Approaches to Translation Teaching:

An Exploratory Study of Translation Teacher Cognitions, Teaching Practices, and Student Cognitions

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Abstract

Teaching translation is crucial for preparing future translators to ensure the necessary competence required by the language service industry. The effectiveness of translation teaching, however, in developing students' competence in translation depends on the approaches implemented by teachers. Various approaches to translation teaching have been proposed and adopted by translation scholars and teachers. The approaches include product-ended, skills-based, and teacher-centred transmissionist-oriented approaches and situated learning-based, project-based, and learner-centred transformationist-oriented approaches. Nevertheless, it is unclear what translation teachers think of these approaches and whether their cognitions about these approaches align with their actual teaching practices.

To address these gaps, this study investigated the cognitions of Chinese translation teachers and students regarding approaches to translation teaching and the teachers' enacted teaching practices. A mixed-methods research design was adopted, involving quantitative data collection through two self-developed questionnaires: The Chinese Translation Teacher Questionnaire answered by 122 teachers, and The Chinese Translation Student Questionnaire answered by 110 students. Additionally, semi-structured interviews and classroom observations were used to collect the qualitative data from 10 translation teachers and 20 of their students.

The results showed that the teachers' cognitions about approaches to translation teaching contained elements from both transmissionist-oriented and transformationist-oriented approaches. These cognitions were influenced by teachers' translation learning experiences, teachers' abilities, and student personalities. Inconsistency between the

teachers' cognitions and teaching practices was identified. Situational factors, teachers' translation ability, and motivation contributed to the inconsistency. Furthermore, although the students' cognitions were found to contain elements from both transmissionist-oriented and transformationist-oriented approaches, they diverged to some extent from the teachers' cognitions. Students' prior learning experiences, personalities and abilities, and contextual factors were identified as the factors influencing their cognitions.

This study contributes to our understanding of translation teaching dynamics through empirical investigation of the relationship between Chinese translation teachers' cognitions, pedagogical practices, and students' cognitions. It has also made theoretical and methodological contributions to the research into translation teacher cognitions, and has pedagogical implications for translation policy-makers, teacher training, curriculum design, and teaching practices.

To my family

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Table of Contents

List of Tables

List of Figures

List of Acronyms

BA	Bachelor of Arts
BTI	Bachelor of Arts in Translation and Interpreting
C/E	Chinese-English
CFA	Confirmatory factor analysis
CTSQ	Chinese Translation Student Questionnaire
CTTQ	Chinese Translation Teacher Questionnaire
DTI	Doctor of Translation and Interpreting
E/C	English-Chinese
EFA	Exploratory factor analysis
FISCQ	Factors that influence student cognitions questionnaire
FITCQ	Factors that influence teacher cognitions questionnaire
FITPQ	Factors that influence teaching practices questionnaire
IST	Institutional training
MA	Master of Arts
MTI	Master of Translation and Interpreting
NIST	Non-institutional training
PhD	Doctor of Philosophy
SCTTQ	Student cognitions about translation teaching questionnaire
SDQ	Student demographic questionnaire
TCTTQ	Teacher cognition about translation teaching questionnaire
TDQ	Teacher demographic questionnaire
TFoA	Transformationist-oriented approaches
TFoP	Transformationist-oriented teaching practices
TMoA	Transmissionist-oriented approaches
TMoP	Transmissionist-oriented teaching practices
TPQ	Teaching practice questionnaire

Chapter 1 Introduction

1.1 Chapter overview

This thesis reports on a study about teacher cognitions of Chinese-English/English-Chinese translation teaching approaches in China. The participants were university translation teachers, who taught at the postgraduate level of translation programmes, and their students.

This chapter first introduces the motivation for the researcher to conduct this research, followed by a description of the research context. Next, working definitions of terms used in this study are provided. In addition, the outline of this thesis is presented.

1.2 Research motivation

My motivation for conducting this research came from my learning experience as a translation student when studying for my master's degree in translation and my three years of working experience as an administrator in the Faculty of Translation and Interpreting Studies.

1.2.1 Research motivation from personal learning experience

My experience as a translation student motivated me to explore which teaching methods and strategies adopted by teachers were best suited for translator education. I studied for the two-year Master of Translation and Interpreting (MTI) programme at the School of Interpreting and Translation Studies, Guangdong University of Foreign Studies, one of the earliest universities in China to run a translator training programme at postgraduate levels. I have received training in English-Chinese and Chinese-English

translation for various types of texts, including literature, law, business, technology, and so forth. In my experience of receiving such training, I often questioned the teaching approaches adopted by my teachers. Some translation teachers relied heavily on traditional teaching methods such as lectures and textbook assignments. For example, these teachers would often require us to memorise the content of a textbook, and then recite the original content in the textbook in the translation classes. Although these methods may have been effective for some students, they seemed not to meet the objectives of the MTI programme, which aims to prepare professional translators. Other teachers used more interactive and student-centred approaches. For example, these teachers would require us to complete translation assignments collaboratively and discuss how to solve translation problems outside of class. They also expected us to present how we solved the problems encountered in the group work during class. Although these approaches offered collaborative and interactive learning opportunities, they did not seem to present students with an authentic context to learn translation, which aims to develop students' autonomous learning abilities by engaging them in real or simulated translation projects. Accordingly, I had always wondered which approaches would allow us to become the translators required by the translation industry. These experiences motivated me to explore translation teachers' different teaching methods and strategies and which methods would maximise learning outcomes.

1.2.2 Research motivation from personal working experience

My three years of experience as an administrator in a translation faculty gave me first-hand evidence of effective teaching by observing teachers' classrooms and research interests. First, I was responsible for facilitating course planning and delivery,

supporting assessment, and so forth. These experiences allowed me opportunities to interact with both teachers and students and to observe the translation classes. For example, I found that some teachers used the same translation teaching materials for years, whereas others frequently updated them. Moreover, some teachers organised teaching practices in a computer-aided translation laboratory, a classroom equipped with the latest translation tools and computer workstations that facilitated collaboration. In contrast, some organised teaching practices in a traditional classroom, with students sitting in rows facing the teacher's desk. These observations allowed me to see the specific teaching materials that students received, the teachers' and students' roles in translation teaching, and the teachers' different ways to organise the classes. Therefore, I was interested in the effectiveness of different teaching methods on students' learning.

Second, when collecting teachers' applications for The Annual Translation Teaching Award, a responsibility of my position, I discovered some interesting phenomena. Few teachers would apply for this award, although they all taught translation courses. The teachers who submitted the application focused rarely on topics related to translation teachers, such as translation teachers' cognitions, emotions, and identities. Instead, their interests were related to subject construction and teaching approaches. The limited interest among translation teachers in applying for teaching awards implies the teachers' under-recognition of the importance of innovations in translation teaching methods. This motivated me to explore the specific approaches that translation teachers adopted in their teaching practices. Moreover, the lack of research topics related to translation teachers implies that there has been a need to explore translation teachers' mental lives, such as their ideas about various approaches to translation teaching.

1.2.3 Research motivation from reading literature

My learning experiences as a translation student and experiences of working in a school of translation studies made me more interested in knowing more about practical approaches to translation teaching and how translation teachers and students thought about these approaches. When searching the translator education literature, however, I found some significant gaps. Results from the literature review have shown that the research field of translator training encompasses a wide range of topics, and translation scholars and teachers focus primarily on the following areas:

- Promoting a well-organised translation programme structure (Ameri & Ghahari, 2018; Hagemann, 2014; Mayoral Asensio, 2007)
- Optimising curriculum design for translator training (Albir, 2007; Berthaud & Mason, 2018; Doherty & Kenny, 2014; X. Li, 2022; Rico, 2010; Rodríguez de Céspedes, 2017; Şahin & Kansu-Yetkiner, 2020)
- Function and application of technology tools in translator training (Biel, 2017; Flórez & Alcina, 2011; Galán-Mañas, 2016; Hirci, 2012; Krüger, 2022; Lise Laursen & Arinas Pellón, 2012; Nebot, 2008; Rodríguez-Inés, 2010; Vale de Gato, 2015; Zhu & Wang, 2011)
- Approaches to translation teaching: Total Quality Management approach (Gabr, 2007); Self-directed Learning (Y. Zhong, 2008); Blended Approach, which brought together different teaching modes or elements (Galán-Mañas & Albir, 2010; Lee & Huh, 2018; Secară et al., 2009); Situated Learning (Calvo, 2015; González-Davies & Enríquez-Raído, 2016); Task-based and Project-based Learning (D. Li, 2013; Mitchell-Schuitevoerder, 2013; Moghaddas & Khoshsaligheh, 2019); Collaborative Learning (Al-Shehari, 2017; Al-Shehari &

Almanna, 2022; Kiraly, 2000)

- Translation students: students' views, ideas, and perceptions regarding translation teaching approaches (Konttinen et al., 2020; D. Li et al., 2015; Shih, 2011), translator training programmes (D. Li, 2004), and translation theory (Ordóñez López & Agost, 2022); students' metacognitions (Hu et al., 2021); students' competence and skills (Alos, 2015; Atari & Abu Radwan, 2009; Dong & Lan, 2010; O'Sullivan, 2012; Sharkas, 2013; Sonbul et al., 2022; Tomozeiu et al., 2016; Ureel et al., 2022); students' learning outcomes (Eser, 2022; Hurtado Albir & Pavani, 2018; Presas, 2012; Tang, 2020)
- Translation teachers: teachers' beliefs (X. Li, 2018; Pinto & Sales, 2008; Wu, Wei, et al., 2019; Wu, Zhang, et al., 2019); teachers' backgrounds (Pokorn, 2009); teachers' translation practice (M. Xu & You, 2021)

As seen from the number of studies, the three most researched topics are translation students (18 studies), translation teaching approaches (13 studies), and technology in translator training (10 studies). The remaining topics cover curriculum design (7 studies), translation teachers (6 studies), and translation programmes (3 studies). These results imply that in the research field of translation teaching, although scholars acknowledge the importance of translation teachers, the number of research topics related to translation teachers appears smaller compared with other topics, especially research topics on translation students. However, Kelly (2008, 2014) mentioned that translation teachers and students are two indispensable components in translation classrooms, and that both play a crucial role in shaping the teaching and learning environment (Kelly, 2014; D. Li & Zhang, 2011; Tao et al., 2020). With most research having been on curriculum and resource aspects of translation teaching, such as teaching approaches and curriculum design, as well as translation students, the focus

on translation teachers has received little attention, especially the personal aspects of the teaching of translation.

With the apparent lack of research on translation teachers in the field of translation education, I continued to search literature on teachers in the broad research field of teacher education, especially research on language teachers, because language teachers share similar characteristics as translation teachers. Results from reviewing the literature on language teachers showed that a wide range of topics has been addressed, particularly teachers' mental characteristics, such as teacher cognitions (e.g., Borg, 2015b; Farrell & Lim, 2005; Nazari, 2020; Simmons et al., 1999, etc.), teacher identity (e.g., Beauchamp & Thomas, 2011; Beijaard, 1995; Burri et al., 2017; J. Huang et al., 2021), and teacher emotions (e.g., J. Chen, 2016; Lee & Yin, 2011; MacIntyre et al., 2020, etc.). Moreover, I discovered that teacher cognitions might be extensively researched because teacher identity and teacher emotions are often incorporated into the research on teacher cognitions. Therefore, this heightened my interest in investigating translation teachers' cognitions.

In summary, reading the literature on translator education made me interested in knowing more about translation teachers because they have received less attention in translator education compared with the research on translation students. Moreover, reading the literature on teacher cognitions and links of other mental activities to teachers' cognitions, made me interested in knowing more about translation teacher cognitions.

1.3 Research context

1.3.1 The historical development of translation teaching in China

Translation teaching in China has a long history, dating back to the Qing Dynasty government (1644-1911). In 1861, translator education was initiated as a part of the Yangwu movement, a movement advocated by the Qing government for self-strengthening through learning Western technologies. In this period, the main focus was on training translators for ship-building and weapon-making (Caminade & Pym, 1998). In 1862, translation became a tool to learn a foreign language course, for the first time, in Tongwen Guan (The School of Combined Learning), an institution held by the Qing government. In 1902, Tongwen Guan merged with the Translation Department of The Imperial University of Peking (Jingshi Da Xue Tang), the first modern comprehensive university in China, now called Peking University (J. Xu, 2005). Therefore, it can be said that translation teaching was first introduced to Chinese higher education in 1902 (Mu, 1999; Tao, 2016).

From the founding of the People's Republic of China in 1949 to 1978, translation teaching in Chinese universities was used primarily as a means of foreign language enhancement, using the grammar-based translation method. However, in 1979, the Syllabus for English Majors at the Foundational Stage was published by the Chinese Ministry of Education, which made Chinese-English translation a compulsory course for the English major. In 1980, after China's reform and opening-up policy, several undergraduate and graduate-level translation programmes were established in Beijing and Shanghai. The first translation department was established at the Guangdong University of Foreign Studies in 1997.

A historical review suggests that translation teaching has primarily been used as a

means of foreign language learning. It also indicates a focus on grammar-based methods in the early stages with a strong relationship between approaches to translation teaching and foreign language teaching. Over time, more comprehensive translator education programmes were established.

1.3.2 The comprehensive translator education system in China

As of 2007, China had established a relatively comprehensive educational system for training translators and interpreters (Tao, 2016), which covers training professional translators and interpreters from undergraduate to doctoral levels. These include Bachelor of Arts in Translation and Interpreting (BTI), Master of Arts in Translation Studies (MA), Master of Translation and Interpreting (MTI), and Doctor of Philosophy in Translation studies (PhD). Recently, another doctoral-level translator and interpreter training programme, Doctor of Translation and Interpreting (DTI) (Ministry of Education of People's Republic of China, 2022), was approved by the Chinese Ministry of Education. With the establishment of DTI, translation education in China has become a subject with a comprehensive education system (Feng & Zhong, 2023). It marks a new stage in the professionalisation of translator training (Mu, 2022) in China. Differences among these training programmes are summarised in Table 1.1.

In Table 1.1, I used the curricula from Shanghai International Studies University as a case to introduce translation programmes in China. This is because 1) it is one of the earliest tertiary institutions to offer translator training from undergraduate to doctoral levels; 2) it is where the Office of China National Committee for Graduate Education of Translation and Interpreting is currently located. This office aims to guide and coordinate the reform and development of graduate education in translation across China. Therefore, the curriculum design of translator training programmes in the

University carries authority and guides tertiary translator training in China.

As seen in Table 1.1, BTI focuses primarily on students' bilingual proficiency. Most of its core courses are related to improving students' English language skills. It is an entry-level programme for student translators who take this opportunity to study for a graduate degree in MA programmes to become a junior translation researcher or in MTI programmes to become a professional translator. Moreover, the differences between the MA and the MTI are that the MA is academic-researcher-oriented, and the MTI is practitioner-oriented. Accordingly, there are more theory-based core courses in MA programmes, whereas more practice-oriented core courses in MTI programmes.

The differences between PhD in translation studies and DTI are similar to those between the MA and MTI. However, the differences between the MTI and DTI, as the DTI is a newly launched translator training programme at the doctoral level, should be noted. While the similarities between them are that they are both practice-oriented programmes, the differences between them can be explained in the following aspects:

1) Student backgrounds: Students need a bachelor's degree, have a solid bilingual foundation, and have professional knowledge in a specific subject such as English language, medicine, economics, and management to enrol in MTI programmes. Students who are not English majors but have some translation and interpreting experience are also encouraged for MTI programmes. In contrast, to enrol in DTI programmes, taking Doctor of Translation as an example, students need to be working translators with extensive translation experience in a particular subject area. They should be able to conduct complex translation projects, enabling them to develop management capabilities after graduation (Feng & Zhong, 2023).

2) Background of translator trainers: Translator trainers for the MTI can be individual teachers who are translation experts, whereas those for the DTI must not only be translation experts but also need working experiences in the language service industry (Chai, 2014). In other words, trainers for the DTI are not individual teachers but a group of experts involving specialists from different industries.
3) Programme objectives: MTI programmes train professional translators undertaking translation projects, while DTI programmes train experts in research and development, and professional management talents for the language service industry (Huang, 2022).

While the two programmes can be compared in many aspects, this study only discusses some of them to provide a general understanding of the DTI. The commencement of the DTI is a milestone in the history of tertiary translator education in China. However, it is the MTI programme that plays an essential role in the transition of professional translators from entry-level to expert level. The MTI is a professional degree emphasising translators' and interpreters' practice capability through involvement in real translation projects and interpreting tasks in different fields, such as conference interpreting and legal translation. Until recently, the MTI pedagogy has been dominated by a traditional teacher-centred approach, which cannot meet the objectives to train professional translators. Many scholars, therefore, have called for more diversified approaches to translation teaching in the MTI programme, such as task-based and project-based teaching, simulation of real translation projects, and translation workshops (Miao & Wang, 2010; Tao et al., 2020). This suggests that there are translation pedagogy problems in the MTI programme.

Table 1.1 The framework of current professional translator education programmes in China

Programme	Programme type	Core courses	Teaching objectives
Bachelor of Arts in Translation and Interpreting (BTI)	Entry-level translator education	• English language skills-related courses accounted for more than 44% of the total courses. • Basic translation skills and knowledge accounted for around 30%. • Interdisciplinary knowledge took up around 26%.	• English Language skills, including reading, listening, speaking, and writing; • Basic translation skills and knowledge; • Interdisciplinary knowledge: Encyclopaedia and Chinese language and culture.
Master of Arts in Translation studies (MA)	Graduate education-Academic oriented	More than 90% of the core courses are related to translation theories, such as Introduction to Translation Studies.	Graduates will have: • A certain amount of translation and interpreting experience; • A certain amount of knowledge about translation theories; • A certain level of independent research capability as a junior translation researcher.
Master of Translation and Interpreting (MTI)	Graduate education-Practice and profession-oriented	More than 90% of the core courses are related to translation and interpreting practice, such as Professional Translation.	Graduates will become • Professional translators specialised in translation projects covering public services, finance and business, technology, law, etc; • Professional interpreters serving cross-cultural communication needs for international conferences and business activities.
Philosophy of Doctor in Translation studies (PhD.)	Graduate education-Academic oriented	Most are related to translation theories and research methodologies in translation studies, such as Translation Theory and Teaching Translation Study Methodologies.	Ph.D. graduates will have: • A strong theoretical foundation and knowledge of the latest research in translation studies; • A capability of conducting high-level research and teaching in translation studies; • A high level of independent research capability as a senior translation researcher.
[a]Doctor of Translation and Interpreting (DTI)	Graduate education-Academic oriented	Core courses provided in Modules • Translation theory Module: Translation theory, Methodology in translation studies; • Interdisciplinary Module: Computational Linguistics and Machine Translation; • Case study in specific industry Module: simulation of actual projects in different industries, such as machine translation and medical translation.	DTI graduates will become: • Translation experts with research and development capability to solve practical problems in the language service industry, such as machine translation and localisation; • Translation experts with management capability to meet the language service needs of national development.

Note: [a]Doctor of Translation and Interpreting (DTI) has been launched in 2022. Therefore, there are no specific curriculum documents. For the content in this table, please refer to Feng & Zhong (2023), Huang (2022), Lv (2020), and Mu (2022).

1.3.3 Problems in current translator training programmes in China

Tertiary level professional translator training has been offered in China for more than 10 years, since the establishment of BTI in 2006 and MTI in 2007, marking the independence of translation teaching from being a tool for learning English for English major students. While these programmes have been preparing students with high levels of bilingual proficiency and producing many professional and high-calibre translators and interpreters, some problems exist. These are analysed from the following perspectives.

Translation teachers

Firstly, full-time translation teachers, including experienced and novice translation teachers, may lack or have inconsistent translation practice experience. The lack of translation practice experience is typically found in novice translation teachers. This situation may be influenced by the academic promotion policy in Chinese tertiary education, which primarily considers research projects and publications as promotion criteria. Unfortunately, the books translated or translation projects undertaken by translation teachers cannot be used as academic achievements for promotion. As a result, novice translation teachers may not be motivated to practise translation.

In contrast, inconsistent translation practice experience is more commonly found among experienced translation teachers. The diverse backgrounds of translation teachers may explain this situation. Many experienced translation teachers initially studied linguistics or English literature, with a primary focus on linguistic theories, language analysis, and literary appreciation, before moving into teaching translation. Consequently, they may have limited opportunities to practise translation during their academic studies.

Secondly, few part-time translation teachers are involved. To train professional translators, many part-time teachers from the translation market are needed to bridge the gap between institutional training and social needs (Hao & Pym, 2022) to ensure the inclusion of up-to-date information and experience in translation classes. However, some universities do not have qualified part-time translation teachers due to limited resources. Some universities do have qualified part-time teachers, but the teachers have not been engaged in actual translation teaching activities (W. Zhong, 2019; W. Zhong & Yao, 2016).

Curriculum design

Translation is a highly practice-oriented activity, and thus, the curriculum for training professional translators should include core courses related to translation practice, such as legal translation and business translation. However, it has been found that some universities use the same curricula for their MA and MTI programmes, with disregard for the practical features required by the MTI programme. In addition, because of the shortage of qualified translation teachers for the BTI and MTI, the curriculum for practice-oriented translation courses is similar in both programmes (W. Zhong, 2014). However, the teaching objectives of the two programmes are different.

Teaching approaches

Many Chinese scholars pointed out that problems with teaching approaches in training professional translators in China are the lack of innovation as well as the dominance of traditional teacher-centred, instruction-based, and apprenticeship-oriented approaches (Tao, 2016). Similar issues have been observed in other translator training contexts as well (González-Davies & Enríquez-Raído, 2016; Kiraly, 2000, 2017). Traditional translation classes typically involve two teaching routines: Teachers present translation

theories and principles followed by in-class exercises, and students are given translation assignments to be corrected and commented on in the next class. Such traditional teacher-centred approaches to translation teaching have been criticised as product-ended, chalk-to-talk, knowledge-transmitted and transmissionist-oriented approaches (González Davies, 2004; Kelly, 2014; Kiraly, 2000, 2017; Tao et al., 2020). Scholars, therefore, have called for a shift of approaches to translation teaching from traditional teacher-centred ones to more diverse approaches, such as project-based, task-based, think-a-loud-oriented, workshop-based, authentic materials-based, and collaboration-driven approaches (Al-Shehari & Almanna, 2022; González Davies, 2017; Kiraly, 2000; M. Li & Zhong, 2010; Lin, 2000).

