The Significance and Instruction of Metacognitive Regulation in Translation Competence Development

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[Abstract] Enhancing students' translation competence is the essential issue in translator education, while the significance of metacognitive regulation in translation competence development is still to be elaborated upon. Reviewing the significance of metacognition, especially metacognitive regulation in translation education, this study proposes a model of metacognitive regulation, the EASER model, based on previous research. Furthermore, this study explores how to integrate the model in translator education to develop learners' historic, developing perspective towards translation, to enhance learners' translation competence effectively, to improve translation quality and efficiency, and to cultivate metacognitive-conscious, autonomous, self-directed, competent translators, and lifelong learners.

[Keywords] translation competence, metacognitive regulation, EASER model

Introduction

Translation competence has been the essential subject under discussion in translation education for decades, and researchers have developed the constitution and interpretation on translation competence from different perspectives (Wilss1976; Delise1980; Nord1991; Gile1992; Hönig1988). The definition from PACTE (2003) is widely recognized as the most comprehensive and elaborate model that reflects the essence of translation competence. Among the sub-competences in PACTE model, the strategic competence, which is a macro-strategy that belongs to metacognition, is the core sub-competence that dominates, harmonizes, and optimizes other sub-competences. The importance of metacognition in the process of learning is an old idea that can be traced from Socrates' questioning methods to Dewey's (1933) perspective that we learn more from reflecting on our experiences than from the actual experiences themselves. What is more recent is the coining of the term *metacognition* and the emergence of a metacognition research field in the last four decades (Tanner, 2012). It is John Flavell who puts forward the term in 1970s, recognizing that metacognition consists of both monitoring and regulation aspects (Flavell, 1976, p. 232). And more and more scholars have realized the significance of metacognition in translation competence development.

Some scholars clarify the significance of metacognition in translation (Yan, 2008; Angelone 2010, 2013; Göpferich 2013; Zou, 2015), some researchers analyze the importance of metacognition in interpreting training (Xu & Mu, 2017; Liang & Chai, 2017); some scholars adopt empirical studies to illustrate the correlation between metacognition and translation competence (Francesc & Patrick, 2012; Pietrzak, 2018; Mellinger,2019); and some scholars developed metacognitive models to improve learners problem-solving competence(Ludo et al., 2018).

However, few scholars have elaborated on how to incorporate metacognition, especially metacognitive regulation in translation education to develop translation competence effectively

and efficiently. Reviewing the significance of metacognition, especially metacognitive regulation in translation education, this study explores how to incorporate metacognitive regulation in translation education to develop learners' interpretation on the essence of translation, to stay alert to reflect on the translation process, to be conscious of their cognitive process in recognizing problems, analyzing problems, and solving problems, and regulate their cognitive process and behavior to improve their translation competence to develop autonomous, conscious, lifelong learners.

Literature Review

Translation Competence

With a comprehensive survey of the TC models from 1970s, we have seen the understanding of TC developing from linguistic-oriented, transfer-oriented models to strategy-oriented ones, from fundamental, partial models with basic sub-competences to comprehensive, profound and systematic models with well-defined core sub-competences and peripheral factors, and from static models in linguistic perspective to dynamic models in functional and communicative perspective, which is a great progress (Robert,1984; Campbell,1991; Bell,1991; Kiraly,1995; Nord,1996; Hurtado,1996; Cao,1996; Presas,1997; Hatim&Mason,1997; Vienne,1998; Campbell, 1998; Schäffner,2000; Beeby,2000; Fox,2000; PACTE,2000; Yang2002; Neubert,2000; Jiang & Quan, 2002; Pym,2003; Davies, 2004; Kelly, 2005; Göpferich, 2009; Wen & Li, 2010; Wang, 2013; Ma,2013; Zou, 2015). With the world we are facing today developing unceasingly with varying requirements, updating information, advancing technologies, and multiplying subjects and disciplines, translation, as a result, experiences consequent changes. The purpose of translation, functions of text, target readers, the time, places and media of target text in translation are becoming diversified, and the contextual, communicative, functional and dynamic features of translation are more and more highlighted. Thus, translators are expected to be observant of the development of the society, to see the whole picture and try to adjust to the changes of the requirements.

