and transmitted, it is sometimes called codified or declarative knowledge, with translation related examples including language and grammar rules, terminologies, reference material, legal requirements, contact and industry information, and documented information on the subject matter. Tacit knowledge is know-how and learning embedded within the minds of the people in an organization. It involves perceptions, insights, experiences, and craftsmanship. Tacit knowledge is personally and socially embedded. Translation related examples here include being able to grasp the context of the target communication situations, understanding meanings behind source text utterances and being able to make intuitive decisions in text production. (Risku, 2013)

Thus, based on the basic concepts of KM and our objective of integrating KM in the formation of translators' competence, referring to the definition formulated by Davenport, DeLong, and Beers (1998) and Galbreath (2000), we define "Knowledge management" as following: knowledge management combines the processes and application of technological tools to digitize and store, and make universally available, via electronic networks, the ongoing creation and transference of knowledge and wisdom. The knowledge to be managed includes both explicit, documented knowledge, and tacit, subjective knowledge.

Ditlevsen & Kastberg (2009) first introduced the personal knowledge management in translation teaching, and later formulated six rudimentary phases of the knowledge management approach, which are identify, acquire, evaluate, organize, apply, optimize the knowledge. Niu and Wang (2013), based on Dalkier's comprehensive knowledge cycle management model, taking translation technology majors of British universities as an example, analyzes the guiding significance and actual effects of the KM in translation teaching in teaching-research compound institutions. Chen (2018) uses the knowledge management competency model to rank the hierarchy of professional translator's competences according to their importance, and revises the translator's translation terminology competence model, to provide suggestions for terminology teaching and the translator's self-evaluation. Mu, Tian and Yang (2018) formulates the Knowledge Management Model for Online Translation Learning, discussing especially the Tag-Word-Based Network of Knowledge Management Model. Zhao (2019) proposes the personal knowledge management (PKM) teaching method combining the personal KM theory with the translation technology in the Internet age. Zhao also gives the specific implementation steps of PKM in the cultivation of patent translation talents.

Based on the former studies, our research intends to combine the PKM theory of Ditlevsen and Kastberg (2009) and Kastberg (2009) with the perspective of the translation teaching of teachers and integrates the new technologies, in order to discuss the application and integration of KM in the translation teaching in universities.

### **3. TRANSLATION TEACHING IN UNIVERSITIES**

In China, the translation teaching for university students has three major objectives: present the nature, the form, the basic concepts and the cognitive process of the translation; cultivate the ability of bilingual thinking and master the basic techniques and strategies of translating; realize the dual responsibility of technical training and better the Chinese language and foreign language level.

Nowadays, with the development of the internet technology and the information age, our time is entering the era of knowledge economy from the era of industrial economy. The fundamental reason for the development of education informatization is that education must adapt to the changes in the production mode and lifestyle of the whole society. In this

context, the translation teaching in the universities is beginning to show new features. Firstly, the text contains large amounts of rapidly changing information. We are now in a world which is fast-changing, thus the translation materials also contain information that concerns new technology, up-to-date news, new forms of economy and new relations of collaboration. All these information need a scientific form of knowledge management and a wide range of domain of knowledge for translators. Moreover, the content is of wide range of coverage, and is more professional, more complicated and more difficult to translate. It's common that nowadays translators receive translation tasks like professional academic reports, formal political discourses or political documents, documents or contracts in areas such as chemical industry, construction, artificial intelligence, etc. These also require that the translators' domain the information search skills, computer assisted tools and skilled techniques of sentence reconstruction, in order to complete the translation tasks. Thus, the universities should explore new ways in their translation teaching in order to broaden the knowledge, form students' ability to use computer assisted tools and make them informed of up-to-date information.

This context also requires that universities help to form more professional and integral translators' competencies, in regarding of which, our research follows the translation competence model of PACTE (2003). PACTE starts from the concept of translation as a communicative activity directed towards achieving aims that involves making decisions and solving problems, and requires expert knowledge, like any other activity with these characteristics. According to PACTE, translation competence consists of the ability to carry out the transfer process from the comprehension of the source text to the re-expression of the target text, taking into account the purpose of the translation and the characteristics of the target text readers. It is made up of five sub-competencies:

- **The bilingual sub-competence.** In other words, the translators should have the ability to communicate between the source language and the target language. This sub-competence is made up of pragmatic, socio-linguistic, textual, grammatical and lexical knowledge in the two languages.
- **Extra-linguistic sub-competence.** Predominantly declarative knowledge, both implicit and explicit, concern 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 what are the 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.).
- **Instrumental sub-competence.** Predominantly procedural knowledge related to the use of documentation sources and information and communication technologies applied to translation: dictionaries of all kinds, encyclopedia, 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.