In short, the research context of this study is that professional translator training in China has had many achievements, especially in the last 10 years. A comprehensive professional translator training system has been established, producing many qualified translators. However, there are also many problems: a lack of experienced translation teachers, curriculum design, and teaching approaches. Novice translation teachers lack practical translation experience, and there are insufficient qualified part-time teachers available from the translation market. There are concerns about curriculum design. For example, while the curriculum for MA and MTI programmes is similar, the two programmes have different educational objectives. Whereas traditional teacher-centred approaches to translation teaching are prevalent, they have been criticised. There is a growing advocacy for a shift toward more diverse approaches to translation teaching.

1.4 Definitions of key terms in this study

Teacher cognitions

Teacher cognitions in this study refer to the "unobservable cognitive dimension of

teaching-what teachers know, believe, and think" (Borg, 2003, p. 81). Here, teacher cognitions serve as an umbrella term covering every aspect of teachers' mental activities, such as teacher beliefs, knowledge, ideas, perceptions, attitudes, principles, and perspectives. This is because teachers' cognitive process is a complex activity (Pajares, 1992; Zhao & Zhang, 2022), and there are no commonly agreed definitions regarding those terms in the research field of teacher cognition. Therefore, scholars always use these terms interchangeably in exploring teachers' mental lives (Abelson, 1979; Borg, 2003, 2015; Nespor, 1987; Woods, 1996). The definition issue of teacher cognition is discussed in Chapter 2. In this study, teacher cognitions refer to what translation teachers know, believe, and think of the approaches to translation teaching.

Teaching practices

Teaching practices can occur in and out of classroom settings as teaching is a highly socio-contextualised activity (Santamaria, 2009). In this study, teaching practices are limited to a classroom setting, and refer to activities undertaken by translation teachers and students in translation classrooms that can be observed. Out-of-classrooms are not included as many practical translation teaching activities occur in translation agencies and companies where teachers adopt student-centred approaches, such as project-based learning (see Kiraly, 2005; D. Li et al., 2015).

Translation teachers

The term, translation teachers, refers in this study to those teachers who teach practice-oriented Chinese-English and English-Chinese translation courses at the graduate level, specifically in the MA and MTI programmes. Those teaching in the BTI programme is not included.

Practice-oriented Chinese-English (C/E) and English-Chinese (E/C) translation courses

Practice-oriented C/E and E/C translation courses refer to courses that are needed to organise intensive practical activities to practise students' translation and translator-related competence. The courses cover various topics, such as legal, business, medicine, technology, and economy, and involve computer-assisted translation tools and machine translation. In the curriculum of some universities, these courses include a type of course that combines translation theories and principles, and translation practice to help students use theories and principles to interpret and solve practical translation problems.

1.5 Organisation of the thesis

This doctoral thesis is composed of seven chapters. In the first chapter, I discuss the research motivation of doing this research project and the translation education context in China, and present the operational definitions of specific terms.

Chapter Two reviews the literature on two strands of research: translation studies and teacher cognition. First, some major translation teaching approaches proposed and adopted by translation teachers and scholars in translator education are reviewed. Second, the literature on teacher cognitions is reviewed.

Chapter Three first presents this study's research questions and then outlines the methodology of the present study, including research design, data collection, data analysis, and ethical issues.

Chapter Four and Chapter Five report the quantitative and qualitative results, respectively. Quantitative results are obtained from questionnaires, and qualitative results are obtained from interviews and classroom observations.

Chapter Six synthesises the research findings by comparing and explaining the similarities and differences between the quantitative and qualitative results for each research question. Possible reasons for the observed similarities and differences are discussed.

Chapter Seven summarises this study's main findings and the theoretical and pedagogical implications for research into teacher cognition and translation teaching. It also discusses the study's limitations and provides recommendations for future research in the research field of translation teaching.

Chapter 2 Literature review

2.1 Approaches to translation teaching

This section first reviews major approaches to translation teaching that have been proposed and applied to translator education by translation scholars. Then, two approaches, transmissionist-oriented and transformationist-oriented approaches, which stand out in translator education, are discussed. Teaching models related to these two approaches have been reviewed critically. In the end, I summarise the key points that emerge from the literature on approaches to translation teaching.

2.1.1 Approaches to translation teaching in general

What to teach and how to teach become the two major concerns in the research field of translator education (Kelly, 2014; Kelly & Way, 2007). What to teach concerns skills and competence that student translators should acquire when they prepare to enter the translation profession, whereas how to teach concerns approaches to translation teaching, which ensure student translators acquire the necessary skills and competence (Li et al., 2015). Since translation studies became an independent academic discipline in the 1950s, academic attention has been overwhelmingly given to what to teach, namely, translation/translator competence (Albir, 2007; Kelly, 2008; Kiraly, 2000; PACTE, 2008; Schäffner et al., 2000), and how to teach did not gain scholars' attention until the late 1980s (Colina, 2003b; Colina & Venuti, 2017; Peverati et al., 2008).

It is necessary to clarify that the purpose of this section is not an attempt to list and give details about every approach to translation teaching. Instead, it intends to demonstrate the uneven development of translation pedagogy; that is, from unstructured and less theorised pedagogies to increasingly diversified pedagogies, from the "veneration of

the source and target texts to a veritable discovery of the translator and the translation process" (Colina & Venuti, 2017, p. 203), and from teacher-centred approaches to student-centred approaches. Therefore, this literature review is representative rather than exhaustive.

2.1.1.1 Non-institutional approaches

In general, translators are trained in two ways: institutional training (IST) and non-institutional training (NIST). IST refers to training that occurs in universities offering translation programmes. In contrast, NIST refers to training that occurs in communities rather than universities, such as private translation companies and translation organisations. Approaches to NIST are "self-taught in translation, or with some form of apprenticeship or mentoring alongside more experienced colleagues" (Kelly, 2014, p. 8). In the same vein, Pym (2011) pointed out that the initial approach to translator training was translators "learnt on the job, from superiors, colleagues, reviewers, and clients, or otherwise through trial and error" (p. 475).

As seen, translation pedagogy in NIST is almost absent. Approaches to training translators heavily rely on trainers' experiences and the help offered by translation markets and associations. Approaches to NIST include but are not limited to self-taught, mentoring, apprenticeship, senior supervision (e.g., a novice translator was supervised by a supervisor), practicums (participating in actual translation tasks in the translation company), and seminars (Caminade & Pym, 1998; Kelly, 2014; Pym, 2011).

2.1.1.2 Institutional approaches

Institutional translator training began around the 1950s when universities and colleges offered translation programmes. Translation programmes offer two major types of courses: translation theory and practice of translation. For the research purpose of the

current study, only approaches to teaching practice of translation have been reviewed, as such courses are the primary way for students to acquire the skills and competence that professional translators need (Kiraly, 1995). Institutional approaches to teaching translation practice emerged and developed in two phases: 1) traditional approaches in the initial phase; 2) a fast-developing phase influenced by a variety of allied theories.

Traditional approaches emerged in the initial phase

Traditional approaches to translation teaching have been characterised as teacher-centred, product-ended, translation-oriented, skills-oriented, read-and-translate, chalk-to-talk, and transmissionist (Colina & Venuti, 2017; Gile, 2009; González Davies, 2005; Kelly, 2014; Kiraly, 1995; Li et al., 2015; Moghaddas & Khoshsaligheh, 2019; Prieto & Linres, 2010; Tao, 2012; Wilss, 1982; Yuen & Hau, 2006; Zhong, 2008). The traditional approaches were the initial way of training translators and are widely adopted in many teaching contexts. However, many translation scholars and teachers criticised traditional classrooms for emphasising the quality of the final translation product at the expense of considering learners and learning processes (e.g., Gile, 2009; Kelly, 2014; Kiraly, 2000; Li, 2013). Despite these criticisms, these approaches are still deployed in current translation classrooms.

Reasons for such a phenomenon could be: firstly, translation teachers are comprised of professional translators, linguists, language teachers, and teachers from other subjects who do not know how to teach translation (Englund Dimitrova, 2002). Secondly, few scholars pay attention to translation pedagogy, although much has been done in translation studies. As a result, approaches to teaching translation are “apedagogic” (Kelly, 2014, p.11) and “asystematic” (Kiraly, 1995, p. 11) due to the lack of solid theoretical frameworks both from translation studies and other allied subjects, and the

lack of solid empirical evidence drawn from actual classroom observations.

A fast-developing phase as influenced by allied theories

The advancement of theories in other academic disciplines, such as linguistics, psychology, sociology, and education, has inspired the evolution of translation studies. In line with the interdisciplinary development of translation studies, scholars started bringing such theories and concepts to translation pedagogy (Li et al., 2015) to meet the need for institutional translator training. Therefore, alternatives to traditional approaches emerged.

Linguistically-oriented approaches

The concepts of linguistics first inspired scholars of translation studies. Delisle (1980) and Nord (1991, 1997) proposed two most influential approaches. Influenced by contrastive linguistics, Delisle's approaches focused on comparing source and target texts, such as sentence structures and words. He also emphasised using pragmatic texts to teach translation and develop students' bilingual competence. In addition, by establishing general and specific teaching objectives, Delisle was regarded as the first scholar to distinguish translation from language teaching (X. Luo, 2002). In the latter, translation was used as a tool to learn a foreign language.

Similarly, Nord (1991, 1997) proposed an approach based on text analysis. Unlike Delisle's approach, which emphasised teaching objectives, Nord's approach was influenced by functional translation, which means when teaching translation, approaches should focus on the purpose of the target texts. Nord's approach emphasised the importance of simulation of professional translation tasks, which is considered to be a learner-centred approach (Kelly, 2014).

Influenced by linguistic theories, both Delisle and Nord proposed systematic approaches to translation teaching. Their efforts indicate a step forward by translation scholars to borrow theories from allied subjects to nurture translation pedagogy.

Translation process-oriented approach

A translation process-oriented approach is also known as a cognitive approach. This approach no longer focuses on translation products but on the translating process. Specifically, it aims to train translators to raise self-awareness and self-confidence (Gile, 2009; Kiraly, 1995; Kussmaul, 1995), which could help students improve their problem-solving ability. The most popular method to investigate a student translator's brain activity is the think-aloud protocols (TAPs). However, TAPs have been criticised for ignoring the non-verbal aspects of mental activities (Sin, 2002). Consequently, some scholars adopted methods combining verbal and non-verbal processes to examine the translator's brain thoroughly.

The translation process-oriented approach marks a turning of research focus from the translation end-product to translators' cognitive skills. The prominent weight given to translators' cognitions distinguishes this approach from the traditional ones and establishes "a solid basis for the systematic teaching of translation skills" (Kiraly, 1995, p. 112). Therefore, it is an essential approach to translation teaching, which has been thoroughly reviewed in section 2.1.3.

Situational Approach to teaching translation

The situational approach to translation teaching can be traced back to Vienne (1994). She proposed that it was necessary to situate teaching within translation tasks that teachers had already completed in a professional translator's manner, enabling teachers to be fully prepared to respond to students' questions. Kelly (2014) claimed

that the essence of this approach is functionalist because it emphasises the purpose of translation tasks. In addition, this approach dealt with elements of the translation learning environment, including translation strategy, teamwork awareness, and teacher motivation, which were ignored by translation scholars (Kiraly, 1995).

In short, Vienne's approach addresses more components regarding classroom dynamics. For example, it addresses the teacher's role in the classroom. It views teachers as initiators with the professional knowledge that student translators need. Underlying this view is the idea that knowledge can be transmitted from teacher to student (Warren, 2005) as the teacher acts as a knowledge distributor. This view of the learning process is rooted in behaviourism, arguing that students need stimuli from teachers to learn (Skinner, 1968). So, it is a typical teacher-centred approach. However, the inclusion of various learning components related to translation teaching in this approach inspired translation scholars to propose new approaches to translation teaching (e.g., González Davies, 2004; Kiraly, 2000).

Constructivist approach

The approaches to translation teaching that shifted learning responsibility to learners and learning processes can be attributed to the advent of a constructivist epistemology (Kiraly, 2000, 2003, 2017). Constructivism views knowledge not as a reality already existing in the world but as a meaningful product constructed through individuals' interactions with others and social contexts (Colina & Venuti, 2017; Windschitl, 2002). Consequently, it is a learner-centred model in which teachers act as learning facilitators rather than knowledge distributors; students act as active knowledge creators, and learning is situated, task-based, and project-based.

Kiraly (2000), based on social constructivism, proposed an empowering approach. His

approach centred translation classrooms on authentic translation projects for real clients. In the project, learning was collaborative. Student translators grew not due to the interactions with a traditional transmissionist teacher but rather through discussions and debates with teachers, peers, and even project experts. Although this approach has been criticised for its loose structure and heavy responsibility for students (Schäffner, 2004), it has inspired many other scholars to apply the constructivism approach to translation classrooms (Colina, 2003b; González Davies, 2004; D. Li, 2013; Risku, 2016; Washbourne, 2013; Y. Zhong, 2008).

These approaches are inspired and influenced by educational and psychological epistemology, particularly social constructivism epistemology. It can be concluded that social constructivism has significant implications for translation pedagogy and is also the most widely discussed approach to teaching practice-oriented translation courses. Therefore, as an opposite approach to teacher-centred learning models, this approach stands out and has been reviewed in detail (see Section 2.1.3).

Other IST approaches

In recent years, translation scholars not only borrowed concepts from allied subjects to theorise translation pedagogy but also internalised theories in translation studies to make contributions to translation pedagogy. For instance, Pym (1993) proposed an inductive principle for teaching translation. He thought that before learning translation theories, students had to do translation practice as much as possible to have a solid practical foundation to understand the theories. However, his proposal consists of basic ideas without forming a theoretical framework. Moreover, it includes other principles that align with traditional approaches.

Drugan & Megone (2011) proposed an ethics-driven approach to translation teaching

from an interdisciplinary perspective by connecting translation education to philosophy. This approach aims to "recognise that the point of studying ethics for translators is not that they become philosophers but that they develop good judgement" (p. 189). A sound judgement ability would help students recognise ethical issues in real translation tasks, which may guide their translation to respond to the situation. However, this approach has been criticised as situating students in dilemmas (Colina & Venuti, 2017). The ethical recognition skills may conflict with translation theories, such as Functionalism and Skopos theory. These translation theories guide translators to make translating decisions based on the purpose of end-translation products (Munday, 2001; Nord, 1991, 1997; Reiss & Vermeer, 2013; Vermeer, 1989, 2000). Once ethical recognition opposes such theories, students may struggle to make decisions.

Many approaches still reflect translation scholars' efforts to nurture translation pedagogy. Due to the limited space of this thesis, there is not much room to review all approaches (e.g., Arrojo, 2005; Gabr, 2007; Maier, 2003; Mayoral Asensio, 2007; Robinson, 2012).

In summary, there are two main types of approaches to translation teaching (see Table 2.1). The first type is non-institutional training, resting mainly on trainers' experiences and assistance from the translation markets. Translation pedagogy in this phase is almost absent and, thus, is not discussed in detail in the present study. The second type is institutional training, which can be divided into two phases. In the first phase, traditional, less theorised and unstructured translation teaching was conducted. However, traditional methods remain significant in current translation teaching. The second phase emerged with the rapid development of approaches to translation teaching influenced by allied theories, including linguistics, psychology, and

education, with constructivism-based teaching methods being the most discussed. Based on the discussed evidence, this literature review focuses on these two aspects in the following sections, namely the transmissionist-oriented and the transformationist-oriented approaches.

Table 2.1 Summary of approaches to translation teaching in non-institutional and institutional training

Training type	Teaching approaches	Sources of teaching approaches	Translation pedagogy
Non-institutional training	Self-taught apprenticeship	• Trainers' experiences • Help offered by translation markets	Absent
Institutional training	Traditional ways (e.g., read-and-translate, chalk-to-talk, etc.)	• Teachers' teaching and working experiences • Anecdotal records	Unstructured Less theorised
	A variety of major approaches (e.g., approaches based on text analysis, think-aloud protocols, etc.)	Allied theories, such as linguistics, psychology, and education	Increasingly Structured and systematic

2.1.2 Transmissionist-oriented approaches to translation teaching

2.1.2.1 Characteristics of transmissionist teaching in general

A transmissionist view of teaching is always related to a behaviourist view of learning (Colina & Venuti, 2017; Li, 2018; Wu et al., 2021). To understand a transmissionist view of teaching, it is necessary to figure out the connotations and characteristics of the behaviourism of learning. The behaviourism of learning can be dated back to 1968 when B.F. Skinner published his seminal work *The Technology of Teaching.* According

to Skinner (1968), teaching was "the arrangement of contingencies of reinforcement" (p.4). Learning contingencies included three variables: learning contexts, learning behaviours, and outcomes of the learning behaviours. Reinforcement refers to external stimuli and responses in the classroom (Colina, 2003b; Skinner, 1968). Therefore, in behaviourist views, learning is achieved through teachers' manipulation of external stimuli and responses to classroom students to shape favourable behaviours and eliminate unfavourable ones. Miller (1983) summarised behaviourist learning from various aspects, including aims, learning conception, the role of learners and teachers, instructional process, learning environment, and evaluations (for details, see p. 27). According to Miller's (1983) summary, an overview of behaviourist views of learning is shown in Table 2.2.

Table 2.2 Summary of behaviourist views of teaching and learning

Aims	Developing learners' good behaviours
Conception of learning	Learning is to acquire new and good behaviours.
Teacher's role	Controllers of the learning process;
Student's role	Passive receivers of external stimulus;
Conception of the instructional approach	• Teachers exert stimuli on students. • Teachers try to help students avoid errors which could lead to bad and undesirable behaviours.
Learning environment	Highly structured;
Evaluation	• Observation of learners' behaviours; • Students attend a test.

Behaviourist epistemology is grounded in objectivism, which holds that all realities exist outside human minds. Accordingly, objectivism reinforces that "the purpose of the mind is to 'mirror' that reality and its structure" (Jonassen, 1991, p. 9). Jonassen further pointed out that:

> Objectivism- the more common scientific conception of reality- holds that there is an objective reality that we as learners assimilate. The role of education is to help students learn about the real world. Students are not encouragement to make their own interpretations of what they perceive; it is the role of the teacher or the instruction to interpret events for them. Learners are told about the world and are expected to replicate its content and structure in their thinking.
>
> (Jonassen, 1991, p.10)

Therefore, the knowledge is transferred from teachers' brains to learners. Such a knowledge-transferring model of teaching and learning is viewed as a transmissionist approach. In short, a transmissionist approach aligns with a behaviourist view of learning. The behaviourist view of learning is characterised as teacher-centred and external stimulus-driven. The underlying epistemology of behaviourism learning is objectivism, which holds that knowledge exists in a structured world and is external to individuals' minds. Teachers have knowledge of the real world and are responsible for teaching their students how to interpret the world.

2.1.2.2 Transmissionist-oriented approaches in translator training

Most transmissionist approaches to translation teaching are anecdotal and asystematic. Without articulated methodology, these approaches are the initial form of translation pedagogy, lacking empirical evidence. However, some translation scholars, based on

their own teaching and research experience, described the transmissionist approaches to translation teaching in a few publications. Kelly (2014) described teacher-centred transmissionist approaches to translation teaching as follows:

> "Many early trainers limited class activity to asking for on-sight (oral) translation of journalistic and literary texts, with little or no prior preparation on the part of the students, and to offering their own 'correct' version as a model after public confirmation that the students' versions lacked professional quality" (p. 11).

This is a typical transmissionist approach in which students are passive receivers of the "correct" versions of the translation product. The teaching focus is on the "perfect" end-product of translation. In another teacher-centred approach, translation teachers took charge of everything in the classroom. Kiraly (2003) described it as follows:

> She [the teacher] stands or sits at the front of the class, facing rows of generally passive students who are hanging on to every word and, in some sense ingesting knowledge about how to translate. The teacher prepares the syllabus, chooses the texts to be translated, organises all of the in-class activities and homework, decides who will speak and when, and personally dominates the classroom discourse."
>
> (Kiraly, 2003. p. 27)

Translation teaching in the classroom, as described by Kiraly, means that translation knowledge exists in the teachers' minds. Teachers prepare everything students need for learning and control the whole learning process. Therefore, the teacher's role is to teach and transmit knowledge to students. Accordingly, the student's job is to memorise the knowledge received from the teacher. Figure 2.1 portrays teacher-

student interactions in a transmissionist translation teaching and learning approach.

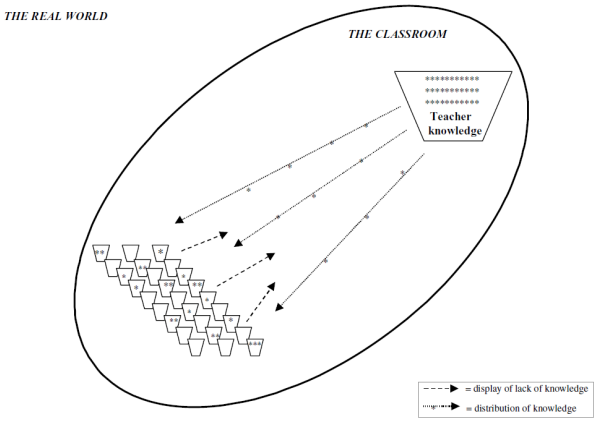


Figure 2.1 A transmissionist approach to translation teaching by Kiraly (2000, p.25)

The two approaches described by Kelly and Kiraly are extremely transmissionist, which means that each teaching and learning element, such as instructional strategy, classroom environment, teacher-student interaction, and teaching focus, aligns with the descriptions of behaviourist epistemology. However, in real teaching and learning contexts, it appears impossible for each of the above elements to align with the transmissionist approach.