Considering the current context of translation, the author regards the TC model proposed by PACTE the most comprehensive and elaborate model with profound understanding of the central competences specific to translation, which defines TC as the underlying knowledge system needed to translate with five sub-competencies: bilingual sub-competence, extra-linguistic sub-competence, translation knowledge sub-competence, instrumental sub-competence, strategic sub-competence and psycho-physiological components, among which the strategic sub-competence is the most important, as it is responsible for solving problems and the efficiency of the process(PACTE, 2003). The strategic competence, which belongs to metacognition, is the core sub-competence that affects the application and development of other sub-competences and plays a decisive role to enhance the translation quality and efficiency (Zou, 2015). Metacognition is what translators need to satisfy the demands of the age, to meet the requirement of translation in the current context, a powerful tool that translators must develop to fulfill communicative tasks.

Metacognitive Regulation

The importance of metacognition in the process of learning is an old idea that can be traced from Socrates' questioning methods to Dewey's (1933) perspective that we learn more from reflecting on our experiences than from the actual experiences themselves. What is more

recent is the coining of the term "metacognition" and the emergence of a metacognition research field in the last four decades. (Tanner, 2012)

It is John Flavell who puts forward the term in 1970s, recognizing that metacognition consists of both monitoring and regulation (Flavell, 1976, p. 232). In 1979, Flavell proposes a model of metacognitive monitoring, which includes four classes of phenomena: metacognitive knowledge, metacognitive experiences, goals (or tasks), and actions (or strategies) (Flavell, 1979, p. 906-911). Flavell also emphasizes that these types of variables overlap and the individual actually works with combinations and interactions of the metacognitive knowledge that is available at that particular time.

Metacognition then is discussed from different perspectives with various foci (Afflerbach 1990; Baker 1994; Bergen 2009; Borkowski 1990,1992; Borkowski, et al. 2000; Butler & Winne 1995; Cavanaugh 1982; Davidson 1994; Echeverri 2015; Fleming & Dolan 2012; Frith 2012; Gardner 1987; Hartman H.J. 2001; Kramarski et al. 2002,2004; Metcalf 1994; Nelson 1996; Pressley 2000; Schneider 2008; Schoenfeld 1987; Smith, Shields & Veenman &Spaans 2005; Shreve & Angelone 2010; Veenman, Prins & Elshout 2002; Washburn 2003; Wellman 1977; Whitebread 1999; Zimmerman 1995; Zohar 1999). Only a few scholars' views will be discussed in the following to clarify the definition with full respect to other researchers.

According to Brown (1978), metacognition mainly has two components: knowledge of cognition and regulation of cognition. However, the metacognitive knowledge in her interpretation does not include the cognition of others and cognitive universals. Kluwe (1982) includes not only the cognition of the subject but also that of other persons. Paris & Winograd offer a succinct definition: metacognition "captures two essential features… self-appraisal and self-management of cognition" (Paris & Winograd 1990, p.17), which focuses on the subject and the central function of metacognition, excluding the cognition of others and cognitive universal. Pressely (2000) points out the connection between metacognition and cognition, "It is very hard to have adequate metacognitive knowledge of one's competencies in a domain without substantial (cognitive) domain-specific knowledge" (Pressley, 2000). Schraw (1998) defines metacognition as knowledge and regulation of cognition, while knowledge of metacognition includes what students know about their own cognition or about cognition in general. Hacker generalizes the definition of metacognition with at least these notions: knowledge of one's knowledge, processes, and cognitive and affective states; and the ability to monitor and regulate one's knowledge, processes, and cognitive and affective states consciously and deliberately. Veenman (2005) reveals some factors that may affect the use of metacognition-- task difficulty, test anxiety, lack of motivation, or their inability to see the appropriateness of metacognition in a particular situation.

Reviewing the connotations of metacognition, the definition is becoming lucid and succinct. Metacognition in this research is defined as knowledge and regulation of cognition. Metacognitive knowledge includes the cognition of the subject (knowledge, ability, resources, cognitive, affective and physiological state), others, cognitive universals, the task, as well as metacognitive awareness. Metacognitive regulation involves planning to maximize the resources in certain context prior to performing a task; monitoring, regulating to optimize the performance in the task; and evaluating and reflecting cognitive process after the performance.