The PACTE translation competence model shows the competences that need to be formed for university students of translation specialty. As we can see from the content above, translators frequently need to be able to translate in a wide range of domains, of large quantity of information and need to be capable of using different instruments and know about the subject matter, therefore, the KM can play an important role in the formation of translators' competence and in the elevation of translating efficiency. In the next section, we will discuss how to form translators' competence based on KM.

#### 4. APPLICATION OF KNOWLEDGE MANAGEMENT IN TRANSLATION TEACHING IN UNIVERSITIES

The KM perspective for translation teaching and learning is different from the traditional form of teaching in many ways. In the traditional form of teaching, the focus is on the teaching material and content, the teacher is the knowledge source while the students only receive the knowledge from the teachers, the curriculum design centers on the process of teaching and students learn from the technology. Meanwhile, with the integration of KM, the teaching focuses on the students and the teachers serve as mentors; the curriculum design focuses on the learning environment and the students learn with the technology as a tool. In the translation teaching with the integration of KM, teachers not only need to help students to use information technology to obtain information with efficiency, but also train them to learn how to quickly systematize this information to solve practical translation problems. Moreover, it is important to mention that PKM is not taught as a separate and/or additional course but as an integrated part of the translation teaching and exercises.

##### 4.1. Curriculum design

The constructivism emphasizes on the design of the teaching environment instead of on the design of teaching process. So, the very first step to implement the integration of KM in translation teaching is to design an environment favorable for the students' research, learning, and capability development. Based on the theory of Chen (2007), we think that the curriculum design includes the design of the learning environment, the assignment, the resources and the instruments.

*Table 1.*  
*Curriculum design of translation teaching based on knowledge management.*

DESIGN ELEMENTS	CONTENT
assignment design	translation project as translation assignment
environment design	the knowledge supply based on the environment and its acquisition
resources design	the teaching strategies, the knowledge repositories
instrument design	instrument of computer assisted translation, instrument of knowledge management and evaluation, instrument of acquisition of information and instrument of cooperation

In the curriculum design, we use the "workshop" mode. The translation teaching is based on translation projects with the purpose to motivate the students' ability of creation, research and cooperation. The environment design means creating the knowledge supply

based on the environment and its acquisition. The resource design is to offer the students the translation cases, the necessary tool and information bank in order to acquire knowledge and solve problems. The instrument design is to teach students to use computer assisted translation platforms and other software, the information search engines, the concept map etc., to realize the personal knowledge management.

Let's take an example of the translation teaching of the theme "information technology". To determine the teaching process, the teacher needs to design, first of all, a translation task about this theme. So, the teacher finds the technical reports presented on "The 10<sup>th</sup> China Information Technology Expo" and gives it to the students, asking them to form groups and translate the report from Chinese to Spanish, with the aim of forming the students to translate and cooperate as professional translators. The students firstly assign different tasks within the group, search the background information, create the terminology list, uniform the expression style, and choose the computer assisted translation platform. Then they follow the professional translation process of pre-translation, translation, first revision, second revision, edition, and quality check. During this process, the students need to use the knowledge management techniques that we will discuss in detail in the following sections. The practice is also accompanied with the direction and communication with the teacher, who serve as a guide or a consultant, rather than a narrator who dictates knowledge in the traditional classroom.

#### **4.2. Search, identification and acquisition of information**

The search, identification and acquisition of information consist of the first three phases formulated by Kastberg (2009). When teachers give the students an assignment of translation, they need to guide them to acknowledge, recognize and identify the personal information deficit with respect to the assignment at hand, which includes the terminology, the subject matter, the deficiency in the use of translation strategies, etc. Students can use a series of instruments to search and acquire the information they need: search engines like Google, Baidu, Yahoo; database like Scopus, Google scholar, Springer, CNKI; online dictionaries like Dictionary by Merriam-Webster, Collins Online Dictionary for English, and Xinhua Dictionary for Chinese; online open courses such as MOOC, Coursera, edX; online encyclopedias such as large Encyclopedia Britannica, Bing Encyclopedia, Interactive Encyclopedia, Wikipedia; community question and answer sites, such as Zhihu<sup>1</sup>, Yahoo Knowledge, Quora, Stack Overflow, etc.