In actual teaching practices, teachers may adopt mixed transmissionist approaches to teach. In other words, teaching and learning elements in an approach partly align with a transmissionist approach, whereas the rest depart from the transmissionist approach. For example, when talking about a translation classroom routine, Mayoral (2003) described his classroom as follows:

> I basically present the problems to be solved. I look for texts that provide suitable illustrations of the problems. Students present their translation, then we discuss and assess them in class.
>
> (p.7)

On the one hand, Mayoral adopted a traditional transmissionist approach in his class. Specifically, he selected problem-based texts for the students to translate. This type of text may be problematic, as the problems in the texts sometimes would be traps to expose the students' lack of related translation knowledge (Kiraly, 2000). On the other hand, he maintained in his teaching principles that there was no single correct or perfect translation for the source texts. Instead, the source texts should have various versions based on the student's creative ability. It is apparent that Mayoral's teaching practices contain both transmissionist elements and elements beyond that. Table 2.3 provides a quantitative summary of Mayoral's mixed approach.

Table 2.3 Quantitative summary of Mayoral's mixed transmissionist approaches

Teaching and learning elements	Transmissionist approaches	Approaches beyond transmissionist
Role of the teacher	√	
Role of the students	√	
Teacher-student interactions	√	
Instructional techniques	√	√
Evaluation	√	√

As seen, Mayoral's approaches contain two elements in a mixed way. Firstly, instructional techniques involve reading and translating (González Davies, 2004) and group work. Secondly, evaluation emphasises both the final translation work and the learning process. In contrast, the remaining elements are implemented only in a transmissionist way. Therefore, it can be said that the transmissionist elements account for the majority of this approach, whereas the other elements make up a minor part. This approach to translation teaching is referred to as the transmissionist-oriented

approaches in the current study.

This also explains why the title of Section 2.1.2 is named transmissionist-oriented approaches to translation teaching. To facilitate discussions in the current study, transmissionist-oriented approaches cover all types of methods related to behaviourism epistemology, except for specific explanations.

The transmissionist-oriented approaches have been criticised for two reasons: anecdotal and unscientific basis (Colina, 2003a; Peverati et al., 2008) and emphasis on translation competence (Prieto & Linres, 2010). Translation teachers frequently find themselves teaching in educational contexts that lack independent translation departments and systematic curricula to guide them (Kiraly, 1995). In such circumstances, teachers tend to select texts catered to their personal preferences, and students are required to translate them without any clear teaching objectives, course goals, or evaluations due to the lack of emphasis on translation pedagogy.

Translation studies emerged as an independent academic discipline in the mid-twentieth century, according to scholars such as Kiraly (1995), Mudany (2001), and Pym (2009). Traditionally, translation scholars have focused primarily on terminologies, discourses, and translation models (Kelly & Way, 2007; Pym, 2011), with some even exploring “how to interpret ‘equivalence’ in translation could have pedagogical value” (Kiraly, 1995, p. 9). Despite that, there has been a notable absence of a scientific approach to translation pedagogy. This absence has adversely affected learning outcomes, as students are often expected to produce word-to-word translations or translations based on their own needs (Wilss, 1982). Consequently, translation teaching tended to adopt a transmissionist-oriented approach, focusing primarily on the final product of translation.

Moreover, the approaches have been criticised for emphasising translation competence, which refers to specific skills, such as linguistic analysis, bilingual transfer, vocabulary, and word choice, that enable translators to produce acceptable translations (Kiraly, 2000; Neubert, 2000; Prieto & Linres, 2010). Such skills can be divided into several learning segments, and students learn these segments randomly. Translation teaching in this environment is "very much a teacher-centred model in which students passively absorb translational knowledge understood as the learning of theory and principles of translation, text analysis, etc." (Prieto & Linres, 2010, p. 134).

The translation competence-based approach has still been applied to current translation teaching courses. For instance, Casas-Tost and Rovira-Esteva (2008) conducted an empirical study to explore approaches to Chinese-Spanish translation teaching in Spanish tertiary contexts. Data were collected through a questionnaire sent to all the tertiary translation teachers in Spain. The research findings showed that most teachers used published translations as parallel texts to compare and identify errors in their students' translations. Additionally, regarding in-class tasks, some teachers required students to translate a text they had never seen before. Most teachers adopted an error-correction approach to teaching translation, which excluded correcting the published paralleled translations. Few teachers encouraged teamwork. As for teaching objectives, teachers preferred specific translation skills. For example, most teachers preferred teaching students to translate culture referents. Some thought vocabulary and pragmatics were important, some regarded documentation skills as the primary objective, and others emphasised terminology and grammar. Concerning assessment, all teachers adopted multiple methods to assess learning outcomes. However, two prevalent methods were exams and assessments on the learning process, such as

students' regular participation in the class teaching and their performances reflected in assignments.

This approach is a typical teacher-centred, transmissionist approach to translation teaching that focuses on developing translation competence. The teaching objectives cover specific translation skills, but such skills may be individually designed or randomly acquired and not be systematically related to one another (Prieto & Linres, 2010). To help students acquire every skill, teachers would select texts that suit a particular difficulty level and address such skills because complex texts do not help build students' learning confidence (Kiraly, 1995). Texts addressing particular skills may not be authentic but purposefully selected. These texts are used for academic exercises and probably simplified to meet the needs of training students' specific skills (Prieto & Linres, 2010). This opposes the recent advocates, arguing that translator training should use authentic translation materials and be contextualised (Colina, 2003b; Corrius et al., 2016; Kelly, 2014; Tao, 2012). In addition, the assessment should be based on how well students apply each skill to the translation task in this approach. So, the translation test is the primary form for assessment, and correspondingly, teachers are responsible for grading since they are considered to have the "right" answer (Colina, 2003a; Prieto & Linres, 2010).

Students in such an approach are motivated to learn to get higher test scores, which aligns with the behaviourism learning theory (Miller, 1983; Miller & Seller, 1985). This approach also discourages cooperation and group work. By adopting an error-correction method, students' job is to wait for deviations from the published translations that serve as parallel texts, which would be corrected by teachers (Colina & Venuti, 2017). So, students act as passive receivers, waiting for knowledge to be transmitted from teachers.

Although traditional transmissionist-oriented approaches have been criticised, they also have advantages. Many scholars claimed that adopting the transmissionist-oriented approaches in the early training period can help students improve their translation competence, such as bilingual skills, textual analysis, cultural understanding, linguistic transfer, and searching (Gile, 1995; González Davies, 2004; Kiraly, 1995). Many scholars (e.g., Bernardini, 2004; Kelly, 2014; Neubert, 2000; Schäffner et al., 2000) acknowledged the necessity of such knowledge to build up basic skills that professional translators need to work with texts.

2.1.3 Transformationist-oriented approaches to translation teaching

Although transmissionist-oriented approaches have advantages and disadvantages, graduates trained using these approaches are not necessarily qualified professional translators. The translation profession requires more than textual expertise; translators must also be prepared to navigate the market effectively. This involves various aspects such as collaborative work, the application of translation technology, and even negotiating prices with clients (Frérot, 2013; Kiraly, 2000; Pym, 2011). To help students acquire the competence necessary to graduate as qualified professional translators in the current translation industry, transformationist-oriented approaches to translation teaching may work. Unlike the transmissionist-oriented approaches, which are anecdotally recorded, transformationist-oriented approaches have been extensively researched and supported by many empirical studies.

2.1.3.1 Why “oriented”

Instead of using the title “Approaches to transformationist teaching of translation” for this section, the current study names it Transformationist-oriented approaches to

translation teaching. This is because the transformationist-oriented approaches to translation teaching constitute two major approaches: transactionist and transformationist. These two approaches, together with the transmissionist approach, are the three main approaches to translation teaching to examine translation learning processes (González Davies, 2004). To give more details about these two approaches, they are described as:

> *Transactional approach*: based on cooperative learning, there is group work and interaction, but the teacher still has the final answer to the problems set in the activities; a positive step towards empowering the students.
>
> *Transformational approach*: a student and learning-centred context that focuses on collaborative study and exploration of the translation process with the teacher acting as guide and where procedures that bridge class work and extramural practice have a place.
>
> (González Davies, 2004, p. 14)

In González Davies's descriptions, it appears possible to theoretically distinguish the transactional approach from the transformational approach. Firstly, regarding the teacher's and student's role, the transactional approach, to a limited extent, gives authority to students in the learning process. However, the teacher is still the one who makes the final decisions. In contrast, the transformational approach views the teacher as a guide or facilitator in students' learning process. Teachers will not be responsible for making the final decisions. Secondly, regarding teaching objectives, the transactional approach focuses on developing students' problem-solving abilities (Miller, 1988; Miller & Seller, 1985). In translation teaching, this refers to translators who can implement strategies to handle translation problems (Albir & Alves, 2009;

Kiraly, 1995). In contrast, the transformational approach focuses on "personal and social change" (Miller, 1988, p. 6), which means learning aims at personal cognitive improvement and reflects social needs. In translation teaching, this refers to translator competence (González Davies, 2005; Kiraly, 2000, 2017; Prieto & Linres, 2010), the competence that encompasses not only translation-related skills but also interpersonal skills related to the translation profession.

Although it is theoretically possible to distinguish transactional and transformational approaches, it is difficult to distinguish one from another in actual teaching practices. For example, Wu, Zhang, and Wei (2021) conducted a longitudinal study to explore one Chinese novice translation teacher's identity trajectories. Data were collected through interviews and self-reflective journals. They found that one of the teacher's sub-identities was related to a transmissionist teacher or a transformationist teacher. However, they reiterated that such an identity could only be defined at a specific teaching point. It was unrealistic to say a teacher was a purely transmissionist or transformationist. The implications of their study are when referring to approaches to translation teaching, the approaches are not static but dynamic. Therefore, it could be appropriate to say that an approach is more relevant to transmissionist, transactionist, or transformationist.

For this reason, the current study uses "oriented" to represent the dynamic and complex characteristics of approaches to translation teaching. Another explanation for using "oriented" is that the current study intends to combine transactional and transformational approaches, which have been reviewed in the following section.

2.1.3.2 A combination of transactionist and transformationist approaches

As mentioned above, the transformationist-oriented approaches to translation teaching

constitute transactionist and transformationist views of learning, both rooted in constructivism. Constructivism offers an alternative to objectivism (Duffy & Jonassen, 1992) by favouring student/learner-centred transactionist and transformationist views of learning (González-Davies & Enríquez-Raído, 2016).

Constructivism has been researched mainly from two aspects: cognitive constructivism and social constructivism. Cognitive constructivism, which can be traced back to Piaget (1970), acknowledges the role of mental activity in knowledge construction and developing learners' problem-solving competence through probes and interactions with others (Wilson, 1996). Social constructivism, on the other hand, can be traced back to Vygotsky (1978). It emphasises the crucial role of activity in knowledge construction, specifically, individuals' participation in a meaningfully contextualised community (Cobb, 1994). Knowledge, from a social constructivist perspective, is constructed not only as a result of individuals' mental processes but also their active interactions with others in cultural contexts. Knowledge, therefore, cannot be viewed as separate from social components (Windschitl, 2002).

Recently, there have been calls to synthesise cognitive and social constructivism in specific subjects, such as language teaching (Felix, 2005) and mathematics (Cobb, 1994). Scholars who supported the synthesis of the two believed that cognitive and social constructivism are complementary (Cobb, 1994). Knowledge construction is achieved through individuals' mental processes and interactions with professionals in cultural and social contexts (Phillips, 1995; Shepard, 2008), confirming the role of individual efforts and social factors. Therefore, cognitive constructivism looks closely at problem-solving abilities, which is associated with cognition and metacognition in teaching practices.

In contrast, social constructivism brings problem-solving abilities to professional contexts, in which students construct knowledge through their efforts and participation in authentic tasks, acquiring expertise and authority by interacting with other professionals. Finally, this empowers students. Therefore, combining cognitive and social constructivism helps design teaching and learning approaches. A synthesis of transactional and transformational approaches is conducive to teaching and learning processes. Based on the above discussions, the transformationist-oriented approaches to translation teaching in the current study refer to the approaches towards transactionist learning, transformationist learning, and approaches that synthesise both.

2.1.3.3 Transformationist-oriented approaches to translation teaching in translator training

Transactionist approaches to translation teaching

Cognitive approaches to translation teaching

Cognitive approaches to translation teaching aim to develop a translator's cognitive competence and are considered transactionist-oriented approaches. Many scholars attempted to identify the cognitive competence that translators need by exploring their mental activities while translating, such as using think-aloud protocols (TAPs). For example, House (1986), Kiraly (1995), and Kussmaul (1995) used dialogue TAPs to ask students to articulate their ideas, while translating, to explore their mental activities. Through TAPs, translators' self-concept has been identified, which refers to their self-confidence and self-awareness in analysing text and dealing with translation problems (Kiraly, 1995). Although TAPs are considered an indirect approach to exploring a translator's cognitive activities, they have facilitated a way to explore the translation

process instead of analysing only translation errors (Albir & Alves, 2009; Kruger & Kruger, 2017). However, TAPs have been criticised for interrupting the translation process and concerning less the non-verbal aspects of student translators' mental activities (Sin, 2002).

In addition to TAPs, Gile adopted an Integrated Problem and Decision Reporting (IPDR) method, "a systematic requirement for written introspective reporting by students whenever they hand in a translation assignment" (2004, p. 15); that is, IPDR is a form of self-reflection that helps students become more aware of critical translating components, such as word choice, grammar accuracy, and searching ability. Gile provided examples of students' IPDR reports from English-French translation classes, demonstrating significant improvements in students' awareness of these components. Although this approach is limited to a case study, it addresses the gap that Sin (2002) raised about TAPs not being related to the non-verbal aspects of students' mental activities.

To address the research gaps presented in studies that solely relied on a single method to explore translators' mental processes, some studies have opted to combine both verbal and non-verbal methods (Massey & Ehrensberger-Dow, 2011; Pym, 2010). For instance, Massey and Ehrensberger-Dow (2011) recruited twelve first-year students in an English-German MA translation, and collected multiple forms of data, including students' keyboard strokes, screen movements, and eye movements for translating a journalistic text from German to English. The students were also asked to explain what they were doing. Eight students were then asked to comment on their peers' translating process in an individual interview, and a follow-up interview was conducted to allow students to elaborate more on their commentaries on their peers' translating process. By suggesting that peer comments benefit students' learning (Massey & Ehrensberger-

Dow, 2011), the findings of their study are consistent with previous research on the translation process and confirm the role of cognitive research in helping student translators improve self-awareness when implementing translating strategies and promoting cooperative learning.

In summary, there has been a shift in approaches to translation teaching, based on the reviewed empirical studies, from a focus on text analysis to the translator's cognitive process. These approaches emphasise the importance of the translator's implementation of translation strategies and problem-solving abilities, which are the teaching objectives of cognitive constructivism learning. Cognitive constructivism helps develop students' abilities to produce acceptable translation products by exploring their mental processes. Additionally, scholars have adopted approaches to translation teaching grounded in social constructivism to assist students in developing the abilities required in professional communities.

Approaches synthesise transactionist and transformationist epistemology

Many approaches towards social constructivism teaching of translation synthesise transactionist and transformationist views of learning. They have been framed and applied to translation classes across various cultural contexts (e,g., Barros, 2011; Biel, 2011b; Li, 2013; Parvaresh et al., 2019; Risku, 2016; Shamma, 2015; Wallace, 2015; Xu, 2005; Zeng & Lu-Chen, 2002; Zhong, 2008). These approaches are based on different learning theories that sit well with social constructivism, such as self-direct, situated, project-based, task-based, and cooperative and collaborative learning.

Self-directed learning approach

Zhong (2008) adopted a self-direct learning approach (SDL) to teach Chinese-English translation in a postgraduate programme at an Australian university. SDL emphasises

learners' initiative more than teachers' control (Knowles, 1975; Nunan & Lamb, 1996), a widely used pedagogy in language teaching, and is considered a learner-centred approach. Zhong's SDL translation class has been reviewed in the following aspects: teaching objectives, teaching and learning procedures, and outcome evaluations. Firstly, the teaching objectives were customised based on students' analysis of their learning ability, background, and career plans after graduation; there is no single and same teaching objective to sit all students, leading to each student's diversified learning contents and procedures. Secondly, according to Zhong (2008), students who expected to become practising translators have to learn translation theories, attend translation projects, and finally demonstrate improvement. Finally, the evaluation focused on students' performance for their customised learning objectives. Therefore, universally standardised evaluation criteria would not work as each student's learning objective may be different.

Zhong (2008) also explored the function of SDL in translation teaching, factors that influenced successful SDL, and students' attitudes towards SDL. The participants were four female student translators involved in SDL who chose to sit a NAATI test (an Australian national accredited test for translators) as their learning objective. Multiple forms of data were collected, such as students' translation assignments with teachers' feedback. Research findings showed that students improved upon 1) individual cognitive competence, such as bilingual communications, target language reading ability, and academic writing ability; 2) extra knowledge related to an expected career after graduation; 3) planning learning strategies and committing to accomplishing learning objectives. Factors that contributed to successful SDL were learners' ability and accessibility to resources, positive attitudes towards SDL, and supervised support from the teacher. Concerning students' attitudes towards SDL in

this study, Zhong found that the participants held positive attitudes towards SDL, which corresponded to others who advocated SDL (e.g., Bhat et al., 2007; Pan, 2020).

A thorough review of Zhong's SDL approach in translation teaching (2007) offers great implications. To my knowledge, Zhong might be the first scholar to introduce SDL to translation teaching, which is a significant step in shifting translation teaching to a learner-centred approach. Research findings of his empirical investigation confirm that SDL improves not only students' cognitive abilities but also abilities related to their expected professions. In addition, it also provides us with the key points to a successful implementation of SDL, including students' learning needs and abilities, and the teacher's facilitating role. Although having such advantages, SDL seems to place more responsibility on learners, which may make learners feel stressed, resulting in their resistance to accepting this approach. Other reflections on or related to self-directed learning in translation teaching can also be found (e.g., Fernández & Zabalbeascoa, 2012; López-Rodríguez & Tercedor-Sánchez, 2008; Mellinger, 2019; Washbourne, 2014).

Situated learning

Another approach that sits well with cognitive and social constructivism is situated learning. Situated learning can be regarded as a profession-oriented approach (Kelly, 2014), which encompasses individual contributions in the simulation of authentic translation projects (González-Davies & Enríquez-Raído, 2016; Risku, 2002; Vienne, 1994), collaborative learning (Kiraly, 2000, 2017), and translation research project (Risku, 2016). Therefore, situated learning confirms the role of individuals in the learning process and acknowledges the learning process through collaborations in authentic social contexts. As a result, it enhances translators' profession-related

competence and employability, also known as lifelong learning ability (Nam, 2016). These results are apparent in several empirical studies of translation teaching.

For example, Prieto-Velasco and Fuentes-Luque (2016) adopted a situated learning approach to translation teaching and found that both students' translation technology and professional competence had been improved. In their study, 56 English-Spanish student translators were situated in an authentic translation project comprised of parts of un-translated books containing various translation problems, such as cultural referents and taboo language. The project was to be completed in a collaborative working platform consisting of Google Docs, Search, and so forth. Students were first introduced to how to use these online tools and their roles in this project. Then, they started working in a real professional translating procedure: preparing material, pre-translation, translating in teamwork, revision, and reflective meetings. Students were also required to complete two questionnaires, one before they attended the situated translation task and one after the translation task, to investigate the improvement of students' competence and their opinions about this approach. Results from the two questionnaires showed that 97% of the students believed it is a helpful approach which should continue to be used in future studies. The approach is applicable to improving skills related to producing translation text and interpersonal competence that are conducive to working in a real professional context. However, the research addresses little about how evaluations work in this approach. Despite the advantages of situated learning in improving students' personal and interpersonal competence, implementing such an approach in translation teaching may be challenging in recent years.

In another descriptive research, Calvo (2015) described applying a situated approach to translation teaching in Spanish universities. She claimed that translation teachers, including herself in Spain, were both experienced practising translators and university

lecturers. They all acknowledged the role of situated learning in providing student translators with a collaborative learning environment, interactions with professionals from the translation industry, work placement opportunities, and real-authentic translation projects. On the other hand, she claimed that Spanish translation teachers also experienced great challenges in implementing the approach due to an increasing number of students enrolled in the translation programmes, with the number of translation agencies offering work placements remaining unchanged. Moreover, she argued that many students had an uncooperative attitude towards situated learning, which prevented teachers from implementing this approach in teaching translation.

It appears possible that a mismatch between teachers' and students' attitudes towards situated learning would influence the extent to which this approach is effectively implemented. Many scholars argued that teachers' and students' ideas, attitudes and perceptions about a specific teaching approach can affect teaching and learning behaviours (A. Baker, 2014; Borg, 2003b; B. Hu & Tian, 2012).

Project-based learning (PBL)

With situated learning focusing on collaborative learning in a real and professional context (Calvo, 2015; Corrius et al., 2016; González-Davies & Enríquez-Raído, 2016), Project-based learning (PBL) approaches provide students with platforms to do so. Contemporary translation service is highly project/task-driven, involving various roles: translators, clients, subject professionals, editors, proofreaders, validators from the target text country, and project managers (Risku et al., 2016). Students involved in such translation projects, with teachers acting as learning facilitators, take different roles to collaborate with others to accomplish the project. As a result, students would assume most learning responsibilities to motivate them to become autonomous (Kiraly,

2000). PBL has been found to help students improve their academic and personal skills. Moghaddas and Khoshsaligheh (2019) applied PBL to an English-Persian translation class at an Iranian university, and adopted a mixed-method research design to investigate students' attitudes towards PBL before and after attending this approach. Data were collected through questionnaires, interviews, and classroom observations. They reported that students' translation quality, critical thinking competence and teamwork skills had been improved.