Significance of Metacognitive Regulation in Translation Competence Development

The importance of metacognition in learning has been recognized: meta-cognition can be observed as one of the most important factors leading to success in learning (Schraw 1998; Veenman, Prins & Elshout 2002). Firstly, the impact of metacognition in learning has been proven. Students will not really learn new information if they do not go through a metacognitive realization that requires them to examine how they thought about the topic before and how they are thinking differently about that topic after learning about it (Posner et al., 1982). This aligns with Dewey's (1933) assertion that reflection on an experience is the key step in learning. Furthermore, there is evidence that improved metacognition is associated with promoting young students' overall academic success (Adey & Shayer 1993; Kuhn & Pearsall 1998), the most effective learners are self-regulating (Butler & Winne,1995, p. 245), and students with greater metacognitive abilities tend to be more successful in their cognitive endeavors (Livingston, 1996); while individuals with poor metacognitive skills perform poorer academically than their peers (Kruger 1999; Dunning et al. 2003). Secondly, researchers reveal significant effects of metacognition in problem solving (Teong 2003; Berardi-Coletta et al.,1995; Bryce & Whitebread, 2012). The process of problem-solving involves metacogniton, which plays a unique role that could not be substituted by subject knowledge (Schoenfeld, 1987). Moreover, metacognitive training could improve students' competence in problem-solving (Mevarech & Zemira, 1987). Thirdly, an adequate level of metacognition may compensate for cognitive limitations (Veenman, Wilhelm & Beishuizen, 2004; Veenman & Spaans, 2005). Metacognition helps to maximize what one has learned and makes one "do 20% better – you get an extra Friday every week" (Heppell, 2014).

While the significance of metacognition in translation competence is highlighted by PACET, some researchers develop the interpretation on metacognition in translation from different perspectives (Zou, 2015). Several studies prove the connection between translation expertise and monitoring (Fraser 2000; Hansen 2003; Tirkonnen-Condit 2004). Göpferich identifies the strategic competence as metacognitive competence (2009, p. 22). Bergon recognizes the central, dominant role of metacognition in translation, and proposes that cognitive conflicts could accelerate the translation competence acquisition process besides learning journals (Bergon, 2009, p. 246-248). Based on the recognition of metacognition in translation, Angelone (2010) proves Shreve's (2006) point that both students and professionals utilize metacognition in translation; and expertise in translation is in direct correlation with more efficacious use of metacognition.

However, the value and function of metacognitive regulation remains to be elaborated in TC and translator education. Firstly, the enhancement of metacognitive regulation is the call of the age. With the constant development of disciplines and technology, especially information technology, translators are facing a world with constantly updating information, with unpredictable problems to be solved in translation tasks, which require more than cognition but also metacognition to optimize the knowledge, abilities, resources mastered, to monitor the process of problem solving, and reflect on what has been performed, in order to complete tasks efficiently, effectively, and keep on track of progress. Translator training is becoming more challenging, because the programs "have to try to cater for the huge diversity in the current market, while at the same time foreseeing likely future developments students should be prepared for" (Kelly, 2005, p.27). Secondly, metacognitive regulation is the call of the essential features of translation competence for the time being. With a comprehensive survey of the TC models from 1970s, we have seen the understanding of TC developing from linguistic-oriented, transfer-oriented models to strategy-oriented ones, from models in static linguistic perspective to models in dynamic,

functional and communicative perspective. Drawing lessons and inspirations from the TC models of the past several decades, we are supposed to take a historical perspective to look at them. When information technology was less developed in the 1970s and 1980s, the instrumental and strategic competences were not as prominent. When translation was largely confined within religion and literature with less need in applied translation, the communicative, functional, and dynamic features were not as significant then in the 1970s and 1980s, while the linguistic competence did play an important role in TC for that period of time. With the great development in information technology and multiplying requirement in applied translation, the constitution of TC of qualified and competent translators is being clarified, highlighting the contextual, communicative, functional and dynamic features of translation, which demands cognition and metacognitive regulation to perform the complex, unfamiliar, and non-routine tasks with dynamic requirements. Consequently, metacognitive regulation plays the dominating role in TC, which sets priorities and defines hierarchies between the individual sub-competences (Göpferich, 2009, p.22).