Teachers should offer all these resources to the students, teach them the instructions and, most important of all, guide them to evaluate and select the information carriers which are relevant to them, in order to accomplish the assignment as a professional translator.

#### **4.3. Organization of the knowledge and the creation of personal knowledge bank**

With the information identified and collected, the students need to organize the knowledge, and to enrich their personal knowledge bank. In these phases, the students are also faced with difficult tasks such as how to organize the large amounts of knowledge which are not familiar to them, how to select the appropriate solution of the target language when the new acquired knowledge are still fragmented, and how to form an efficient knowledge management procedure in order to accomplish the text revision task after the translation. To solve these problems, a series of instruments are necessary. Risku, Dickinson, and Pircher

<sup>1</sup>Official website: <https://www.zhihu.com/signin?next=%2F>

(2010) identify different KM tools and instruments for these forms of knowledge in a translation context. The management of explicit knowledge is supported by various instruments and methods, like glossaries, translation memories, style guides, newsletters, handbooks, websites, knowledge portals, topic maps, customer relationship management tools, and project management tools. The non-codifiable, tacit aspects of translation are supported by personal experience of different communication situations, such as mailing lists, online communities, translator associations, courses and collaboration tools, but also by taking part in mentoring and storytelling projects.

The teachers need to guide the students to select the appropriate instrument to solve the translation problems and form their competence at the same time. The personal space of online dictionaries and terminology application such as SDL Trados and memoQ can register the new words and terminology of the students, which is an effective way to enrich the vocabulary of the translators and better their bilingual competence. The concept map and knowledge repositories can help the students to manage different subject matter, open their horizon and form their extralinguistic competence. The translation project management tools offer the students a space for group cooperation and problem-solving practices, to form their strategic sub-competence. KM applications such as OneNote or MarginNote can help the students to record and analyze the information of translation theory and techniques, which form their know-about competence.

#### **4.4. Application of personal knowledge bank in the practical translation task**

With the personal knowledge bank created, the students are now formed with the knowledge base, and what is required now is to internalize the knowledge bank into personal domain and use it in the translation task. Thus, this phase is more practical and needs the students to unleash and integrate their capability of knowledge domain, computer skills, and translation techniques.

For example, in the translation of the annual report of SINOPEC (China Petrochemical Corporation), the students can actively use their personal knowledge bank to search the annual report of SINOPEC or other petrochemical companies, as well as the terminology bank of petrochemical industry to assist the translation. Moreover, they can also choose the appropriate translation tool and form the translation group according to the characteristics and the needs of this translation material. In this way, the students can applicate and optimize their knowledge with the assistance of the KM technology and method.

## **5. CONCLUSION**

In the information age, the integration of KM in translation teaching is necessary to help the students form translator competence and meet the increasing demand of the market for translators. In the present research, we exposed the basic concepts of KM as well as the application of KM in the translation teaching. We also discussed how to form translators' competence based on knowledge management from the teaching perspective and the learning perspective, namely, the curriculum design, the search, identification and acquisition of information, the organization of the knowledge and the creation of the personal knowledge bank, as well as the application of the knowledge bank in the practical translation tasks. In this process, the teachers should play the role of guide, while the students are the main participants of learning. The application of KM in the translation teaching has the following advantages. To begin with, it offers an integral perspective to form translators' ability, not only paying attention to the linguistic and translation abilities of the translators, but also focuses on their computer and technology ability and teamwork ability. Secondly, the

integration of knowledge management in the translation teaching also gives more autonomy to the students in their learning and working, making it possible that the translation learning is not only the acquisition of knowledge, but also a process of forming personal knowledge bank, learning to cooperate with others, and do the work actively and creatively. Thirdly, the integration of knowledge management in translation teaching is also useful in forming professional translators who satisfy the complicated need of the market in the information age.

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## ACKNOWLEDGEMENTS

This research is supported by “the Fundamental Research Funds for the Central Universities”, China, Project No. 3162021ZK02.

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