Similar research findings were also found in González Davies (2017). She designed a collaborative pedagogy for a translation course consisting of a simulation of translation projects, concrete exercises, and translation tasks. The translation projects aimed to engage students in the simulation of professional activities, and the other two aimed at practising specific skills. She collected data through student questionnaires and teachers' teaching journals to investigate the outcomes of this approach. She found that engaging students in various exercises, tasks, and projects improved students' translation skills and critical thinking abilities.

PBL has also been applied to teaching translation in other forms. The Team-based learning approach (TBL) is one of them. TBL is defined as "team members develop skills from each other and progress towards a common set of skills" (Hills, 2001, p. 7). Hills's definition implies that TBL can replace traditional classrooms that view the teacher as the sole source of knowledge with collaborative learning. In this approach, students learn in a network, in which team members can share individual professional skills and learn from each other to achieve common learning objectives. Thus, TBL seems not only to help improve students' personal knowledge but also some interpersonal skills required by the workplace through collaborations (Kelly, 2014; Kenny, 2008; Kiraly, 2003; Vienne, 2000). Supporting evidence can be found In

Wallace's (2015) study, which applied TBL to an English-Spanish translation class in America. This TBL course aimed to produce acceptable translations with enhanced Spanish proficiency, and help students understand translation theories and acquire teamwork ability. She collected quantitative data through questionnaires answered by 12 students to investigate their feedback on TBL. Research findings showed that the students improved their Spanish proficiency, translation production, and critical thinking after attending the TBL course. Therefore, TBL is conducive to cognitive competence (translation skills) and some interpersonal competence (teamwork). However, her approach is a deductive model, in which students were required to create their own translation theory to explain translation problems, which is an approach that opposes Pym's (1993) inductive model.

Other approaches related to PBL or involved PBL in translation teaching can also be found in Maruenda-Bataller and Santaemilia-Ruiz (2016) who connected PBL to translator competence assessment, Int (2005) who engaged PBL in the simulation of professional translators' workflows, Kiraly (2005) who linked PBL to situated learning, and Olvera Lobo et al., (2007) who adopted an online project to simulate a translation agency. Reviewing the literature on these approaches with various names, they share some certain features: mentioning collaborative learning and promoting autonomous learning ability. The two features were later integrated into Kiraly's seminal work in 2000 based on social constructivism, in which he designed an authentic, collaborative learning approach for empowerment.

Empowering approaches

The empowering approaches rooted in social constructivism proposed by Kiraly (2000) feature the following concepts: collaborative learning, appropriation, zone of proximal

development (ZPD), situated learning, experiential learning, viability, scaffolding, social-cognitive apprenticeship, and transformation and the acquisition of translator competence. A summary of each concept is illustrated in Table 2.4.

Table 2.4 Summary of Kiraly's empowering approach

Concepts of an empowering approach	Summary
Collaborative learning	Jointly accomplish a task with the same learning goals and solve complex projects in a real-life environment;
Appropriation	Learning is a mutually constructive process including two types of interactions: • Internal individual interactions; • Individual interactions with learning contexts;
ZPD	Emphasise the teacher's role in the learning process, shifting from knowledge distributors to learning facilitators;
Situated learning	Learning within the authentic situational environment;
Viability	It suggests lifelong learning.
Scaffolding	Teachers' support helps learners construct their own knowledge.
Socio-cognitive apprenticeship	A process that changes students from school learners to professionals in a real working environment.

Drawn on the summary in Table 2.4, an empowering approach informs collaborative learning in which students interact with peers, teachers, and social learning contexts. It changes the teacher's role from a learning controller to a learning facilitator. The role change allows the teacher to offer learning support to students who are engaged in the practice of professional translation. Students are, consequently, able to construct their own cognitive and professional knowledge to achieve autonomous learning ability. This is empowerment (Abdallah, 2011; Kiraly, 2000, 2017).

Kiraly (2000) applied the empowering approach to his own German-English translation course. Twenty-four students in the class voluntarily formed into groups. Group size varied from two to five. Students in each group collaboratively negotiated with other members to undertake different roles. Interestingly, one of the roles was an entertainer who helped create a relaxing working atmosphere. Although the students were empowered to assume learning responsibility, he did not completely leave students behind for self-learning. Instead, he offered the necessary support to facilitate students' projects, such as creating an authentic learning environment and offering additional resources (background knowledge). By collecting research data through observations and questionnaires, he concluded that peer assistance helped improve translation quality, especially the involvement of a native speaker of the source text in the group. In addition, students were highly motivated to assume responsibility for participating in the project and became confident to accomplish an authentic project with support from the teacher and peers.

Despite a successful approach, Kiraly also claimed that implementing such an approach could be challenging. For example, peer assistance relied heavily on fully preparing students for collaborative work. Otherwise, it would become a simple work of "check each other's work" (Kiraly, 2000, p. 116). Others, such as how to distribute

the teacher's and student's role, whether to create a bilingual classroom, difficulty levels of the source text, and ways for the teacher to offer support, were also challenging.

Unlike Kiraly's (2000) approach, which emphasised the importance of teachers' support during collaborative learning processes, Barros (2011) proposed an empowering approach to translation teaching, contradicting Kiraly's ideas. According to Barros, "in order to achieve good teamwork performance, all team members must actively participate... in every task they undertake, with the guidance of their teacher" (Barros, 2011, p. 45). Despite these opposing views, Barros aligned with Kiraly's approach by recognising the necessity of introducing collaborative working mechanisms and concepts to students for a successful empowering approach. Moreover, Barros highlighted the significance of teamwork as a critical method for implementing collaborative learning. In teamwork, students assume greater responsibility than individual learning, as each team member's commitment to learning directly impacts the overall team's performance.

Furthermore, students who engage in teamwork benefit from interactions with their team members, working towards shared objectives and supporting one another. This improves their interpersonal abilities. It is important to note that when it comes to assessment, Barros suggested that the method and criteria should be determined by the teacher. However, peer assessment can still be conducted based on the teacher's chosen methods and criteria. Based on the survey data from teachers and students involved in this approach, Barros also discovered that a significant majority of student respondents had never received any training related to teamwork, despite having experienced it in previous learning. These results highlight the importance of preparing students for collaborative work, which is a key factor in implementing the empowering approach

(D. W. Johnson & Johnson, 1975; R. T. Johnson et al., 1985; Kiraly, 2000). Additionally, Barros found that while teamwork can enhance students' interpersonal competence (Hills, 2001; Kiraly, 2000; Wallace, 2015), students also reported several disadvantages, such as imbalanced contributions from team members.

2.1.4 Approaches to translation teaching in China

Considering that the research context of this study is in China, it is necessary to have an overview of the literature on approaches to translation teaching in Chinese academia. In general, approaches to translation teaching can be divided into two phases. The first phase can be dated back to 1979, when translation became one of the compulsory courses for English majors. Translation served as a tool for Chinese students to learn English. As a result, ways to teach translation were linguistics-oriented (Liu, 2013; Tao, 2016), such as intensive reading, grammatical translation, and contrastive and comparative analysis. The second phase dates back to 1997, when the first university-level translation department was set up in China (Mu, 1999), although it was not officially approved until 2007. Since then, Translation teaching has attracted more attention. However, teaching approaches had long been left over because scholars committed to fine-tuning translation programmes, including teaching materials, teacher qualifications, and translation skills (He, 2007; Miao, 2007; Tao, 2005, 2007).

With translator training programmes being fully established in China, from undergraduate to doctoral levels, approaches to translation teaching began to receive more attention in Chinese academia. In the meantime, Chinese scholars shifted their eyes to peers in the West, hoping that their insights on approaches to translation teaching could provide implications for Chinese translation teaching. For example,

Lin (2000) summarised the development of translation teaching approaches in Western countries and concluded that many approaches to translation teaching responded to the lack of systematic translation pedagogy in China. These approaches include but are not limited to 1) a shift from a traditional teacher-centred to a student-centred approach; 2) exploring the translator's cognition; 3) role play and simulation of real tasks. Such conclusions are consistent with the literature reviewed in Sections 2.1.2 and 2.1.3, suggesting that Chinese scholars' commitment to translation teaching approaches follows the path of their Western peers.

Tao (2016) described that the traditional teacher-centred, read-and-translate, error-correction-based approach (González Davies, 2004; Kiraly, 2000) was also true in Chinese academia, which is named the "master-apprentice approach" (p. 211). This approach required students to learn translation knowledge taught by the teacher and to do translation assignments based on the knowledge learned. It focused on acquiring some language-related skills and was indeed a transmissionist view of learning, which holds that knowledge is transferrable. This approach, accordingly, has been criticised by many scholars. Shen (2006) claimed that the traditional teacher-centred and text-correct-oriented approach makes students invisible in translation learning processes. Wang and Su (2008) argued that such an approach was far from providing qualified professional translators to meet the needs of social and economic development. Against this backdrop, different translation teaching approaches that shift away from traditional approaches have been proposed and practised.

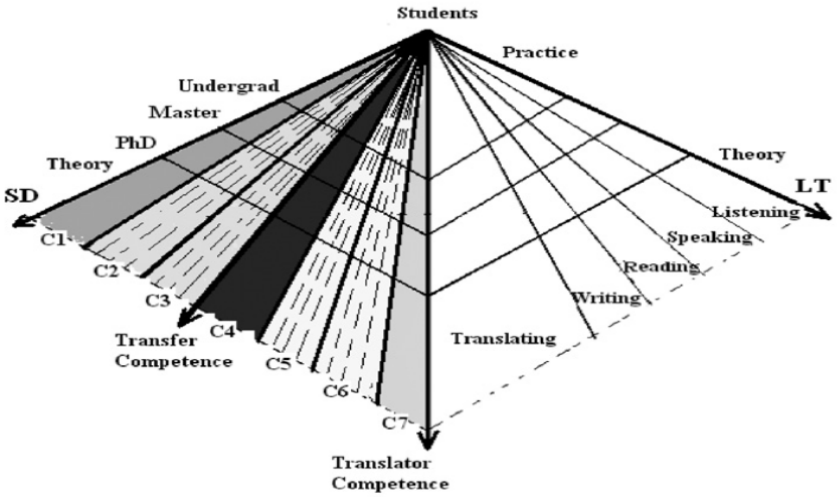
Firstly, the think-aloud protocols (TAPs) have been applied to translation teaching by Chinese scholars to replace the traditional product-ended approaches. Li (2008) introduced TAPs to teaching translation in China. Similarly, Zhang (2010) applied TAPs in her own translation class to develop students' problem-solving abilities.

Introducing TAPs signals Chinese scholars' efforts to explore alternatives to traditional approaches with a primary focus on learners and the translation process. Thus, learner-centred approaches have become prevalent in China. Wang (2003) advocated shifting the research focus from what to teach to how to teach and proposed a learner-centred approach in an undergraduate translation course. His approach emphasised the importance of students' learning needs and the involvement of making teaching plans to enhance learning motivation, creativity, and translation-related skills.

The constructivist view of learning is another factor that influences translation teaching in China. For instance, distinguishing translator training from translator education, Tan (2008) proposed a whole-person approach to translator education for both undergraduate and postgraduate translation programmes (see Figure 2.2). Liu (2010), based on constructivism, proposed a conceptualisation approach to translation teaching to resolve contradictions such as limited classroom teaching time and intensive teaching plans. Li and Zhong (2010) introduced a translation workshop-based approach in which the teacher undertook the role of a learning facilitator, and students were organised for real translation projects through collaborative learning. However, these approaches are primarily for undergraduate translation programmes.

In postgraduate translation teaching, Tao (2012) proposed a constructive model of translation teaching for the MTI programme (see Figure 2.3). This approach, with learning objectives to develop students' translator competence, aimed at students' communicative, translational, and professional competence. Correspondingly, task-based reading, translation skills-based workshops, and project-based practice were implemented to help students develop translator competence. The learner-centred and constructivist underlined approaches can also be found in many other studies (e.g., Dai, 2011; Lian et al., 2011; Y. Wang, 2012; Wen, 2015; Zhang & Zhang, 2012).

Despite such development, the reviewed literature lacks support from empirical evidence, as most approaches are either proposed, theorised, or applied as case studies. However, some scholars have tried to conduct empirical studies in the Chinese context. For example, to explore students' ideas about the project-based approach to translation teaching, Li, Lei, and Chen (2020) collected qualitative data. The data set included students' reflective journals, open-ended questionnaires, and focus group interviews; all conducted after 22 students engaged in authentic research-oriented translation projects. Research findings showed that students reported enhancement in a wide range of knowledge and skills, such as future employment, technology, critical thinking, communication, and leadership.



NB:

C1:	Cognitive Competence	C2:	Linguistic Competence in L2
C3:	Pragmatic Competence in L2	C4:	Transfer Competence
C5:	Linguistic Competence in L1	C6:	Pragmatic Competence in L1
C7:	Instrumental Competence	Undergrad:	Undergraduate Level
Master:	MA/MPhil Level	PhD:	PhD Level
LT:	Language Teaching	SD:	Social Development

Figure 2.2 A whole-person approach proposed by Tan (2008, p. 603)

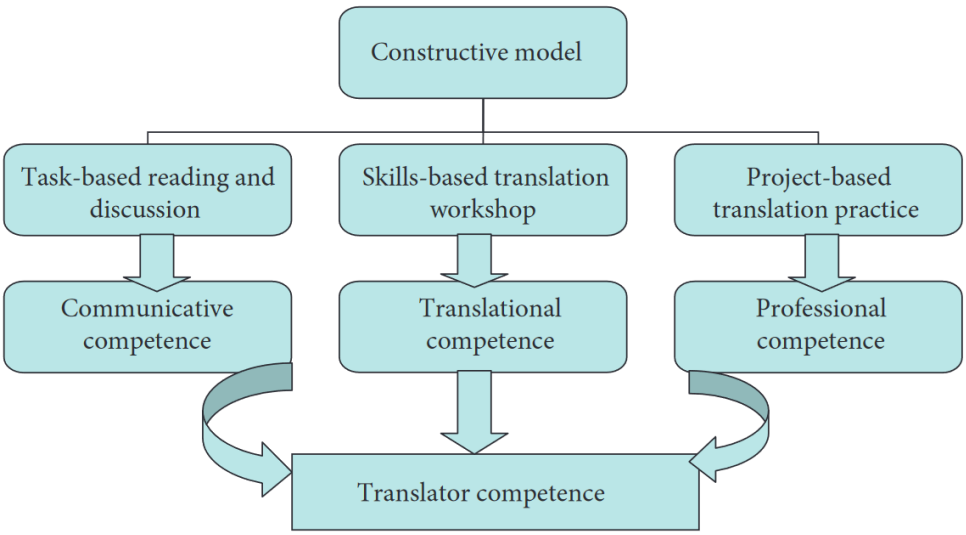


Figure 2.3 A constructive model proposed by Tao (2012, p. 303)

In conclusion, the evolution of translation teaching approaches in China reflects a shift from behaviourism to constructivism, from transmissionist to transformationist, and from asystematic and apedagogic methods to increasingly systematic ones. Although some scholars started to explore this topic from an empirical research perspective, such empirical studies are still lacking compared to similar research in other disciplines.

After reviewing the above literature, I decided to explore, in this study, the two major perspectives on approaches to translation teaching: transmissionist-oriented and transformationist-oriented approaches. The reasons for exploring these two approaches are not only because they have been extensively researched, but more importantly, they are practical for this study. A clear framework can be established for the current study by dividing the approaches into two opposing extremes. The two opposing extremes, then, can be used for the generation of questionnaire items and the

comparison of teachers' and students' cognitions about the two approaches. Lastly, they can be used for qualitative analysis, such as coding and developing themes.

It should be noted that there are no perfect or superior approaches for one or another. The teaching approaches adopted in this study are to fulfil the purpose of the current study. Therefore, the theoretical framework of approaches to translation teaching in the present study will be based on the transmissionist-oriented approaches to translation teaching, which is rooted in behaviourism, and the transformationist-oriented approaches to translation teaching, which is rooted in constructivism. The reasons for the inclusion of the transmissionist view of learning and transformationist view of learning are because, firstly, both are widely researched and well theorised with empirical support. Secondly, both specify sub-components related to teaching and learning. Therefore, these two views of learning epistemology are chosen for their detailed information about each teaching and learning sub-component, which could guide the development of quantitative and qualitative instruments.

2.1.5 Summary of trends in research on approaches to translation teaching

After reviewing the extant and representative research on approaches to translation teaching, a summary of the key points is now presented.

1) Approaches to translation teaching can be categorised into two major groups: non-institutional and institutional approaches.
2) Non-institutional approaches are mostly experience-based. The approaches in this phase primarily rely on apprenticeship and are less theorised; Institutional approaches are well theorised with translation theories and theories from allied subjects.
3) Institutional approaches shift away from the teacher-centred and translation

competence-based approaches to the learner-centred and translator competence-based approaches.

4) The teacher-centred and translation competence-based approaches align with a behaviourism view of learning grounded in objectivism epistemology. This trend is called the transmissionist-oriented approaches to translation teaching in the current study.
5) The transmissionist-oriented approaches have been criticised for 1) knowledge transmission; 2) teacher control; 3) less empirical support.
6) The learner-centred and translator competence-based approaches align with a constructivism view of learning. This trend is called the transformationist-oriented approaches to translation teaching in the current study.
7) The transformationist approaches emphasise collaborative learning for students to construct individual cognitive skills to deal with translation texts and interpersonal skills for future careers.
8) In addition to the educational theory-based approaches, translation approaches are supported by interdisciplinary theories, such as feminist, literary, and philosophy.
9) Chinese scholars generally share similar ideas about approaches to translation teaching with peers in the West.

2.2 Teacher cognitions, teaching practices, and student cognitions

While reviewing the literature on teacher cognition, several topics emerge. These include a definition of cognition, sources of teacher cognition, the relationship between teacher cognition and teaching practices, and the need to incorporate student cognition into the research on teacher cognition. Therefore, the literature review in this section

has focused mainly on these topics.

The literature to be reviewed on these topics relies on the language teacher research fields. This is because although the current study intends to investigate translation teachers' cognitions, little literature has been provided both in translation studies and beyond. To address this problem, literature on language teachers has been selected to shed light on the research topics of the current study, as there is a plethora of research on language teachers' cognitions. Moreover, language teachers, to some extent, share the same characteristics as translation teachers. In addition, research findings from the academic sphere of general education are also applied to the current study to address the problem.

2.2.1 Complexities of teacher cognitions

Teacher cognition serves as an umbrella term, covering research on teachers' psychological processes or mental activities when they are doing their work (Borg, 2003b, 2006, 2015b). Research on teacher cognition emerged in the 1970s. It breaks the predomination of the study of teaching, which focuses primarily on the relationships between teachers' behaviours and students' learning outcomes. Research on teachers' cognitive processes in the classroom, therefore, has become prevalent.

With the research on teacher cognition going further and more profound, an important problem becomes prominent, which is "an overwhelming array of concepts" (Borg, 2006, p. 35) that exist in the research field of teacher cognition, resulting in the fact that a wide range of terms have been interchangeably used to refer to the same construct. Table 2.5 summarises the terms used by scholars and lists examples of terms adopted.

Table 2.5 Terms used to refer to teacher's mental process

Terms to be used	Sources (examples)
Belief, beliefs	Kagan (1992), Richardson (1996), Southerland et al. (2001)
Cognition	Borg (2003b, 2015b), Nazari (2020)
Attitude	Jarvis and Pell (2004), Karavas-Doukas (1996), C. Sun et al. (2022)
Perspective	Gilliland (2015), Tabacbnick and Zeichner (1984)
Conception	Alexander and Dochy (1995), Chan (2004), Farrell and Lim (2005)
Theory	Clark (1988), Jonsson et al. (2012)
Knowledge	Cess-Newsome (2002), Koçoğlu (2009), Verloop et al. (2001)

Reasons for such a phenomenon are because of the complex nature of teachers' mental and psychological processes and are "due to the fact identical terms have been defined in different ways and different terms have been used to describe similar concepts" (Borg, 2006, p. 35). For these reasons, many scholars attempted to differentiate those terms in their writing, aiming to inspire researchers to define these terms and facilitating empirical investigations (Abelson, 1979; Alexander & Dochy, 1995; Borg, 2003b; Richardson, 1996; Southerland et al., 2001). Among their discussions, cognition, knowledge, and beliefs are three extensively discussed constructs.

Cognition, knowledge, and beliefs

Among the variously identical used concepts related to teachers' mental processes,

knowledge, beliefs, and cognition are three concepts that have been extensively researched. To define cognition, it is necessary to examine knowledge and beliefs first. Many scholars tried to distinguish knowledge from beliefs (Abelson, 1979; Hoy et al., 2014; Kagan, 1992; Pajares, 1992; Verloop et al., 2001). Nevertheless, the fact is that it is challenging to do so (Richardson, 1996) because components of the two concepts are often interchangeably used to define the other. For example, Alexander, Schallert, et al. (1991) referred to knowledge beyond the field of cognition and literacy as "an individual's personal stock of information, skills, experiences, beliefs, and memories" (p.317). It can be seen, in their study, that beliefs are considered a component of knowledge. This is also true to regard knowledge as the component of beliefs when defining beliefs. For example, "a belief is knowledge that is viable in that it enables an individual to meet her goals in specific circumstances" (Tobin & Lamaster, 1995, p. 226). Moreover, Kagan (1992) pointed out that "most of a teacher's professional knowledge can be regarded more accurately as belief" (p. 73).

It is not only challenging to theoretically distinguish knowledge from beliefs but also to do so in empirical investigations, as the distinctions between them seem "to become hopelessly blurred at the empirical level" (Southerland et al., 2001, p. 348). Researchers found that it is hard to tell whether teachers' teaching practices are influenced by their knowledge or beliefs because teachers may interchangeably use the two terms, which are intertwined in their minds (Borg, 2006; Cobern, 2000; Smith & Siegel, 2004; Southerland et al., 2001).