Being the central, decisive component in TC for the time being, metacognitive regulation dominates, coordinates, and facilitates the development of other sub-competences. Metacognitive regulation maximizes and optimizes the knowledge, abilities, resources at disposition with certain language competence, and supports the improvement of translation quality and efficiency; it is the prerequisite to satisfy the demands of the dynamic, contextual, communicative, functional translation tasks; it is what equips and ensures translators to become self-directed, autonomous, competent lifelong learners, and keep making progress in translation; it is what qualified translators need to adjust to the ever changing and developing society, information and technology; it is the core to become capable and efficient translators in the current context. Therefore, metacognitive regulation is to be highlighted in TC and translator education. As Baer and Koby (2003) write,

We may hope to better prepare students for the workplace by offering them appropriate tools but if our teaching methodology is of the traditional kind—performance magistrate described by Jean-René Ladmiral (1977) in which the master passes on his/her knowledge to passive apprentice—we may fail to produce translators who are capable of the flexibility teamwork and problem-solving that are essential for success in the contemporary language industry.

Instruction of Model EASER in Translation Competence Development

Metacognition is expected to develop over years (Flavell, 1979); however, metacognitive instruction can help to increase this developing process. Researchers note that features of self-regulated behaviors can be learned through practice and reinforcement (Schoenfeld 1987; Mevarech & Kramarski 1997; Kramarski, Mevarech & Arami 2002).

Models of Metacognition for Instruction

Researchers propose models of metacognition to facilitate its development Bransford's (1993). IDEAL Problem-Solver has incorporated aspects of metacognition into their model: (a) *Identify* an important problem to-be-solved; (b)*Define* the subgoals involved in solving the problem; (c) *Explore* possible approaches to the problem, that is, select a set of potential strategies; (d) *Anticipate* potential outcomes before acting on the best initial approach; and (e) *Look* back and learn from the entire problem solving experience. This model emphasizes the identification and definition of problem, selection of strategies, and the prediction and reflection of performance, overlooking the analysis and assessment of the state of the subject

and the task, and the regulation of the performance besides reflection. Furthermore, it is a question whether identification of problem is supposed to be set as the first step. It is reasonable to do so for simple tasks, which do not need to be analyzed thoroughly to recognize the problems; and the cognition of the subject is to some extent internalized, which does not always demand conscious assessment. While for complicated and intricate tasks, it does require analysis and assessment of the subject and the task to identify problems.

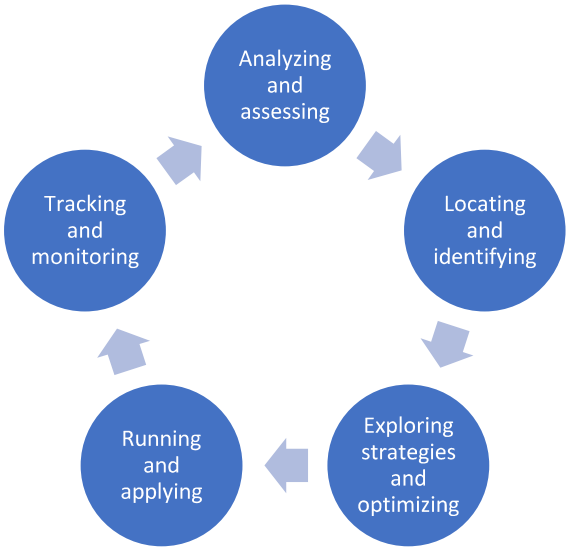
Mevarech and Kramarski (1997) designed the IMPROVE metacognitive self-questioning model, which includes introducing new concepts, meta-cognitive questioning, practicing, reviewing and reducing difficulties, obtaining mastery, verification, and enrichment. Studies using this instructional method produced significant results within heterogeneous groups (Kramarski 2004; Kramarski et al. 2002; Mevarech & Kramarski, 1997). This comprehensive model starts with introduction and meta-cognitive questions, emphasizing regulation and evaluation; however, it moves from meta-cognitive question to practicing directly, without differentiating the analysis and assessment of the subject and the task from the exploring, selecting and optimizing strategies; additionally, this model, starting with introduction of new concept, seems designed in perspective of teaching rather than learning.

Veenman (1998) proposes the WWW & H rule (What to do, When, Why, and How). This rule overlooks the metacognitive awareness, omits analysis and assessment of the subject and the task to identify problems, overlooks the maximizing and optimizing of the resources at disposition and selection of strategies, and monitoring, evaluating and reflecting are not included. Each of the models noted above has its advantages with certain emphasis, while a model of metacognition for translator education remains to be elaborated upon.