The above-reviewed literature implies that there are some overlapping concepts between knowledge and beliefs, resulting in the fact that it seems hard to describe the distinctions between them. However, some scholars believe that it is viable to distinguish beliefs and knowledge. First, knowledge is objective and mainly relies on

the truth in the world. Green (1971) claimed that knowledge is the "thought to depend on a truth condition or warrant that compels its acceptance as true by a community" (p.69). Similarly, Lehrer (2000) indicated that "one essential role of knowledge is the employment of it to reason to conclusions, to confirm some hypotheses and refute others" (p. 6). In contrast, beliefs is subjective and depends on individuals' personal judgement. Ford (1994) regarded beliefs as "convictions or opinions formed either by experience or by the intervention of ideas through the learning process". Calderhead (1996) even referred to beliefs as "suppositions, commitments, and ideologies" (p.715). Second, the objective characteristics of knowledge result in that knowledge remains stable and unchanged among teachers with different backgrounds (Cess-Newsome, 2002; Southerland et al., 2001), whereas the subjective characteristics of beliefs make it personalised and contextualised (Alexander & Dochy, 1995; Woods & Çakır, 2011). Third, knowledge is seen as outcomes that are developing from formal learning, such as school learning and other formal learning experiences, while beliefs is regarded as developing from informal and personalised daily experience (Alexander & Dochy, 1995).

Despite the existing dichotomies regarding the distinctions and similarities between beliefs and knowledge, scholars have a considerable agreement that knowledge and beliefs are two complex constructs with no universally convincing definitions. Therefore, some scholars decided to use one of the terms to refer to the other or to use only one in their research (Alexander & Dochy, 1995; Kagan, 1992).

Given the complexity of beliefs and knowledge, teacher cognition has become an umbrella construct in recent research on teachers' mental processes. Teacher cognition refers to "the unobservable cognitive dimension of teaching- what teachers know, believe, and think" (Borg, 2003, p.81). Specifically, Kagan (1990) defined teacher

cognition as “pre-or in-service teachers’ self-reflections; beliefs and knowledge about teaching, students, and content; and awareness of problem-solving strategies endemic to classroom teaching” (p. 421). It can be seen from the two definitions that teacher cognition is used as an umbrella term covering all the concepts, including beliefs, perceptions, knowledge, and so forth. Therefore, the term *teacher cognition* is adopted in the current study. This is because using teacher cognition allows me to avoid distinguishing teacher knowledge and beliefs, facilitating the data analysis procedures. In addition, the current study adopts Borg’s definition of teacher cognition. This is because Kagan’s definition is more specific in giving great detail of teacher cognition compared to Borg’s definition. Instead of describing what is teacher cognition, Kagan’s definition appears to depict what can be researched in the study of teacher cognition. The current study, therefore, adopts Borg’s definition.

2.2.2 Research on teacher cognitions

After introducing the nature and characteristics of teacher cognition, the following sections focus on what and how teacher cognition has been researched. These include:

- What contributes to the formation of teacher cognition;
- How teacher cognition interacts with teaching practices;
- How to conduct investigations into teacher cognition;
- Why the research on teacher cognition calls for an incorporation of student cognition;
- What the current status quo of research on translation teacher cognition is like.

2.2.2.1 Factors that contribute to teacher cognitions

The existing literature reveals that teachers’ past experiences contribute to their

cognitions (Beijaard, 1995; Bonner et al., 2020; Borg, 2003b; L. X. Gao & Zhang, 2020; J. Huang et al., 2021; L. Li, 2013, 2020; Mok, 1994; Nespor, 1987; Ng et al., 2010; Q. Sun & Zhang, 2022; H. Zhao & Zhang, 2022). The experiences are comprised mainly of schooling experiences and professional coursework. Schooling experiences include teachers as learners and past teaching experiences; professional coursework refers to various educational and training programmes that teachers are involved in.

Teachers as learners

The experiences of teachers as learners refer to their learning experiences in schools as students other than in teacher education programmes. These experiences are found to have a powerful influence on teacher cognition formation. Firstly, mainstream studies confirm the influence of teachers' past learning experiences as students on cognitions held by teachers across different subject matters (Buehl & Fives, 2009; Holt-Reynolds, 1992; B. Y. Hu et al., 2017; Murphy et al., 2004; Ng et al., 2010). For example, Ng et al. (2010) adopted a mixed-methods approach to investigate the evolvement of a group of pre-service teachers' beliefs about effective teaching. They collected data from close-ended and open-ended questionnaires from 37 preservice teachers in various subjects from different educational systems. Their research findings revealed that these teachers' schooling experiences as learners played an essential role in shaping the teachers' beliefs. Using an open-ended questionnaire, Buehl and Fives (2009) studied 116 pre-service teachers' beliefs about knowledge of teaching. These teachers were selected from different subjects and different grade-levels with various ethnicities. They found that these teachers' beliefs about teaching were formed since the first day of kindergarten. In addition, Murphy et al. (2004) have similar research findings. They compared the beliefs about good teachers and good teaching held by pre-service and in-service teachers. The research findings showed that the pre-service teachers' beliefs

were consistent with the in-service teachers' beliefs. The two groups of teachers' beliefs about good teachers were formed early in primary school. Their study not only provides evidence for the impact of teachers' school learning experiences on pre-service teachers' cognitions, but also provides further support for the fact that those experiences also affect the formation of in-service teachers' cognitions.

The literature reviewed above illustrates the impact of teachers' learning experiences as students in schools on teachers' cognition. Similar research findings are evident in studies of language teachers. Unlike teachers of other subjects, language teachers' learning experiences specifically refer to their language learning experiences in and out of school. Language learning experiences are found to be highly influential for the initial establishment of language teachers' cognitions about language teaching and learning (Borg, 2003b). For instance, Huang. J et al. (2021) explored three Hong Kong novice secondary teachers' beliefs about English teaching and the impact of the beliefs on their identity formation. They collected research data through interviews and found that one of the teachers had been learning English via many approaches, including teacher- and student-centred approaches. These learning experiences made her believe that approaches to English teaching cannot be limited to one single approach but should combine different approaches according to different teaching contexts. Öztürk and Gürbüz (2017) researched three Turkish EFL teachers' cognitions by collecting data through interviews, classroom observation and reflective journals. Their research findings suggested that all three teacher participants' language learning experiences contributed to the teachers' cognitions about EFL teaching and learning. The teacher participants' narrations made it evident that they had formed their initial ideas about how English should be taught or what a good teacher should be like by reflecting on their language learning habits and observing their past teachers. Using a mixed-methods

approach, Busch (2010) unveiled the beliefs changing over time after an SLA course taken by 381 preservice teachers. Research findings of this study showed that the participants' cognitions about language teaching prior to attending this course could be attributed to their language learning experiences in high school.

Professional coursework

Teachers' professional coursework here refers to the teacher education programme. The teacher education programme includes programmes for pre-service teachers to receive formal teacher education before entry into the teaching profession and programmes for in-service teachers to receive periodic training for career development.

For pre-service teachers, the impact of teacher education programmes on their cognitions is a controversial topic. While various pre-service teacher education programmes have been described as limited in bringing about change in pre-service teachers' cognitions because their cognitions "tend to be highly resistant to change" (Cross, 2009, p.327), certain programmes have successfully predicted changes in cognitions held by the teachers (Banas & York, 2014; Fischer & Lahmann, 2020; Ha & Murray, 2021; Koçoğlu, 2009; Leavy & Hourigan, 2018; Levin & He, 2008; Richards et al., 1996; Safrudiannur et al., 2022; Sheridan, 2016). For instance:

Taking the authentic learning experiences in a method course as a means of investigation, Banas and York (2014) researched how these experiences influenced 104 per-service teachers' self-efficacy beliefs and their intentions to technology integration in the context of health education, in which participants were enrolled in an undergraduate level course that focused on how to teach health-related subjects. Participants in the course were required to develop curriculum and lesson plans and to present the lesson plans. Before and after these activities, participants had been required

to complete the Technology Pedagogical Content Knowledge questionnaire and Intensions to Integrate Technology questionnaire, respectively. Their research findings indicated a significant statistical increase in these pre-service teachers' self-efficacy beliefs about and intentions to integrate technology, which suggests that this method course added new constructs to the pre-service teachers' cognitions about technology integration. Similar research findings echo in the research field of language teacher cognition. In a quantitative study, Fischer and Lahmann (2020) explored the changes in 27 German pre-service teachers' beliefs about multilingualism after attending a course on linguistically responsive teaching developed for pre-service teachers. They collected data using DaZKom's beliefs questionnaire, which has been a helpful instrument to evaluate courses developed for pre-service teaching training programmes across Germany in recent years. After the teachers attended the course, they found significant changes to the German pre-service teachers' beliefs about taking responsibility for language facilitation and valuing multilingualism. In addition, Levin and He (2008) recruited 94 pre-service teachers from a graduate-level teacher education programme as their participants. Drawing a content-analysis method, they found that 31% of the teachers' practical theories about how classroom management interacts with instruction came from the course they attended.

Qualitative studies also support that teacher education programmes affect pre-service teachers' cognitions. Cevher-Kalburan (2015) investigated changes in 26 early childhood pre-service teachers' beliefs about children's risky play after participating in a six-week intervention course. Data were collected by an open-ended questionnaire the teacher participants filled out before and after the intervention course. The researchers' reflective notes and participants' drawings were collected to triangulate with the questionnaire data. The results of this study revealed that participation in the

six-week intervention course changed these teacher participants' beliefs. The changes were evident in the increase of the teachers' positive perspectives on children's risky play and the teachers' improved understanding of the characteristics of children's risky play. Similar research findings are also identified in the language teacher cognitions research field. Koçoğlu (2009) interviewed 27 pre-service EFL teachers who participated in a computer-assisted language learning course in Turkey to find changes to their beliefs about technological pedagogical content knowledge. She found an increase in the participants' technological content knowledge by using a variety of computer-aided learning tools.

Little literature appears to address the topic of how teacher education programme affects in-service teachers' cognitions, as Borg (2006) claimed that "in comparison to the study of pre-service language teacher cognition, studies of practising language teachers engaged in-service teacher equation are limited" (p. 94). Nonetheless, some scholars made their contributions to this research aspect. Ha and Murray (2021) conducted a qualitative study in two high schools in Vietnam to investigate changes in 10 EFL teachers' beliefs about oral corrective feedback after enrolling in a professional development programme. They collected data through interviews and multiple sources of reflective journals. Research findings of this study showed that the programme extended their knowledge of multiple types of corrective feedback, particularly more output-prompting feedback. Therefore, their willingness to provide fluently and accurately immediate corrective feedback increased. Adopting a similar research design, Nazari (2020) conducted a qualitative study in Iran to explore the changes in 4 Irian EFL in-service and experienced teachers' beliefs about listening teaching. He collected research data by using focus group interviews and classroom observations. Research findings showed that prior to attending the in-service teacher development course, the

teachers' beliefs about the approach to listening teaching were product-oriented. However, those teachers' beliefs changed to a metacognitive approach to listening teaching after learning the concepts of metacognitive listening teaching and practising this approach in actual teaching practices. Research related to subjects other than language teachers provides further support for the fact that teacher education programme affects the development of teacher cognition. Jarvis and Pell (2004) reported 70 primary school in-service science teachers' confidence and attitudes towards science teaching and their understanding of science. The quantitative findings of their research confirmed a positive relationship between the in-service teacher education programme and the participating teachers' confidence and attitudes towards science teaching.

Teaching experiences

Teaching experiences are another factor that contributes to pre-service teachers' and in-service teachers' cognitions. Pre-service teachers' teaching experiences always refer to practicum experiences, which are experiences pre-service teachers gained from various modelling practices. In contrast, teaching experiences for in-service teachers are gained from years of actual teaching practices. Nevertheless, how teaching experiences shape pre-service and in-service teachers' cognitions are different.

For pre-service teachers, how teaching practices shape teachers' cognitions manifests in their negotiation of frustrations encountered in teaching practicum. Pre-service teachers enter teaching practicums by bringing their prior cognitions about how and what to teach. However, the teachers may encounter teaching problems as they have no idea about adequately dealing with those problems. As a result, they have to alter some of the cognitions in order to achieve successful teaching. During this process, pre-

service teachers will bring new components into the existing cognition system (Borg, 2003b, 2006). For example, Johnson (1996) tracked one pre-service teacher to examine her perceptions about the teacher's role, ESL teaching, and the TESOL practicum. Classroom observations, stimulate recall, interviews and reflective journals were drawn as research instruments to collect multiple data forms. During this study, the participant experienced many problems during her teaching practices, such as students' interruptions of teaching procedures, time limits for real teaching practices, boring teaching materials, and so forth. These problematic issues demotivated the participant. While the participant was frustrated, her conceptions about ESL teaching and her role as a teacher started changing as she continued in the practicum, such as knowing more about her students and how to manage the class if interruptions occurred. Another qualitative research indicated changes to the cognitive structure caused by the negotiation of frustrations as pre-service teachers engaged in the internship (M. Liu et al., 2022). In this research, Liu and their team interviewed eight Chinese ESL pre-service teachers conducting their teaching practicums in a teacher education programme to explore their beliefs about teacher-centred and student-centred approaches to teaching and the relationship between their elicited beliefs and teaching practicums. Research findings showed that two pre-service teachers' beliefs changed from student-centred to teacher-centred due to dealing with the negative emotions that appeared during their teaching practicums. These negative emotions could be, in fact, regarded as the frustrations encountered by the pre-service teachers.

As for in-service teachers, whether years of teaching experiences could change or alter in-service teachers' cognitions might be debated. While in-service teachers are researched to find that their cognitions are stable and are reluctant to be changed as they consider the teaching routines effective (Richards, 1998; Tsui, 2002), they are also

found to experience cognition changing or altering through reflections on their teaching experiences, such as their approaches to teaching, interactions with students, and teaching documents (Borg, 2003a; Kagan, 1990; Woods, 1996). The impacts of the reflections on in-service teachers' cognitions are explored by comparing novice and experienced in-service teachers. For example, two studies were conducted by Gatbonton in 1999 and 2008 to compare novice and experienced ESL teachers' pedagogical knowledge. The researcher investigated seven experienced teachers and four novice teachers and found that the experienced teachers' pedagogical knowledge was much more stable. In contrast, the novice teachers' pedagogical knowledge was developing. That is because the experienced teachers had ample teaching experiences, which helped them alter their cognitions about teaching when encountering difficulties. However, novice teachers with limited teaching experiences often struggled when facing problems in teaching due to a lack of relevant knowledge (Gatbonton, 1999, 2008).

2.2.2.2 Teacher cognitions and teaching practices

Numerous studies in the research field of education have confirmed the relationships between teacher cognitions and teaching practices (C.-H. Chen, 2008; Fung & Chow, 2002; Simmons et al., 1999; Tondeur et al., 2017). This relationship can be described as symbiotic, which means teacher cognition affects teachers' classroom behaviours. In the meantime, teachers' classroom behaviours provide a space for the development of teacher cognition (Foss & Kleinsasser, 1996). Research findings from the studies focusing on this relationship collectively showed that teachers' cognitions could be consistent with their teaching practices or, in contrast, inconsistent with their teaching practices. The following literature review focuses on these two prominent relationships.

In addition, factors that contribute to the inconsistency between teacher cognitions and teaching practices have been analysed.

The consistency between teacher cognition and teaching practices

A wide range of research has concluded that teachers' cognitions are consistent with their teaching practices. This is not a surprising fact, as teacher cognition has been found to be a highly influential factor in guiding teachers' classroom behaviours (Borg, 2011; Pajares, 1992). For example, by taking interviews and classroom observations, Farrell and Ives (2015) collected qualitative data from one ESL university teacher who taught reading in Canada to explore the teacher's stated beliefs and classroom practices. They found that, for the most part, the teacher's beliefs and classroom practices are convergent. As the teacher claimed in the interview, when teaching languages, a teacher should help students improve their language proficiency in reading, listening, speaking, and writing. Accordingly, it was discovered that the teacher did what was told in the interview. Adopting the same research instruments, Watson (2015) conducted a case study to investigate a primary school teacher's beliefs about grammar teaching and teaching practices. Research findings confirmed the close match of the teacher's beliefs and teaching practices. The teacher viewed grammar as boring and less creative, so she did not give content priority to grammar in the teaching of writing.

Many mixed methods studies also produce similar results (Maloney-Berman, 2004; Mao & Crosthwaite, 2019). For example, Mao and Crosthwaite (2019) investigated 5 Chinese EFL teachers' beliefs about written corrective feedback and their actual feedback provided to 100 second-year college students. The teachers were required to complete a questionnaire and attend follow-up interviews. Research findings revealed that those teachers' beliefs about the forms of indirect feedback were reflected in their

feedback submissions, such as circling or underlining students' errors in their writing.

Limited consistency between teacher cognition and teaching practices

While consistency between teacher cognition and teaching practices has been identified, limited consistency also exists. Limited consistency could be explained as, for one thing, teachers' cognitions do not match their teaching practices, which is called inconsistency; for another thing, while parts of a teacher's cognitions match the teaching practices, the other parts do not, which is called co-existence. The appearance of limited consistency between teacher cognition and teaching practices is due to a complex relationship between teacher cognitions and teaching practices. This complex relationship happens as teachers typically hold a complex set of cognitions (Borg, 2015b; Kagan, 1990; Pajares, 1992), and not all cognitions can effectively guide teachers' behaviours.

Many studies identify the inconsistency between teacher cognitions and teaching practices (Alisaari & Heikkola, 2017; Gilliland, 2015; Kartchava et al., 2020; Powers et al., 2006; Richardson et al., 1991; Shu-wen Lin, 2022; Taherkhani, 2019; Wei & Cao, 2020; Yuan & Stapleton, 2020; Zheng & Borg, 2014). Some scholars advocated that the inconsistency is unexpected for teachers because it would cause less effective teaching and constrain the development of teachers' cognitions (Basturkmen et al., 2004; Z. Fang, 1996), whereas some claimed that the inconsistency "does not mean that their [teachers'] teaching behaviour is not desirable or ineffective" (Fung & Chow, 2010, p. 319), especially for novice and pre-service teachers. By reflecting on the inconsistency, preservice teachers can adjust their cognitions to align with the teaching practices, and teacher educators can use this information to fine-tune teacher education programmes. (Anderson, 2001; Buchanan et al., 1998).

For example, Junqueira and Payant (2015) investigated a pre-service teacher's feedback

cognition and practices over student writing. They collected the teacher's beliefs about written feedback through reflective journals, semi-structured interviews, and teacher feedback practices from four sessions of commenting on students' essays. They found the pre-service teacher's beliefs mismatched with their teaching practices. The teacher valued the overall structure and content of students' essays. However, she marked more on students' linguistic errors, such as verb tense and grammar. By identifying this mismatch, preservice teachers can reflect on their teaching practices and adjust them to align with their cognitions, leading to more effective teaching. Additionally, teacher educators can fine-tune teacher training courses by incorporating target teaching elements into the existing curriculum to help preservice teachers adjust their teaching practices.

The inconsistency between teachers' cognitions and teaching practices exists not only among preservice teachers but also among in-service teachers. Farrell and Bennis (2013) investigated the self-reported beliefs about language teaching and observed the teaching practices of two English language teachers in Canada. Both teachers' stated beliefs were partly consistent with their teaching practices. For example, one teacher believed in the "test-teach-test" approach. Such stated beliefs were found in all the observed classes. However, he did not present many examples for the students to memorise, as he believed that great memorable sentences were good for students to continue to use in future. In another research, Mitchell (2005) recruited six foreign language high school teachers with different years of teaching experience to explore their beliefs about communicative language teaching and teaching practices. Classroom observations, interviews, reflective journals, and surveys were adopted to collect research data. Research findings revealed that some of the teachers' self-reported beliefs were reflected in their teaching practices, while some were not reflected. Those beliefs

reflected in the teaching practices were found among experienced teachers. Such examples could also be found in other studies (e.g., Breen et al., 2001; Farrell & Bennis, 2013; Farrell & Lim, 2005; Yang & Gao, 2013), which confirm the co-existence of consistency and inconsistency between teacher cognitions and teaching practices.

Identifying the inconsistency between in-service teachers' cognitions and teaching practices is also essential for improving teaching quality because teachers' cognitions influence how they perform and teach in classrooms (Borg, 2003a, 2015b; L. X. Gao & Zhang, 2020; Q. Sun & Zhang, 2022), and teachers' teaching practices inform the development of teachers' cognitions (Kagan, 1992; Pajares, 1992). Therefore, mitigating the gaps between teachers' cognitions and teaching practices can help in-service teachers adjust their practices to align with their cognitions. Moreover, it is helpful for teacher educators to offer target professional development courses and programmes for in-service teachers to improve teaching quality.

Identifying the mismatch between teachers' cognitions and teaching practices is necessary. However, it is far from providing enough support for teacher development. It is equally important to discover the factors that cause the limited consistency between teacher cognition and teaching practices. Fortunately, many scholars have researched this topic, claiming that socio-cultural contexts are the key factors behind the conflicts.

The impact of socio-cultural contexts

The socio-cultural contexts shape teachers' classroom practices, resulting in changes to teachers' cognitions (Borg, 2003b; Z. Fang, 1996). Socio-cultural contexts refer to the social and cultural "realities of the schools and classrooms" (Borg, 2003a, p. 94) where teachers work. According to Borg's definition, there are two facets related to socio-cultural contexts: One of the facets is classroom, and the other is school. Accordingly,

the classroom contexts can be considered as the internal factors that teachers take in control, while the school contexts can be considered as the external factors that are out of teachers' control. According to the literature on the influence of internal and external factors on teaching practices, the internal factors include students' needs, learning abilities, class size, and limited teaching time. As for the external factors, colleagues, accessibility of recourses, school, social culture and policies, and others are included in this category. These factors bring challenges to teaching practices, which ultimately causes limited correspondence between teacher cognition and teaching practices (Devine et al., 2013; L. Li, 2020; Mao & Crosthwaite, 2019; Pahissa & Tragant, 2009; Sanchez & Borg, 2014; Wei & Cao, 2020; Yuan & Stapleton, 2020; Zhao & Zhang, 2022; Zheng & Borg, 2014).

For internal factors, student gender plays a role in shaping teachers' teaching activities. In one study, despite the fact that teachers believed it is important to create a positive learning environment for all students, the scholars found that, compared with all-boys schools, teachers in all-girls schools were more likely to create a positive classroom climate, such as showing respect to mistakes made by their students and trying to engage all students in classroom activities (Devine et al., 2013). In addition, students' learning abilities are also considered when teachers select approaches to teaching. In his study, Gilliland (2015) researched two high school teachers' understanding of L2 writing and their teaching practices by collecting data through interviews and classroom observations. Research findings showed that teachers' teaching approaches to L2 writing were not only guided by their understanding of L2 writing teaching but also guided by their understanding of their students' learning needs of L2 writing.

Moreover, there is evidence showing the impact of time constraints (Basckin et al., 2021; Farrell & Lim, 2005; Hamilton, 2018; Mak, 2011; Mao & Crosthwaite, 2019; Woods

& Çakır, 2011). For example, Mak (2011) explored one EFL teacher's beliefs about communicative language teaching (CLT) in Hong Kong by collecting various types of data, including interviews, questionnaires, research field notes, and classroom observations. The teacher believed that CLT could be applied to Hong Kong EFL teaching, although the teacher was impeded from doing so due to limited time teaching in the classroom. Other studies also confirmed the role of in-classroom factors on the mismatches of teacher cognition and teaching practices (e.g., Garcia-Ponce & Tagg, 2020; Golombek, 1998; Nishimuro & Borg, 2013).

External factors are another reason that causes the mismatch between teacher cognitions and their teaching practices. The external factors include the influence of colleagues, accessibility of recourses, school, educational policies, and so forth. For example, Underwood (2017) explored four Japanese high school EFL teachers' beliefs about the integration of CLT in grammar teaching and their teaching practices by collecting data through questionnaires, teacher journals, interviews, and classroom observations. The research findings of this study showed that one of the teachers, despite the supporting beliefs about CLT, did not integrate the approach into grammar teaching because most colleagues showed unsupportive attitudes to the approach. Pahissa and Tragant (2009) investigated three EFL teachers' beliefs about grammar teaching for writing and their teaching practices in Spanish secondary schools. Data were collected through interviews and teacher's one-on-one feedback meetings with the students. They found that one of the three teachers focused on terminology, translation, and structure when teaching grammar in his writing class, although the teacher believed something new should be brought into the class to make learning grammar more active. The teacher explained further that the underlying reason for the misalignment between his beliefs and practices is the writing exam that every student in the school must pass. The two

examples confirm the influence of external factors in the cause of the mismatch between teacher cognition and teaching practices.

In conclusion, the complex relationships between teacher cognition and teaching practices are manifested in many empirical studies. Both consistency and inconsistency are found. In addition, scholars also explore the underlying reasons for these complex relationships, especially the reasons for inconsistent relationships. Socio-cultural contexts, including schools (external factors) and classrooms (internal factors), contribute to the mismatch between teachers' cognitions and teaching practices.

2.2.2.3 Incorporating student cognitions into the study of teacher cognitions

In the research field of teacher cognition, there is a call for incorporating student cognition into the study of teacher cognition. This is because scholars gradually realise that it is not enough to study only teacher cognition or student cognition in one study to unveil the complexities of cognitions in schooling contexts (Barcelos & Kalaja, 2013; Kubanyiova, 2014; Kubanyiova & Feryok, 2015).

Previous research normally separated teacher cognition and student cognition in one single study. Therefore, little is known about the interrelationship between teachers' and students' cognitions (Borg, 2015; Kiely, 2001; Tsui, 2013). For instance, in Section 2.2.2.2, much has been done to understand teachers' cognitions, such as teachers' cognitions about teaching various subjects at different levels of schools, and the relationships between teacher cognitions and their teaching practices, whereas students may not think the teachers' ideas about teaching are effective. To explain this further, on the one hand, if teachers and students in the same classroom have consistent cognitions about teaching and learning, students would be actively engaged in learning, and teachers may not have to worry about students' motivation. Then, the whole

teaching and learning process would be more effective. On the other hand, if students' cognitions about teaching and learning oppose that held by teachers, students may be less motivated and resist participating in the teaching activities that teachers choose. As a result, the whole teaching and learning process would be negative and ineffective. Therefore, understanding this interrelationship is helpful for classroom teaching and learning activities (A. V. Brown, 2009; Kern, 1995; Schulz, 1996, 2001).

Some scholars contribute to this research field. Their studies into the interrelationships between teacher and student cognition indicated similar research findings in the study of teacher cognition and their teaching practices. Both consistency and inconsistency are identified. For example, Kern (1995) investigated 288 students' and 12 teachers' beliefs about learning French at the University of California, Berkeley. The instrument for data collection was the Beliefs about Language Learning Inventory (BALLI). Research findings showed that, overall, teachers' and students' beliefs were consistent. However, some inconsistencies were found if all L2 teachers' classes were taken as a single group. For example, the researcher found when it comes to accent, students believed that they should speak French with a good accent like the native speaker, while teachers did not hold the same beliefs as their students. Furthermore, in terms of learning grammar, teachers strongly disagreed with learning many grammar rules, whereas students had mixed beliefs about this. The discrepancies between teachers' and students' beliefs about grammar are also evident in Schulz (2001). In the study, Schulz recruited 607 Colombian students and 122 of their teachers, 824 American students and 92 of their teachers as the questionnaire respondents to explore their perceptions about grammar instruction and corrective feedback in foreign language learning. Results showed many mismatches between teachers' and students' perceptions in each cultural group. For example, while most students believed that their grammar errors should be

corrected by teachers immediately in the class, more than 50% of the teachers believed they should not do so in the class. Apart from grammar instruction, similar research findings are also evident in other aspects of language learning. Chavez (2007) examined teachers' and students' attitudes towards the degree of German oral accuracy in terms of grammar, phonology, pragmatics, and lexicon in the U. S. Two questionnaires, one for teachers and the other for students, were administered in each group. Twenty-three German language teachers and 369 German language students completed the corresponding questionnaire. The results showed that beginning German language students tended to believe they should achieve high accuracy when speaking German, whereas their teachers believed that it was appropriate for students to make mistakes when speaking German.

After reviewing the empirical studies above, limited correspondence between teachers' and students' cognitions was found regarding different aspects of language learning. For example, there were discrepancies between teachers' and students' ideas about immediate corrections on students' grammar errors made in classes. In the meantime, researchers also pointed out the underlying reasons that cause such limited correspondence. It reveals that reasons that cause the limited correspondence between teachers' and students' cognitions are included but are not limited to students' prior learning experiences, students' motivation for learning, cultural contexts, learning resources and learning goals (Brown, 2009; Hu & Tian, 2012; Schulz, 1996, 2001). With an insight into the discrepancies between teacher and student cognition, as well as the underlying reasons for such discrepancies, the interplay between the two sets of cognitions could be clearly understood. In addition to that, the understanding of such interplay provides a number of meaningful implications for teaching and learning, such as "misunderstanding and miscommunication, challenges by students to their teacher

credibility, the engagement of the learner in strategies disapproved of by their teachers, and withdrawal and feelings of unhappiness experienced by students" (Barcelos & Kalaja, 2013, p. 387).

2.2.2.4 Research methods adopted for investigating teacher cognitions

By reviewing the literature on teacher cognition, both quantitative and qualitative methods are used to investigate teachers' cognitions. Accordingly, instruments for data collection included questionnaires, interviews, and classroom observations. These three instruments are the most commonly used ones (Borg, 2015b). Reasons for using different instruments to collect various forms of data to investigate teachers' cognitions are mainly due to the complexity of teacher cognitions. As most researchers suggested, teacher cognition is related to teachers' psychological development. It can hardly be directly observed or touched (Borg, 2006; Kagan, 1990; Pajares, 1992). Therefore, investigating teachers' psychological activities calls for different forms of data to reflect this complex construct from different aspects.

As for questionnaires, the Likert-scale questionnaire has been widely used in this research field. The Likert-scale questionnaire can be further categorised into a ready-to-use Likert-scale questionnaire, a very mature questionnaire tested for reliability and validity and generalised into different research contexts. On the other hand, some researchers are in favour of self-developed questionnaires with the purpose of using these questionnaires to answer particular research questions. Regarding the ready-to-use Likert-scale questionnaires, Beliefs about Language Learning Inventory (BALLI) developed by Horwitz (1985, 1987) might be the most widely used one. Many scholars have adopted this questionnaire in their research to investigate teacher cognition and extended their studies into different contexts (e.g.,, Abdolahzadeh & Rajaee Nia, 2014;

Aslan & Thompson, 2021; Chawhan & Oliver, 2000; Duisembekova & Özmen, 2020; Javid & Al-malki, 2018; Jusoh, 2017; Kern, 1995; Peacock, 1999; Wong, 2010). Apart from the ready-to-use BALLI questionnaire, other self-developed Likert-scale questionnaires are adopted by researchers to address teacher cognition (e.g., Bell, 2005; Cheung & Leung, 2013; López López & Hinojosa Pareja, 2016; Nishino, 2012; Quirk et al., 2010; L. J. Zhang & Sun, 2022).

Using Likert-scale questionnaires to explore teachers' cognitions has advantages and disadvantages. For the advantages, it is an effective and economical way to collect data from a large group of respondents quickly. On the other hand, however, the disadvantages of using this instrument are also evident, as Dörnyei (2007) said, "quantitative methods are generally not very sensitive in uncovering the reasons for particular observations…" (p. 35). This is also a common problem in using other types of questionnaires. In addition, teachers may complete the questionnaire with ideal and socially desirable answers, which fulfil the researchers' expectations, rather than giving their real opinions (Borg, 2015b). Therefore, many scholars tend to use qualitative methods to gain insight into teacher cognition.

Many qualitative instruments are also used to explore teacher cognition. Specifically, the most frequently used instruments are interviews (such as semi-structured interviews, focus groups, and stimulate recall) and authentic observations, especially classroom observations. In brief, semi-structured interviews are conducted one-on-one, which allows participants (teachers and students) to flexibly express their ideas, although some predetermined questions are set (Kvale & Brinkmann, 2015). For example, Couper (2017) conducted semi-structured interviews with 19 English Language Teachers in New Zealand to explore their cognitions about pronunciation teaching. In a recent study, Gao et al. (2020) used semi-structured interviews as one of the

instruments to collect the data to explore data through semi-structured interviews to explore five Chinese university EFL listening teachers' cognitions about the sources of listening anxiety. Both studies adopted semi-structured interviews as the predominant instruments in their research.

However, some scholars claim that one-on-one interviews are time and energy-consuming, and therefore, they prefer focus group interviews. Focus group interviews aim to gather collective ideas from participants towards specific topics by asking participants to attend interviews as small groups (Oates & Alevizou, 2018). This method allows participants and the interviewers to interact with each other. Thus, thoughtful meanings may be generated during the interactions. For example, Burri et al. (2017) used focus group interviews to explore 15 student teachers' teacher cognition development and identity changes in the context of pronunciation teaching. In another study, Widdowson et al. (2015) extended focus groups into secondary schooling. They took focus groups as the sole instrument to explore secondary school students', parents', and teachers' beliefs about the goal of secondary learning. Results generated from these studies were built on the interactions between interviewers and the participants in a supportive environment, which could improve the data quality (Oates & Alevizou, 2018).

Stimulate recall interviews, as the third frequently used instrument, like semi-structured interviews, are also conducted one-on-one but are usually used to explore different teaching practices and help researchers interpret different reasons underlying teachers' instruction decisions (Borg, 2006). This is because, during the stimulated recall interviews, teachers are provided with video recordings of their behaviours in the classroom. Then, they are required to comment on their own teaching activities, which forms the basis for data analysis (Lyle, 2003). Such an instrument is often used in

connecting teacher cognitions to teaching practices (e.g., Jackson & Cho, 2018; Lim, 2016; Liviero, 2017).

Authentic observation is another principal instrument in the research field of teacher cognition. Compared to interviews that ask teachers to articulate their ideas, observations usually require researchers' participation in the data collection process, as this instrument is often used to examine what happens in the class (Creswell & Guetterman, 2019; Dörnyei, 2007). So, it is an effective method to investigate teachers' instructional approaches and decision-making strategies. Accordingly, these observed data can be compared with teachers' articulations or answers to the self-stated questionnaires to identify the relationships between teacher cognition and their teaching practices. Many studies report the results of the observed teaching practices and the interplay between the self-stated cognitions and the observed practices (please see the reviewed literature in section 2.2.2.2). While used to elicit teachers' teaching behaviours, the data collected from observations are also employed in many studies as the basis of stimulating recall interviews to explore teachers' cognitions. This has been reviewed above.

Other methods are also identified to explore teacher cognitions, such as reflective writing, Think-aloud protocols, and document analysis (Barnard & Burns, 2012). Reflective writing is a kind of narrative writing, the self-reflection or working note written by teachers. Think-aloud protocols usually assign teachers tasks and ask them to articulate their thoughts while completing them. Document analysis is to analyse teachers' lesson plans or other teaching-related documents. These instruments, however, according to a review of recent studies conducted from 2016-2018, are less frequently used, while interviews with the support of authentic classroom observations become predominant in exploring language teacher cognition (Borg, 2019). This may mostly be

because these methods would probably increase the participants' extra workload (Borg, 2015b). In addition, the think-aloud protocols would hardly be achieved. This method requires participants to articulate their thinking while doing the assigned tasks. Situated in the context of exploring teacher cognition, it seems unrealistic to ask teachers to express their thoughts while teaching in the class. This may be why it is less frequently used to explore teacher cognitions.

To sum up, both quantitative and qualitative methods have been used in studies to explore teacher cognitions. Quantitative methods are effective in gathering collective results from a large group of populations in a short period, and the research results are normally general, while qualitative methods provide an in-depth understanding of teachers' mental constructs and the research results are contextualised and individualised (Barnard & Burns, 2012; Borg, 2006). However, the recent research trend in teacher cognition has seen the methodological shift from collecting a single form of data to multiple forms of data. Compared with a single form of data, multiple forms of data could be used to triangulate one form of data with other forms of data. Teacher cognition is a complex construct. It needs to be investigated from different lenses by adopting various methods. Thus, multiple forms of data could reduce the limitations of a single form of data. This is the reason why the methodological shift happens. Against this backdrop, many researchers recently tend to use a mixed-methods design in their studies to explore teacher cognition. In a mixed-methods design, both quantitative and qualitative data will be collected (e.g., Burri et al., 2017; Sun et al., 2022; Wu et al., 2019; Yunus et al., 2016). The different data sets will be used for data triangulation in the end.

2.2.3 Research on translation teacher cognitions and student cognitions

Translation teachers, in fact, have long been under-researched in the field of translation studies in various socio-cultural contexts, including China. Studies addressing translation teachers mainly focus on the status quo of translation teachers, the qualifications of translation teachers, and translation teacher competence. Table 2.6 briefly summarises these studies.

Table 2.6 Studies related to translation teachers in China and other cultural contexts

Topics	Source	Methods	Research contexts
Status quo of translation teachers	Mu (1999), R. Zhang and Chen (2012)	Quantitative study	China; Little research in the contexts of other countries
Qualifications of translation teachers	Caminade and Pym (1998), Gabr (2001), Englund Dimitrova (2002), Han (2008), Bao (2009)	Theoretical reflections	China and other countries, such as Egypt and Sweden
Translation teacher competence	Kelly (2008, 2014), Orlando (2019), S. Wang and Li (2021)	Theoretical reflections	China and other countries

Table 2.6 shows that research into the status quo of translation teachers gains much more attention than in other countries (Mu, 1999; R. Zhang & Chen, 2012). However, scholars from a wide range of cultural contexts discuss the qualifications of translation teachers (e.g., Bao, 2009; Caminade & Pym, 1998; Englund Dimitrova, 2002; Gabr,

2001; Han, 2008). Finally, the most extensively researched topic is translation teachers' competence. Scholars not only analyse what kinds of competence translation teachers should acquire but also create many competence frameworks to address this topic (Kelly, 2008, 2014; Li & Zhang, 2011; Orlando, 2019; Qin, 2016; Wang & Li, 2021). Despite the various topics in the research on translation teachers, few studies address translation teachers' cognitions. Therefore, little is known about what translation teachers think of translation teaching. In addition, regarding methodological issues, most existing research reflects the scholars' theoretical knowledge. Then, it calls for more empirical studies in this research field.

Fortunately, as translation studies advances into the new era, some scholars acknowledge the role of teacher cognition in the research field of translation studies. Scholars point out that translation studies pays much more attention to the study of translating, translation teaching content, and translation curriculum but ignore translation teachers (Kelly, 2008; Kiraly, 2017; B. Lv, 2018). Table 2.7 summarises the studies that explicitly investigate translation teacher cognitions. As seen, research topics cover translation teachers' cognitions about approaches to translation teaching, their identity, their abilities to teach translation, and translation competence. However, all studies are conducted by Chinese scholars, with two being exploratory. It indicates that the research on translation teacher cognition is in its infancy. Although few studies conducted by Western scholars explicitly focus on translation teacher cognitions, some implicitly contribute to this research field.

Table 2.7 Studies explicitly focused on translation teacher cognitions

Topics	Source	Methods	Aim
Translation teachers' and students' beliefs	X. Li (2018)	Exploratory case study	To explore Chinese-English translation and interpreting teachers' and students' beliefs about approaches to translation and interpreting teaching;
Translation teachers' identity	Qin and Wang (2018)	Qualitative study	To understand translation teachers' identity changes;
Translation teachers' self-efficacy beliefs	Wu, Wei, and Mo (2019)	Exploratory case study	To explore factors that affect translation teachers' self-efficacy beliefs;
Translation teachers' and students' cognition	Wu, Zhang, and Wei (2019)	Mixed methods study	To investigate translation teachers' and students' cognitions about translation competence.

For example, Pinto and Sales (2008) investigated translation teachers' views of their students' translation competence. They focused on the students' information technology competence. Data were collected through semi-structured questionnaires. Research findings showed that translation teachers regarded competence, such as information synthesis, information searching and retrieving, and the use of various databases, as crucial. However, their students' level of achievement in this competence was relatively low. In another study, Torres-Simón and Pym (2016) explored 252 translation and interpreting teachers' perceptions of the relationships between their professional practices and research activities. Most teachers thought their professional practices and academic research work had mutually informed each other. Professional practices provide sources for conducting academic research. Academic research, in turn, provide theoretical support for their professional practices while making translation or

interpreting decisions. This study also implies that translation teachers are born with multiple identities. They are teachers, trainers, professional translators, and scholars. Accordingly, the exploration of their mental dimensions relating to these identities may have significant implications for translation studies and the research field of teacher education.

To sum up, despite scholars showing interest in investigating translation teachers, little is known about translation teachers. Many other topics, such as translation teachers' cognitions about various aspects of teaching and teaching practices, have yet to be addressed. Due to the lack of research on translation teachers, little is known about translation teachers' cognitions about approaches to translation teaching. However, many scholars have proposed and framed a variety of approaches to translation teaching (see reviews in section 2.1). For these reasons, the need to understand translation teachers' cognitions about approaches to translation teaching is manifest.

2.2.3.1 Gaps between translation teachers' cognitions and teaching practices

In the research field of teacher cognition, teacher cognition is the best indicator of teachers' actual behaviours in classrooms of various contexts or vice versa. Therefore, investigating the interplay between teacher cognitions and teaching practices becomes a typical research design for most researchers in educational research. However, as discussed above, in the translation education research field, research is scarce on translation teacher cognitions about approaches to translation teaching. Accordingly, little is known about the relationship between translation teachers' cognitions and teaching practices regarding specific approaches to teaching.

With more understanding of approaches to translation teaching, in particular with newly introduced approaches being applied to translation classes, teachers may encounter

difficulties implementing such new approaches in their own classes (González-Davies & Enríquez-Raído, 2016; D. Wu et al., 2021) because of many contextual factors, such as socio-cultural limit, accessibility of resources, and school policies. While translation scholars realise factors that may constrain translation teachers from implementing new teaching approaches, they ignore one of the most underlying factors for such phenomenon: teacher cognition. For example, it appears possible that teachers may be reluctant to adopt new teaching approaches not due to contextual factors, but because they do not perceive any potential benefit for themselves or their students. Therefore, there is a need to observe translation teachers' real teaching activities, in order to unveil the relationship between translation teachers' cognitions about approaches to translation teaching and their real teaching practices.

2.2.3.2 Status quo of research on translation student cognitions

The current research on translation student cognitions reflects a similar status quo to the research on translation teacher cognitions, with few studies explicitly and implicitly investigating translation students' cognitions. Studies that explicitly investigate translation student cognitions include translation students' metacognition (Hu et al., 2021), their conceptual knowledge (Chodkiewicz, 2021), and translation students' cognition about teaching approaches, such as project-based approach (Li et al., 2015), and teacher-centred approach (Klimkowski & Klimkowska, 2012; X. Li, 2018). Studies implicitly exploring translation student cognitions include students' conceptions of translation workflow (Konttinen et al., 2020) and their perceptions of entrepreneurship in a translation programme (Galán-Mañas & Olalla-Soler, 2021). These studies, including explicit and implicit focuses on translation students' cognitions, have been conducted in recent years, which implies that scholars' awareness of the significance of

research on translation students has increased. Considering the need to incorporate student cognition into the research on teacher cognition (as reviewed in section 2.2.2.3), it is necessary to include translation students' cognitions in the current study. This may identify the mismatch between translation teachers' and students' cognitions, thereby facilitating effective translation teaching. Therefore, it is necessary for the current study to explore translation students' cognitions about approaches to translation teaching.