*Model **EASER** in Translation Competence Development*

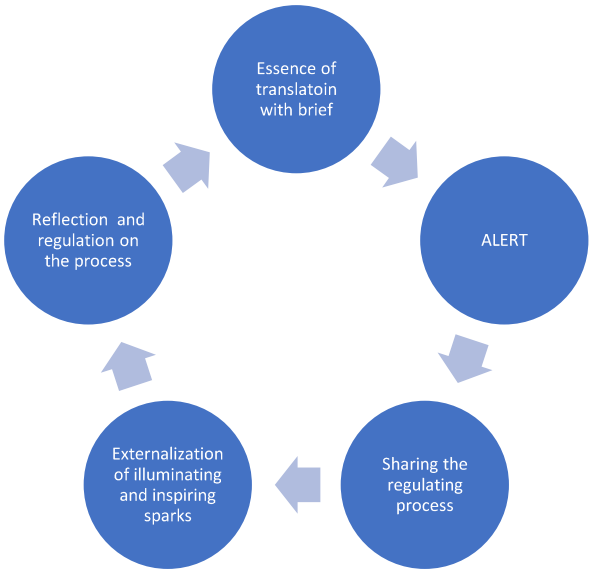
We have proposed a metacognitive model from learners' perspective especially for complicated tasks as translation (Figure1). The ALERT model incorporates metacognition in translation education with the 3-phase method. It highlights the significance of metacognition before concrete translation activities; integrates ALERT principles in class translation activities, analyzing, locating problems, exploring strategies, run the strategies, and tracking and monitoring in the process of translation; and reinforces and reflects on the performance with translation journals after class (Zou, 2015).

Figure 1
Model of Metacognition ALERT



The model emphasizes metacognition before, during, and after translation tasks as an inner and individualized experience. After eight years' of teaching and applying the ALERT model, we have developed the model not only as an inner and individual experience, but also as an externalized experience in class--the five-phase ERASER model (Figure2).

Figure 2
Model of Metacognitive Regulation EASER



Firstly, considering the essence of translation, the EASER model guides learners to develop their understanding of the essence and purpose of translation in phase one, turning from the text-oriented view on translation to the historic, developing view on translation, highlighting the contextual, communicative, functional and dynamic translation leading learners to explore the purpose of translation with the help of translation brief, analyzing the time, place, medium, target readers and communicative purpose of translation (Zou,2022).

Learners are guided to concern the social, historical, cultural contexts, especially the target readers and communicative purpose besides the text itself. Learners are encouraged to reconsider the principle of sincerity with historical and developing perspective, to regulate the understanding on translation, so that the learners could be more observant of the essence and vital features of translation, be more observant about the diversified requirements in various contexts in different period of time. Consequently, the learners could build a multi-dimensional, developing understanding on translation, and choose appropriate translation strategies to achieve the communicative purpose in the target readers and revive the original text in a different context with the help of translation brief.

This regulation process of the views on translation could be individualized or externalized in groups or class. We tend to ask learners to develop more than one translation brief with different target readers and communicative purposes, or in different time, place or medium to highlight the contextual, communicative, functional, and dynamic features, to awaken learners' awareness of the essence of translation.

Secondly, on the basis of thorough analysis of translation brief, learners are supposed to maximize the knowledge, ability, and resources at disposition, and explore possible solutions to the problems, and try to select the most effective and efficient strategies.

After the process of translation, learners are required to monitor the translation, regulate if necessary, when the strategies fail to help or achieve the goal in certain aspect; and evaluate and reflect on the translation process from linguistic, cultural, instrumental, professional, and strategic perspectives to draw lessons and inspirations for the enhancement in future tasks. And the process of thinking and regulating is required to be recorded in written reflection, which has been discussed elaborately in The Concept and Instruction of Metacognition in Translation Competence Development (Zou, 2015). This process is an inner, individualistic process of regulation on all the conflicts, problems one may encounter, including one's physical and psychological state.

Thirdly, sharing the complete process of regulating. What we highlight is not only the translation product-oriented regulation, but the thinking, struggling, and regulating process: all the problems one has encountered in the translating process. What learners are required is to share how they analyze the problems, how to maximize their resources at disposition, how to make the choices; furthermore, the learners could relate what other presenters have mentioned to reconsider their problems and analysis; in addition, learners are encouraged to raise questions to the class.

The process of sharing, different from the silent, individualized regulation, is an externalized regulating process that involves metacognitive perspective while sharing one's ideas with others in communication. Moreover, with the presentations, doubts and challenges of the rest, the presenter tends to update or regulate his or her solutions. However, the sharing process is not only beneficial to presenters, but also to the listeners. We have found that learners of higher translation proficiency tend to locate their problems—linguistic, cultural, instrumental, professional, and strategic ones, even the physical or psychological problems--effectively, and show diversified means to solve problems efficiently, as a result, the sharing process of regulation

offers the rest of the class the opportunity to learn to identify problems, broaden the mind to apply different means to solve problems. In addition, the sharing of encountering problems, challenges, tension in professional, physical even emotional areas and their solutions arouses sympathy, which may ignite other learners' enthusiasm, inspire their autonomy and inner drive in the class.

Fourthly, externalization of illuminating and inspiring sparks. Discussion begins after the sharing process: learners are encouraged to draw inspirations and lessons from the sharing, to respond to questions mentioned, and to ask relevant questions. What teachers are supposed to do is to guide learners to explore possibilities, principles, means in various respects through Socratic questioning. Teachers are encouraged to apply analogies, examples to lead learners to further their understanding, analysis in different fields. And there might be divergence, diversion, even fierce debate on certain issues, which is a great opportunity to explore the essence and truth. We leave some questions to students to search more information, continue their discussion, and develop their understanding in certain complicated and profound problems before and after class so that we could continue the discussion in class, which offers students sufficient time and opportunity to develop their metacognitive monitoring and regulating to focus on the process of problem-solving, to acquire not only declarative knowledge, but procedural and conditional knowledge.

Being an externalized regulating process, discussion is a vital phase, which should be question-oriented, process-oriented, and regulation-oriented, which highlights the principle proposed by Confucius, "Do not illuminate students before they have tried their best, do not inspire students before they have spared no effort to express themselves after rumination."

The process of making progress is a course of challenging one's cognition, regulating one's cognition, and transcending oneself to achieve a better understanding of the world. The process is an experience of the burst of inspirations, communication of ideas, problem-solving, and rebuilding cognition. With the inspiration from others, one may reconsider the preoccupied ideas, regulate the cognition, relieve stress, and draw wisdom and power. The externalized regulation process is of vital significance to develop one's overall cognition and metacognition with process-oriented, question-oriented teaching method.

Fifthly, process-oriented reflection and regulation on one's individualistic regulating, others' regulating and discussion process. The focus is not only the translation product, but the means and process to achieve the product, especially the problems, debates, sparks, lessons and inspirations. What we emphasize is not confined to the choice of words, structures, translating techniques, but the analyzing, struggling and problem-solving process, which provides students with tools to face unpredictable problems in the future, which equips them with the ability to develop their translation competence, which develops autonomous, self-guided, lifelong learners, which cultivates learners to transcend themselves constantly by metacognitive regulation.

The EASER model facilitates learning to develop the historic, developing perspective towards translation concerning the contextual, communicative, functional, dynamic features, so that learners develop their metacognitive regulation to regulate and transcend themselves constantly on the journey of translation.

Survey and Reflections

Model EASER in Translation Class

We require the senior students of two classes (57 students) in the School of English Language and Literature at a University in Beijing to participate in the pretest to translate a

paragraph of about 150 words at the beginning of the Chinese-English translation class, and the average results (71,70) of the two classes do not show significant difference. We apply the EASER model in class one and require the students to finish a process-oriented reflection on their assignment, the class and extracurricular reading each week, and an overall reflection on the translation course at the end of the semester. At the same time, we adopt the traditional product-oriented teaching method in class two, without the requirement of the process-oriented written reflection. At the end of the semester, two classes participate in the final examination, and the average results (80, 73) are of significant difference.

The participants in class one are required to reflect on the product, translating process and discussing process either in English or Chinese, which allows them the opportunity to cover whatever they could think of without the barrier of language or structured items.

Reflections

All the participants from class one write that they have learned something in the course in the reflective journals, and the followings are chosen from the overall reflections, which have been classified into six categories.

Firstly, the translation brief and the purpose of translation feedback. Student 1 writes, "Translation brief, which helps us putting ourselves in readers' shoes, is like a light to remind us of the purpose of translation."

Secondly, development from linguistic, transfer-oriented models to contextual, dynamic and communicative models. Student 1 writes, "I develop a macroscopic view on translation, and some concrete translation strategies and techniques. And the two aspects are interrelated and interacted. I learnt how to translate and why." Student 4 writes, "I thought translation is no more than the transfer of languages before the course, and now I think translation is a complicated process concerning many factors besides words and grammar." Student 1 and Student2 agree that "Besides the concrete translating knowledge and techniques, what I learned most is the way to understand translation and life in different contexts, different possibilities to see the problems and life."