2.2.4 Summary of the research on teacher cognitions

According to the literature reviewed above, research on teacher cognition and teaching practices can be concluded as follows:

- Teachers' mental dimensions are complex.
- Researchers have no widely agreed definitions and terms regarding teachers' mental dimensions.
- Teacher cognition is an umbrella term covering teacher knowledge, beliefs, attitudes, perceptions, conceptions, values, and so forth.
- Teacher cognitions are mainly developed from their experiences, including schooling (learning experiences as learners), professional coursework (teacher education programmes), and teaching experiences.
- Teacher cognitions and teaching practices are mutually informed. Teacher cognitions are reflected in their teaching practices, and in turn, their teaching practices contribute to the changes in teacher cognitions.
- Teachers' cognitions could be consistent and inconsistent with their teaching practices. The inconsistency of teacher cognitions and teaching practices is caused by socio-cultural contexts, which include internal and external factors.
- There is a call for connecting teacher cognitions to student cognitions in one

study, as understanding the interplay between them could be conducive to effective teaching and learning.

- Quantitative, qualitative, and mixed methods have been adopted to explore teacher cognition. Research instruments in such research design include questionnaires, interviews, observations, reflective writing, think-aloud protocols, and document analysis. A mixed-methods design which allows data triangulation becomes prevalent in the research field of teacher cognition.
- Research on translation teachers is limited. Little is known about translation teachers, not to mention their cognitions about specific aspects of translation teaching.
- Little is known about the relationships between translation teachers' cognitions about various approaches to translation teaching and their actual teaching practices. However, translation scholars have proposed many approaches to translation teaching.
- Similar to translation teacher cognitions, research on translation student cognitions is scarce. Little is known about how translation students think of their teachers' approaches to translation teaching. So, it is necessary to link translation teachers' cognitions about translation teaching to their students' cognitions about translation teaching.

The summary of this section reveals the research gaps in the current study of translation teacher cognitions. We generally know little about translation teachers, their teaching practices, and their students. However, these topics have been extensively researched in the research field of teacher education. In response to these gaps, the current research adopted a convergent mixed-methods design to explore a group of Chinese postgraduate translation teachers' cognitions about approaches to translation teaching

and their teaching practices. Moreover, this study explored the factors that affected the relationship between translation teachers' cognitions and teaching practices. Finally, the current study investigated translation students' cognitions to gain insight into the relationship between translation teachers' and students' cognitions. Details of the research design have been described in the next chapter.

Chapter 3 Methodology

This chapter first gives an overview of the research design, followed by the rationale of the research methods. Then, it provides detailed explanations of instruments and procedures for quantitative and qualitative data collection and analysis. This chapter ends with a discussion of the ethical considerations in data collection and analysis.

3.1 Overall research design

The present study adopted a mixed-methods approach. It refers to an approach in which "…the investigator collects and analyses data, integrates the findings and draws inferences using both qualitative and quantitative approaches or methods in a single study or a programme of inquiry" (Tashakkori & Creswell, 2007, p 4.). Accordingly, this study collected qualitative and quantitative data by using interviews, classroom observations and questionnaires. At the end of the study, both qualitative and quantitative findings were used to answer the research questions.

The reasons for adopting the mixed methods are as follows: One dataset may be insufficient to generate more complete results and provide detailed evidence to support the results (Creswell & Plano Clark, 2017). In general, quantitative data are typically comprised of numerical scores aiming to provide quantified information from a large group of people. By doing so, quantitative results could be more easily generalised to a larger population. However, the results ignore the deep understanding of any participant. On the other hand, qualitative data provide a detailed understanding of a problem by collecting participants' words, while the data are difficult to generalise the results (Creswell, 2018). Therefore, a mixed-methods approach combining both quantitative and qualitative data may generate more reliable and complete results by mitigating the

limitations of using one method in a single study (Creswell & Plano Clark, 2017; Tashakkori & Creswell, 2007). In addition, the criteria for a researcher to utilise a research method may largely depend on research problems or questions. For example, quantitative analysis better explores the relationships between different variables, and qualitative analysis is more effective in investigating what and why a factor may influence a research question. In the present study, I have explored the relationship between translation teachers' cognitions and their students' cognitions (Research question 5, see Section 3.2), as well as the factors that influenced translation teachers' and students' cognition (Research question 1.2 and 3.1, see Section 3.2). In this regard, both quantitative and qualitative analysis have been adopted in the present study to answer the research questions. Hence, a mixed-methods approach that integrates quantitative and qualitative methods has been used.

In summary, by adopting a mixed-methods approach in a single study, "the limitations of one method can be offset by the strengths of the other, and the combination of quantitative and qualitative data provides a comprehensive understanding of the research problem than either approach by itself" (Creswell & Clark, 2018, p. 13). Therefore, a mixed-methods approach was adopted in the current study. Having explained the rationale for a mixed-methods design, the next step is to choose the best inquiry approach to answer the research questions. In general, there are three core inquiry approaches in a mixed-methods research design. They are the convergent approach, the explanatory sequential approach, and the exploratory sequential approach. Table 3.1 illustrates the major differences between them.

Table 3.1 Differences between the three major approaches in a mixed-methods research design

Approach	Intent of the design	Relationships between the two data bases	Ways of interpreting results
Convergent	Collect diverse but complementary data for the same research questions;	Quantitative and qualitative data have equal importance.	Results from two databases will be merged for interpretation.
Explanatory sequential design	Qualitative data used to explain initial quantitative results;	Greater importance will be placed on quantitative data.	To what extent could qualitative results explain quantitative ones.
Exploratory sequential design	Qualitative results used to inform and design a quantitative method.	Greater importance will be placed on qualitative data.	To what extent could qualitative results be generalised or tested by quantitative results.

Specifically, the convergent approach refers to collecting both quantitative and qualitative data separately and then combining the data from two different sources for analysis. This approach is helpful when re

searchers aim to merge statistical numbers (quantitative) and in-depth descriptions (qualitative) to understand the research questions best. The explanatory sequential approach is quantitative data that will be collected and analysed in the first stage. Subsequently, the analysed quantitative data will be used to prepare for collecting qualitative data. This approach will be adopted when the researcher has a stronger knowledge background in quantitative methods. Meanwhile, the research questions have a more quantitative orientation. The exploratory approach is a reversed explanatory approach by collecting and analysing qualitative data in the first stage. Then, the qualitative results will be used for planning the quantitative phase. This

approach is more useful when the researcher and the research questions are more qualitatively focused. In addition, there is enough time for the researcher to conduct the research in three sequential stages.

As can be seen, the convergent design is the most time-efficient because it allows researchers to collect quantitative and qualitative data in the same stage. In addition, it is the most familiar design to new researchers, as they will "first think of this approach because they feel that mixed methods only consist of combing the quantitative and qualitative data" (Creswell, 2018, p. 217). In comparison, the other two designs are more quantitatively or qualitatively oriented. Extra time will be spent on collecting data in sequential order. However, although there are differences among the three core designs in terms of intention, the sequence of data collection and the interpretation of results, the first thing that needs to be considered when choosing an appropriate inquiry design for a mixed-methods approach is the research questions.

In this regard, the present study adopted a convergent design to understand the research problems best. The present study intends to:

- Investigate Chinese university translation teachers' and students' cognitions about approaches to translation teaching: A survey allowed me to identify the collective cognitions and draw conclusions about a large proportion of the population in a short period by studying a sample of this population.
- Explore the relationships between teachers' cognitions and teaching practices: Detailed qualitative studies allow me to interview teachers and observe their classes to obtain an in-depth and detailed meaning of how teachers' cognitions form and how their cognitions interact with their teaching practices.

A convergent design in the current study comprises four steps (see Figure 3.1). In the

first step, it aimed to collect both quantitative and qualitative data by using self-developed questionnaires, interviews, and classroom observations. In the second step, quantitative and qualitative data were analysed by various approaches. In the third step, several strategies were used to merge the results generated from the two databases. These strategies include comparing and synthesising the results that represent both data bases. The last step aimed to interpret the merged results. This consists of summaries of results from each data base, different interpretations of results from both databases, discussions of the similarities and differences between the two types of data, and explanations of the divergence that occurred.

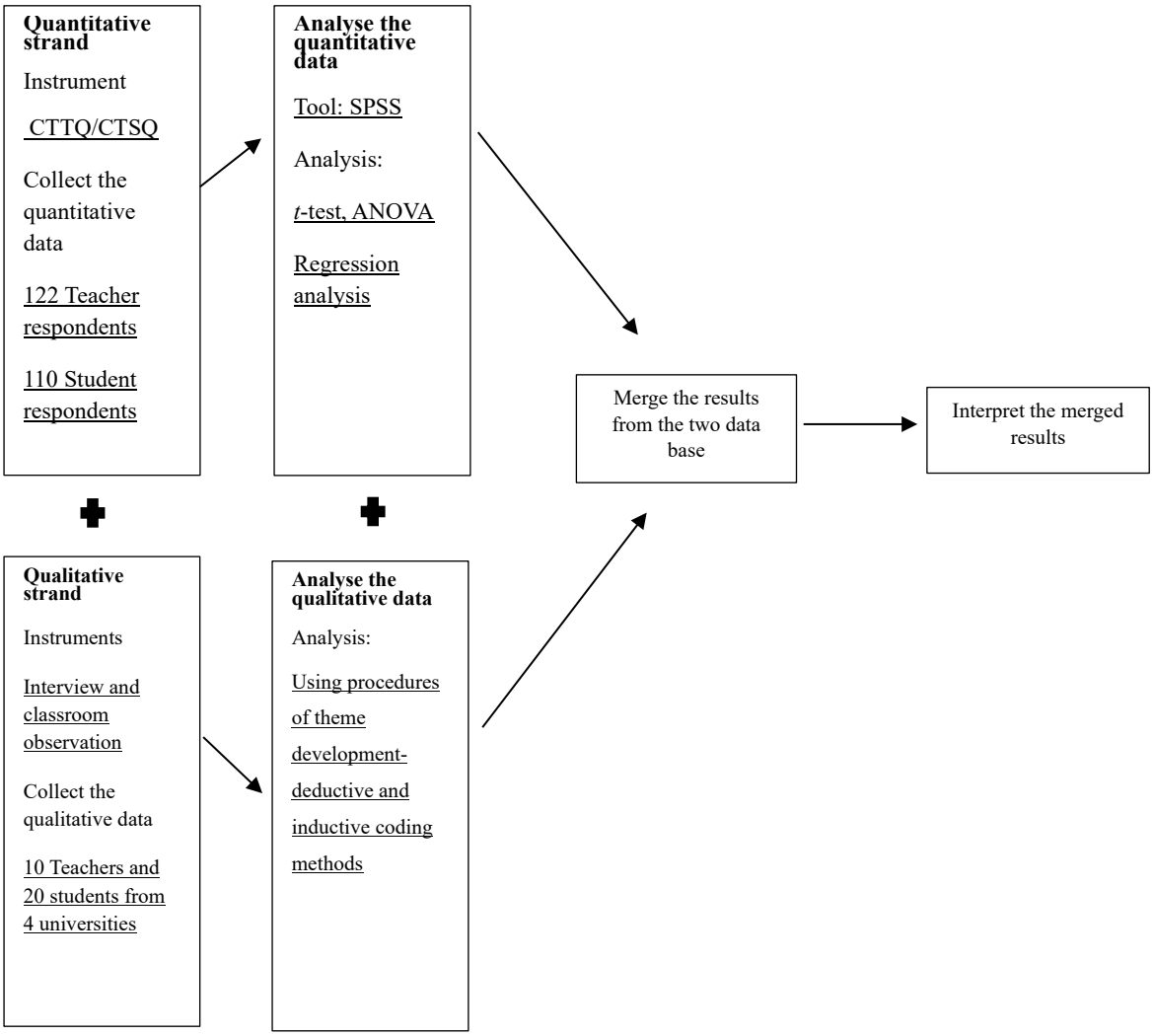


Figure 3.1 The convergent design in the current study

3.2 Research questions

The present study aimed to explore Chinese university translation teachers' cognitions about approaches to translation teaching and teaching practices and the students' cognitions. These served as umbrella ideas that guided the whole research. Accordingly, three general questions were asked:

1) What are Chinese university translation teachers' cognitions about approaches to translation teaching?
2) How can Chinese university translation teachers' teaching practices be characterised?
3) What are Chinese university translation students' cognitions about approaches to translation teaching?

The three general research questions relate to teachers' cognitions, teaching practices and students' cognitions. As mentioned in the previous section, a convergent inquiry design was adopted in the present study to better understand the research questions. Therefore, each general question can further be divided into more specific sub-research questions.

Two sub-questions are related to teachers' cognitions:

1.1 Are there any differences in cognitions about approaches to translation teaching held by Chinese university translation teachers with different backgrounds?

1.2 What are the factors that influence Chinese university translation teachers' cognitions?

Two sub-questions are related to teachers' teaching practices:

2.1 Are there any differences in the teaching practices of Chinese university translation teachers with different backgrounds?

2.2 What are the factors that influence Chinese university translation teachers' teaching practices?

One sub-question is related to Chinese university students' cognitions about approaches to translation teaching:

3.1 What are the factors that influence Chinese university translation students' cognitions?

A discussion was conducted on the relationship between teachers' cognitions and their teaching practices and the relationship between teachers' and students' cognitions. Subsequently, two additional research questions were asked to resolve these problems:

4) Are there any relationships between Chinese university translation teachers' cognitions and their teaching practices? If so, do any factors contribute to these?
5) Are there any relationships between Chinese university translation teachers' cognitions and students' cognition about translation teaching? If so, do any factors contribute to these?

3.3 Participants

Participants in this study included translation teachers and students. Both have been involved in quantitative and qualitative data collection. Sampling strategies for selecting participants for the two datasets are presented separately. The representativeness of the participants selected is also explained.

3.3.1 Participants for quantitative data

Participants for quantitative data are respondents answering questionnaires. Respondents chosen as the population samples in the current study comprised 122 Chinese university translation teachers and 110 students. Firstly, Chinese university translation teachers refer to those teaching C-E/E-C intensive translation courses in postgraduate programmes in Chinese universities. Translation teachers in undergraduate programmes were excluded because of different teaching goals and curricula. Accordingly, the sample of the teacher population is all the Chinese university translation teachers I could reach. Secondly, Chinese university translation students refer to those studying C-E/E-C translation in postgraduate programmes in Chinese universities. So, the student population sample is all the Chinese university translation students that I could reach.

3.3.1.1 Strategies for targeting teacher and student respondents

Convenience, snowball, and random sampling strategies were applied to the current study to target the teacher and student respondents. Convenience sampling emphasises accessibility. The rationale behind this sampling strategy is that although it is ideal to include the entire population in a survey, it is impossible to do so because the population is too huge. Therefore, convenience sampling is defined as "researching subjects of the population that are easily accessible to the researcher" (Etikan et al., 2016, p 2). The convenience sampling strategy was used in this study because I was more likely to gain access to a group of university translation teachers and students in the Greater Bay Area (GBA) while collecting the data (see Section 3.5.1 for reasons to choose GBA as the location for data collection).

The snowball and random sampling were used in a combined way, as Goodman (1961) claimed that snowball sampling is " a random sample of individuals drawn from a given finite population" (p. 148); that is, I could, firstly, contact some respondents. Then, the respondents being contacted in the first stage were required to name different respondents randomly. Lastly, the randomly named respondents in the second stage were then asked to name other respondents who were neither in the convenience sample nor the first two stages of the snowball sampling. This procedure would continue until the resources of the sample were exhausted.

3.3.1.2 Representativeness of sample population

Representative in a quantitative inquiry means "the selection of individuals from a sample of a population such that the individuals selected are typical of the population under study, enabling you to draw conclusions from the sample about the population as a whole" (Creswell & Guetterman, 2019, p. 139). Despite including all relevant individuals being ideal, it seems unrealistic to do so in practice. To resolve this problem and ensure diverse presentation, Creswell and Guetterman (2019) suggested that researchers use multiple sampling strategies to target a specific group of people within the population, such as simple random sampling, convenience sampling, and snowball sampling.

In this study, these strategies were employed. Convenience sampling facilitated access to the Greater Bay Area participants, while snowball sampling extended the sample across China. Comparing demographic data with prior studies conducted recently and 10 years ago confirmed the consistency among Chinese university translation teachers. For example, according to Zhang and Chen (2012) and Wu et al. (2019), most Chinese translation teachers at tertiary levels were under their 50s. This is also true in the current

study, with more than 70% of the sample under their 50s. Regarding types of working institutions, both Wu et al. (2019) and the current study found that around 70% of the sample population worked in universities other than 985-Project and 211-Project universities. Given the similarities among the three studies, it can be argued that the demographic information of the teachers across 10 years remains consistent. Considering their studies involved larger groups of translation teachers, n = 328 in Zhang and Chen (2012) and n = 144 in Wu et al. (2019), it is reasonable to claim that the respondents in the current study represented Chinese university translation teachers.

Similar conclusions can also be drawn by examining the demographic characteristics of translation students, as seen in Table 4.2 in Section 4.1.2. Translation students varied regarding their genders, ages, learning programmes, translator certificates, and so forth. It can be argued that this group of student respondents can represent Chinese university translation students as a whole.

3.3.2 Participants for qualitative data

Qualitative participants in the current study involved 10 translation teachers and 20 of their students. Definitions of Chinese translation teachers and students for qualitative data are the same as those for quantitative data (see Section 3.3.1).

3.3.2.1 Strategies for selecting teacher and student participants

Identifying teacher and student participants depends primarily on a purposive sampling strategy. This strategy is defined as "the deliberate choice of a participant due to the qualities the participant possesses" (Etikan et al., 2016, p. 2). Since participants would be deliberately selected, it may cause a limitation on the range of sample diversity. To increase the possibilities of sample diversity, the main consideration of using a

purposive strategy is to maintain the maximal variation of the sample (Etikan et al., 2016).

Maximal variation is functional when researchers set out to understand a particular topic by gathering viewpoints from different groups of people. Correspondingly, research purposes can be examined from various angles (Creswell, 2018). Since the qualitative data in this study explored how teachers and students think about translation teaching and how teachers behave in their classrooms, a purposive sampling strategy with maximal variation was used in the current study to recruit teacher and student participants for qualitative data collection.

3.3.2.2 Identifying teacher participants

As discussed in the above section, teacher participants would be identified using a purposive sampling strategy with maximal variation. This is achieved by keeping teachers diversified in age, gender, teaching experience, academic rank, teaching courses, and so forth. To do so, it is unlikely to complete the recruitment in a one-off screening. Therefore, three rounds of screening were taken. Table 3.2 presents an overview of the three rounds of screening.

Table 3.2 Overview of procedures to identify teacher participants

Round	Number of teachers recruited	Gender	Academic rank	Teaching experience
Round 1	5 from the same university	4 Male 1 Female	3 Prof 1 AP 1 Lecture	4 very experienced 1 inexperienced
Round 2	3 from two different universities	2 Male 1 Female	1 Prof 2 AP	1 very experienced 2 experienced
Round 3	2 from the same university	1 Male 1 Female	1 AP 1 Lecture	1 experienced 1 inexperienced

Note: Prof=Professor; AP= Associate Professor; Teaching experience: very experienced= more than 10 years; experienced= 5-10 years; inexperienced= less than 5 years.

Locations to collect qualitative data were within the Greater Bay Area (GBA). The reasons for choosing this location are presented in Section 3.5.1. Due to ethical restrictions, all participants had to be chosen from a pool of voluntary participants. In the first round, I contacted one of the institutions in GBA that I frequently communicated with, A University. A total of five teachers expressed willingness to participate, and they were all included. The five teachers worked in the same Faculty, and four had more than 10 years of teaching experience. To maximise the variation, a second round of recruiting was considered to involve teachers who are from different institutions and whose teaching experience is less than 10 years. Therefore, three teachers from two universities were identified, including one from B University and two from C University. The teacher from B University met the criteria for recruiting teachers from universities other than A University. The teachers from C University had fewer than 10 years of teaching experience. However, after the two recruitment rounds, I found that only one inexperienced teacher and two female teachers were involved in

this research. So, I decided to conduct the third round of recruitment. In round three, two teachers from D University were involved, including one experienced male teacher and one inexperienced female teacher. The reason for recruiting the experienced male teacher is that he was teaching a translation course different from the other nine teachers. Considering this could further enlarge the range of course differences in the sample of the qualitative population, this teacher was engaged in this research. It was not until the end of the third round of recruitment that I was convinced that no more recruitment was needed, as it may not contribute to qualitative data analysis. Eventually, 10 teachers from four universities were selected.

3.3.2.3 Identifying student participants

A purposive sampling strategy with maximal variation was also used to identify student participants. As my time was limited, I could not engage too many student participants in the research. Considering this factor, I recruited two students from each teacher participant's class. In the end, 20 student participants were identified. The 20 students were identified by considering their backgrounds, such as gender, undergraduate learning experience, working experience, and so forth. This is to ensure that maximal variation is maintained. When recruiting teacher participants, I told the teachers that the present study would also investigate their students' cognitions. I hope the teachers can help me with recruiting student participants. With the teachers' consent, I distributed an online Background Information Sheet to their students. Students interested in participating in the research were required to voluntarily fill in the sheet and email it back to me.

3.3.2.4 In-depth description of qualitative participants

Unlike quantitative research, which intends to generalise outcomes from the selected sample to a population, qualitative researchers intend to select individuals to provide a "rich description" (Gibbs, 2018, p. 4) of social processes. In addition, these selected individuals are better varied in demographic backgrounds, which enables qualitative researchers to develop in-depth descriptions from multiple perspectives (Creswell & Guetterman, 2019).

To achieve these two goals, three rounds of teacher recruitment were implemented to maximise sample variation by using a purposeful sampling strategy (see Table 3.2 in Section 3.3.2.2). As Creswell and Guetterman (2019) claimed, "this procedure [maximal sampling] requires that you identify the characteristic and then find sites or individuals that display different dimensions of that characteristic" (pp. 207-208). Thus, I analysed teacher participants' basic backgrounds at the end of each round. The analysed information served as the recruitment requirement in the next round until the maximal variation was achieved. By doing this, the teacher participants varied in their backgrounds regarding age, gender, qualifications, and so forth (see Table 5.1 in Section 5.1.1). Student participants were recruited in a similar way. I sent out a Background Information Sheet to the students interested in participating in my study. Then, I chose students based on the information they provided to make sure that students participated in the interviews with various backgrounds (see Table 5.2 in Section 5.1.2)

Regarding the thick or in-depth description provided by the participants, both teachers' and students' interviews were semi-structured, which means they would not be asked questions strictly restricted to the interview guide. Instead, I asked follow-up questions not in the interview guide but were relevant to my research questions. Then, teachers

and students were allowed to discuss the follow-up questions in-depth. This provided possibilities for teachers and students to give abundant and meaningful information.