Thirdly, translation strategies and techniques feedback. Student 5 writes,

> I learned translation strategies and techniques…and I have a more profound understanding on translation—sometimes I overlook the organization of the article while struggling with the choice of words and phrases. What I should do first is to read the article as a complete article and then come to the details.

Fourthly, problem-solving process. Student1 writes, "I went to search a great amount of information and spend quite a lot of time on the assignment each time, which is a productive experience for me." Student2 writes, "We develop the ability to solve problems." Student 3 writes, "What I have learned is not the concrete translation products, but the process of thinking, struggling, choose, even the consequent suffering are my gains. I learn to think, to monitor my thinking, to regulate my thinking. I learn to solve problems in translation and in life."

Fifthly, the subtlety of the process-oriented sharing and discussion feedback. Student 7 writes,

> The sharing and discussion process made our course unique—we have more opportunities to express, share and make progress. To locate the problems is an ability, and to search the information, to analyze the possibilities, and try to solve problems develop our overall abilities to deal with challenges. The teacher did not spoon feed us with information but offered more opportunities for us to explore. Furthermore, the process-oriented reflection allows us to review ourselves, analyze and solve problems from a higher perspective.

Student 5 writes,

> The sharing and discussion process help me realize my problems, see my classmates thinking process, which benefits me a lot. I did not know why I spent so much time on my homework, but gradually, I found that I realize more problems and figure out more solution by reflecting, sharing and discussion." Student6 writes, "Some stupid people are still receiving information passively, while smart guys have started using new ways to learn—sharing, discussing and reflecting.

Sixthly, enthusiasm, curiosity and faith. Student1 writes,

> I spent a lot of time doing research work. Being a student, I am shameful that I'm not so interested in the textbook, which is like the magic key in Harry Potter; although it looks like the shabby boots, it brings me to a wonderland with miracles, which tells me that life is of various possibilities, and I want to experience the unpredictable fun.

Applying the EASER model, we involve all the relevant sub-competences in translation--bilingual sub-competence, extra-linguistic sub-competence, translation knowledge sub-competence, instrumental sub-competence, strategic sub-competence and psycho-physiological components; we cover the top-down method to practice theory in translation, and the bottom-up method to generalize principles from practice.

With the EASER model, we help students develop a historic, developing and multi-dimensional perspective on translation, cultivate students' metacognitive regulation, broaden their understanding on cultures, increase their repertoire of translation strategies and techniques, boost their confidence to develop their translation competence, and even inspire their enthusiasm in translation so that they are equipped with tools to embrace the unpredictable future with confidence.

Conclusion

Reviewing the significance of metacognition, especially metacognitive regulation in translation education, we propose the EASER model on the basis of the ALERT model, integrating externalized metacognitive regulation in class to the internalized regulation. Firstly, the EASER model guides learners to develop their understanding of the essence and purpose of translation in phase one, turning from the text-oriented view on translation to historic, developing view on translation, highlighting contextual, functional, communicative, and dynamic translation. Secondly, on the basis of thorough analysis of translation briefs, learners are supposed to maximize the knowledge, ability, and resources at their disposition, explore possible solutions to the problems, and try to select the most effective and efficient strategies. Thirdly, sharing the complete process of regulating, what we highlight is not only the translation product, but the thinking, struggling, and regulating process. Fourthly, being an externalized regulating process, discussion

is a vital phase, which should be question-oriented, process-oriented, and regulation-oriented, which in turn reflects the principle on education proposed by Confucius, "Do not illuminate students before they have tried their best, do not inspire students before they have spared no effort to express themselves after rumination". Fifthly, we emphasize the process-oriented overall reflection. The focus is both the translation product and the means and process to achieve the product, especially the problems, debates, sparks, lessons, and inspirations. The EASER model is to facilitate learning that develop the historic, developing perspective towards translation concerning the contextual, communicative, functional, dynamic features, so that learners develop their metacognitive regulation to regulate and transcend themselves constantly on the journey of translation. Moreover, the model equips learners with tools to face unpredictable problems in the future. It teaches how to develop translation competence, promotes autonomous, self-guided, lifelong learning, and cultivates learners to transcend themselves constantly by metacognitive regulation. The role and function of metacognitive regulation in different stages of the translation competence acquisition process remains to be analyzed further in future research.

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