3.4 Instruments

3.4.1 Questionnaires

Questionnaires in this study were adopted to collect quantitative data related to teachers' and students' cognitions about approaches to translation teaching, factors that influence their cognition formation, and translation teachers' teaching practices. With its unique feature that allows researchers to collect a large amount of data quickly, the questionnaire has become one of the most prevalent instruments applied in social sciences. It has been extensively used to measure three core data types, including factual, behavioural, and attitudinal (Dörnyei & Taguchi, 2009). According to Dörnyei and Taguchi (2009), factual data refer to the demographic information about the respondents, such as their age, gender, learning and working experience. Secondly, behavioural data are used to identify respondents' current and past behaviours, for example, their frequency of attending a course. Thirdly, attitudinal data refer to respondents' ideas. In other words, it is concerned about what individuals are thinking, which covers people's attitudes, opinions, and cognitions about the world.

The current study explored Chinese university translation teachers' and students' cognitions about approaches to translation teaching, which are the attitudinal data. In addition, this study also aimed to look at the teachers' teaching practices, which are behavioural data. Furthermore, this study explained differences in cognitions held by Chinese translation teachers with various personal backgrounds, which are factual data. Finally, this study targeted a sample of the population across China, and a questionnaire

can obtain the data cheaply. Therefore, the questionnaire is an effective instrument for this study and was applied.

In general, there are two types of questionnaires: close-ended questionnaires and open-ended questionnaires. A close-ended questionnaire means items in the questionnaire are ready-made for the respondents to choose, leaving no room for the respondents to write their answers freely. In contrast, an open-ended questionnaire contains questions without pre-set options to choose from but requires the respondents to write their answers subjectively. In the present study, a close-ended questionnaire was applied in that one of the advantages of this type of questionnaire is that it is "particularly suited for quantitative, statistical analyses" (Dörnyei & Taguchi, 2009, p. 26), particularly suited for the comparison of different numerical data. Given that this study aimed to make various comparisons, such as cognitions held by Chinese university translation teachers and students, teachers' cognitions and their teaching practices, close-ended questionnaires were used in the present study.

3.4.1.1 Questionnaire development

The questionnaires employed in the current study were self-developed, as little literature addressed the research topic of the current study. The current study included two self-developed questionnaires, one for teachers and one for students. The two questionnaires are: The Chinese Translation Teacher Questionnaire (CTTQ) and The Chinese Translation Student Questionnaire (CTSQ) (see Appendix A and B). The two questionnaires were initially developed after item generation, categorisation, scrutiny, pilot, and finalisation. Table 3.3 illustrates these methods in detail.

Table 3.3 Procedures to develop questionnaires

Procedures	Method	Note
Item generation	Focus group	1) Teacher group- two translation teachers and three doctoral students in translation studies who work or worked as translation teachers; They were asked to discuss their ideas about teaching translation and why they had those expressed ideas. 2) Student group- five translation students; They were asked to talk about their ideas about how to learn translation and the reasons for their expressed ideas.
	Audio transcripts	1) The two focus groups' meetings were audio recorded and transcribed. 2) The transcripts served as the basis for generating questionnaire items.
	Literature review	1) Items were generated by direct-use or modification of the sentences from the existing literature. 2) A variety of relevant literature included (Colina, 2003b; Gile, 2009; Kelly, 2014; Kiraly, 2000; Klimkowski & Klimkowska, 2012; D. Li et al., 2015; X. Li, 2018; D. Wu et al., 2021).
Item categorisation	Item pool	The generated items formed an item pool for categorisation. 1) Three categories for teacher cognitions-transmissionist, transactionist, and transformationist. 2) Two categories for factors influencing teacher cognitions- translation-related experience and personal experience. 3) Three categories for teaching practices- transmissionist, transactionist, and transformationist. 4) Two categories for factors influencing teaching practices- teacher experience and student needs, and curricular and facilities. 5) Three categories for student cognitions- transmissionist, transactionist, and transformationist. 6) Three categories for factors influencing student cognitions-learning experience, in-classroom context, and socio-cultural factors.
Scrutiny	Experts audit	Three experts specialising in translation teacher cognition, quantitative methodology, and translation studies examined the questionnaire for theoretical rationale and content validity. Their scrutiny changed the categories for teachers' and students' cognitions and teaching practices from three to two. 1) Original three categories- transmissionist, transactionist, and transformationist; 2) Two categories for cognitions and teaching practices after scrutiny- cognitions towards the transmissionist extreme, cognitions towards the transformationist extreme.
Pilot	Piloting group	1) Teacher group- five teachers; two PhD candidates in translation studies, one post-doctoral fellow in education, and two professors in translation studies. 2) Student group- ten students have a similar educational background to the target population. More details in Section 3.4.1.2

As shown in Table 3.3, the purpose of a focus group, audio transcripts, and literature review is to create an item pool for the researcher to select items included in the questionnaires and to group the selected items into different categories. After these procedures, scrutiny is set to ensure the selected items are relevant to the item categories and to ensure the items aim to examine what they are about to measure.

In addition, after scrutiny, the item categories for teacher and student cognitions and teaching practices have been reduced from three to two. The reasons for the category reduction are explained in the following. Table 3.3 shows three categories for teachers' and students' cognitions and teaching practices: transmissionist, transactionist, and transformationist. The three categories have been reduced to the transmissionist and transformationist extremes. Reasons to do so are provided in the following paragraph.

Reasons for reducing three categories into two categories after scrutiny

Firstly, I would like to explain the reasons for deleting the transactional category. The main reason for deleting the transactional category is that it is challenging to generate items that clearly distinguish the transactionist from the transmissionist and the transformationist. This is due to the overlapping learning elements between the transactionist and the other two. The transactionist view of learning is regarded as a step away from the transmissionist view of learning to the transformationist view of learning (González Davies, 2004). Therefore, it can be understood as a middle point that constitutes learning elements from both transmissionist and transformationist approaches. For example, transactionist approaches encourage group work and interaction, but teachers still have the right to make final decisions about teaching activities. This learning element overlaps with the transmissionist approach in which the teacher always has the right to give final answers to problems. In addition, the

transactionist approach also overlaps with the transformationist approach. For instance, the transactional approach aims to enhance students' cognitive ability, which refers to students' problem-solving abilities in translation teaching. However, this teaching objective has already been included in most transformationist approaches.

Secondly, I would like to explain why the two categories, transmissionist and transformationist extremes, have been added to the questionnaires. Inspired by Miller and Seller (1985), Kiraly (2000) paraphrased their descriptions of the dilemmas between transmission and transformation, which are two educational approaches respectively underlined by objectivist and constructivist, such as teacher control *vs* student control (details of the dilemmas see Kiraly, 2000, pp. 20-21). These dilemmas can be used to form teachers' pedagogical belief systems. In addition, Wu, Zhang, and Wei (2021) also found that it is unrealistic to define a translation teacher's approach as purely transmissionist or transformationist in actual teaching practices. Teachers and students may instantly change their roles in the classroom between transmissionist and transformationist approaches. Therefore, by adding the two extremes to the questionnaire, it is practical for the respondents to judge their ideas about how they are situated in the teaching and learning processes.

Finally, the three categories, transmission, transaction, and transformation, were changed to cognition/teaching practice towards the transmissionist extreme and cognition/teaching practice towards the transformationist extreme.

3.4.1.2 Questionnaire piloting

After the procedure of category adjustment, the initial questionnaires- CTTQ and CTSQ were in the piloting phase. During questionnaire piloting, a group of teachers and students were invited to pilot CTTQ and CSTQ, respectively. Criteria to choose teacher

participants for CTTQ piloting are 1) they need to obtain a PhD degree in translation studies or be doctoral students studying translation; 2) they are working in top universities running MA and MTI programmes; 3) they must be varied in academic rankings. In the end, five teachers were invited. Among them, two are translation teachers studying for their PhD in translation studies at the Guangdong University of Foreign Studies; one is a post-doctoral fellow in education at Sun Yat-sen University; and the remaining two are professors in translation studies at Dalian University of Foreign Languages and Northeastern University. The five teachers were involved in the piloting phase by completing the CTTQ. After they submitted the questionnaire, I had an individual retrospective meeting with them. The purpose of asking them to complete the CTTQ is to find out the following:

- Items that address more than one topic in one single item- the compound items
- Items that cause difficulty in reading

In the meantime, another purpose is to ensure that items address the topics that aim to measure and examine the practicality of the questionnaire- questionnaire layout and ways to distribute. The reason to reiterate the importance of questionnaire layout is that an online questionnaire differs from a hard copy one because the respondents would generally answer a digital questionnaire via their smartphones. A five-point Likert scale may not be fully displayed on the phone screen. For example, when scrolling up on the screen, the respondents would only see the Likert numbers without a note to remind them of the accurate scale behind the number due to the limited display range of the phone screen. As a result, the respondents would forget what they were asked to choose but only face a group of numbers, especially when staring at the screen for a long time. Therefore, the layout of the questionnaire on the smartphone is essential for the respondents to complete the digital questionnaires without hassles.

In addition, the purpose of the retrospective meeting is to ask the teachers to verbalise their ideas when answering each question, except for the background information items. Doing so would help me determine whether the respondents can understand each item to ensure that each item examines what they are expected to measure.

After the two procedures, I modified the CTTQ based on the feedback from the teachers. That included deleting the ambiguous items, rewording some items, and adjusting the layout of the answers to be ticked.

For the CTSQ piloting, the criteria for choosing student participants are as follows: 1) Students are from different translation programmes; 2) Students are studying in different grades; such criteria aimed to keep the maximum variation of students' backgrounds. Based on the criteria, 10 students, five in their first year from the MTI programme and five in their second year from the MA programmes at the Guangdong University of Foreign Studies were invited to repeat the procedures as the five teachers have gone through. The only difference is that a focus group of retrospective meetings for students replaced individual meetings, considering my energy and time.

3.4.1.3 The finalised questionnaires

The final versions of CTTQ and CTSQ were formed after several rounds of modifications and revisions. Table 3.4 summarises the number of items in the CTTQ and the TSQ. Both questionnaires were in a five-point Likert scale format, except for the sub-questionnaires to collect teachers' and students' background information. The finalised CTTQ was comprised of five sub-questionnaires. They are:

1) Teacher demographic questionnaire-TDQ
2) Teacher cognition about translation teaching questionnaire-TCTTQ

3) Factors that influence teacher cognitions questionnaire-FITCQ
4) Teaching practice questionnaire-TPQ
5) Factors that influence teaching practices questionnaire-FITPQ

The finalised CSTQ was comprised of three sub-questionnaires. They are:

1) Student demographic questionnaire-SDQ
2) Student cognitions about translation teaching questionnaire-SCTTQ
3) Factors that influence student cognitions questionnaire-FISCQ

Table 3.4 Number of items in the CTTQ and the CTSQ

Questionnaire	Sub-questionnaire	Number of items
CTTQ	TDQ	11
	TCTTQ	16
	FITCQ	9
	TPQ	16
	FITPQ	8
CTSQ	SDQ	7
	SCTTQ	16
	FISCQ	12

In the CTTQ, the sub-questionnaire TDQ contained 11 items to collect teacher respondents' demographic information, such as their age, gender, qualification, and so on; the TCTTQ included 16 items to measure translation teachers' cognition about approaches to translation teaching. The 16 items belonged to two categories (See Table 3.5). They were grouped into eight pairs of opposing statements concerning teaching material, teachers' role, translation assessment, learning evaluation, instruction strategy, assignment, feedback, and teaching content (see Table 3.6). Eight statements in Table

3.6 represent the transmissionist extreme (Items 1,3,9,16,13,11,10,15), whereas the other eight statements represent the transformationist extreme (Items 14,7,5,12,8,4,2,6). The respondents were required to express their ideas about to what extent they agree with these opposing statements using a 5-Likert scale for each statement (e.g., 1= disagree; 2= somewhat agree; 3= moderately agree; 4= strongly agree; 5= extremely agree). When analysing the data, each item representing the transmissionist extreme will adopt the reverse coding strategy. This means a high score in the transmissionist extreme is transformed into the corresponding low score on the scale, and vice-versa. For example, in the current 5-Likert scale, one was transformed into five, four was transformed into two, and so on for the rest. Specifically, in the current study, Item 1 represents the transmissionist view of using teaching materials: *The teacher should use a textbook to teach.* If one teacher somewhat agreed (2 = somewhat agree), the reversed score for this item was four. In the meantime, if this teacher moderately agreed with Item 14- the transformationist view of using teaching material, the score of this item was three. Then, the *Mean* (3.5) of the paired items (Items 1 and 14) would be the final score of this teacher's opinions about material use.

Table 3.5 Categories and items in the sub-questionnaires of the CTTQ and the CTSQ

Sub-questionnaire	Categories	Items
TCTTQ/TPQ/SCTTQ	The transmissionist extreme	1,3,9,10,11,13,15,16
	The transformationist extreme	2,4,5,6,7,8,12,14
FITCQ	Teachers' translation-related experience	3,6,7,8,9
	Teachers' personal learning and working experience	1,2,4,5
FITPQ	Teacher experience and student needs	1,2,7
	Curricula and facilities	3,4,5,6,8
FISCQ	Learning experience	1,2,4,10,11
	Teacher and student personality	3,5,6,9
	Socio-culture contexts	7,8,12

Table 3.6 Factors being addressed by the eight pairs of items in the sub-questionnaires in the CTTQ and the CTSQ

Sub-questionnaires	Factors being addressed	Paired items
TCTTQ/TPQ/SCTTQ	Material use	1 (M*), 14 (F*)
	Teacher's role	3 (M), 7 (F)
	Ways to assess translation quality	9 (M), 5 (F)
	Ways to evaluate student learning	16 (M), 12 (F)
	Instruction strategy	13 (M), 8 (F)
	Ways to complete translation Assignment	11 (M), 4 (F)
	Ways to offer feedback	10 (M), 2 (F)
	Ways to choose teaching content	15 (M), 6 (F)

Note: M= the transmissionist extreme; F= the transformationist extreme

The TPQ included the same items as TCTTQ (see Table 3.5 and Table 3.6). Instead of asking the respondents the extent to which they agree with the statements, respondents of TPQ were required to indicate frequencies of teaching practices with the use of a 5-Likert scale for each teaching activity (e.g., 1= never; 2= seldom; 3= sometimes; 4= frequently; 5= always). Data analysis of TPQ also adopted the same reverse coding strategy as the TCTTQ.

The FITCQ included nine items attempting to measure the factors influencing translation teachers' cognitions about translation teaching; the FITPQ contained eight

items intending to measure factors influencing translation teachers' frequencies of teaching practices. Table 3.5 also summarises the corresponding items for each influencing category.

In the CTSQ, the sub-questionnaire SDQ contained seven items to gather student respondents' demographic information; the SCTTQ adopted the same items in the TCTTQ (See Table 3.5 and Table 3.6), but some items were reworded to suit students' reading habit. It intended to measure translation students' cognitions about approaches to translation teaching. The reverse coding strategy was also adopted in analysing student cognitions. The FISCQ contained 12 items to measure factors influencing the students' cognition about approaches to translation teaching (See Table 3.5).

3.4.1.4 Validating the questionnaires

Validity

Efforts have been made to achieve content validity, which means ensuring the items were measuring what they were supposed to measure. First of all, the questionnaires were developed under the supervision of the researcher's supervisors, who are experts in teacher education, especially in teacher cognitions. In addition to that, two external experts were invited to check the content validity. One of them is a translation teacher with a doctoral degree in education. His research interest is translation teacher cognition, which is the research topic of the current study. The other external expert is an academic language advisor with a doctoral degree in applied linguistics and is experienced in questionnaire development. Both were invited to read through the questionnaires carefully to check whether the content of each item measured what it was intended to measure. Based on their suggestions, some items were reworded to increase readability. Several items were deleted due to deviation from the prescribed categories.

Reliability

The reliability of the questionnaires adopted in the current study was tested through statistical procedures, especially internal consistency, which is the most traditional and frequently used method to check quantitative reliability (Creswell, 2018). Cronbach's α coefficients were gathered for each sub-questionnaire and the categories in each sub-questionnaire. It should be noted that despite .70 being taken as the cut-off point for reliability tests in many studies, scholars held widely divergent opinions on this controversial value.

Cronbach (1951) ascertained that a high alpha score was wanted when an instrument was used to measure individuals' psychological dimensions. However, he further claimed that once scores obtained from the instrument can generate meaningful insights, the instrument can be used without needing a high alpha value. In other words, a low level of alpha value would be acceptable if scores obtained from an instrument were interpretable. Dörnyei and Taguchi (2009) made specific suggestions that a lower alpha value of .60 would also be considered acceptable for short scales with three to four items in the research field of second language teaching because scholars intended to interpret various areas but were unable to utilise instruments that required several hours to complete. Finally, Schmitt (1996) argued that a quite low alpha value would be meaningful in some cases. Therefore, there was no general cutting-off point for the alpha value, such as .70.

To conclude, the level of alpha value varied in different research contexts. In the current study, considering that some sub-questionnaires were non-standardised questionnaires, and some categories contained only three to four items, .60 was used to determine internal consistency.

Cronbach alpha values of each sub-questionnaire and categories in each sub-questionnaire were obtained. These values were calculated based on the respondents' data in the current study (teacher respondent, n = 122; student respondent, n = 110). The results of the calculations are shown in Table 3.7. As can be seen, the overall Cronbach alpha values of each sub-questionnaire reached above .70. As for alpha values of categories in each sub-questionnaire, most were above .70. The alpha values of three categories, including teachers' personal learning and working experience influencing teacher cognitions, teacher experience and student needs influencing teaching practices, and social-culture context influencing student cognitions, did not exceed .70, but very close to .70. Therefore, it was considered that the internal consistency of the CTTQ and CTSQ was satisfactory.

Table 3.7 The Cronbach's alpha coefficients of the CTTQ and the CTSQ

Questionnaires	Sub-questionnaires	Categories	No. of Items	α
CTTQ	TCTTQ	The total scale	16	.71
	FITCQ	Teachers' translation-related experience	5	.75
		Teachers' personal learning and working experience	4	.68
		The total scale	9	.83
	TPQ	The total scale	16	.71
	FITPQ	Teacher experience and student needs	3	.67
		Curricular and facilities	5	.73
		The total scale	8	.79
CTSQ	SCTTQ	The total scale	16	.74
	FISCQ	Learning experience	5	.71
		Teacher and student personality	4	.72
		Socio-culture contexts	3	.69
		The total scale	12	.84

In addition, each standardised questionnaire should undergo strict statistical analysis procedures to check the reliability and validity of a questionnaire from various aspects. However, non-standardised questionnaires, which means questionnaires that are self-developed to answer specific research questions, are not always able to do so (Dörnyei & Taguchi, 2009). For the self-developed questionnaires that cannot check various aspects of reliability and validity, it is suggested that "we should strive for a questionnaire that has appropriate and well-documented reliability in at least one aspect: internal consistency" (Dörnyei & Taguchi, 2009, p. 83). Considering the questionnaires in the current study, they were self-developed to answer specific questions. Internal

consistency would be the only feasible way to check reliability. It has been reported above that the alpha values in the two questionnaires were acceptable, resulting in a satisfactory internal consistency of the two questionnaires.

3.4.2 Interviews

The semi-structured multiple-session interview was used in the present study to collect qualitative data. The interview has been the most frequently used technique for researchers in qualitative inquiries because it works well to obtain in-depth descriptions of the life of the interviewees, such as their working experiences, feelings, attitudes, and interests (Dörnyei, 2007). This allows the researcher to interpret the meaning of the interviewees' descriptions.

There are three main types of interviews: structured, unstructured, and semi-structured. In a structured interview, the interviewer strictly follows a pre-set list of questions. This type of interview is helpful for researchers to make comparisons between different participants. However, the richness of the data may be limited due to a lack of freedom for participants to elaborate on extra ideas, whereas an unstructured interview goes to another extreme. It offers maximal flexibility for the participants to express their ideas about a phenomenon, and the interviewers often act as a listener during the interview. However, researchers may easily get lost when interpreting the data because researchers would encounter many rambling ideas that need to be re-organised.

Compared with the first two types of interviews, semi-structured interview stands out among the two extremes. It allows the interviewers to prepare a list of questions closely related to the research questions. It provides some freedom for the interviewees to make extra interpretations of the questions raised. In other words, the interviewers may have follow-up questions about the issues that they are interested in when the interviewees

elicit extra information. Therefore, semi-structured interviews are not only available for the researcher to make comparisons between different participants but also explore newly emerged codes in data analysis, enhancing the richness of the data. For these reasons, the semi-structured interview was adopted in this study.

3.4.2.1 Designing the interview guide

An interview guide, especially a carefully designed one, performs a function to help interviews succeed. In the current research, two interview guides were designed: one for teachers, named the Translation Teacher Interview Guide and the other for students, named the Translation Student Interview Guide. Both interview guides contained questions closely related to the research questions: 1) background information of teachers and students; 2) teachers' and students' cognitions about approaches to translation teaching; and 3) factors contributing to their cognitions.

The interview questions are based on an extensive literature review and brainstorming. However, I had concerns about their alignment with the research goals. There was a worry that these questions may be overly general or ambiguous, as different interpretations may arise. Consequently, I believe that a well-tested interview guide, obtained through several rounds of piloting, is crucial before official interviews. The subsequent section described the pilot process for the interview guides.

3.4.2.2 Interview guide pilot

Piloting the interview guides was done in three steps. In the first step, one Chinese university translation teacher was recruited to help me improve the Translation Teacher Interview Guide. In the second step, three translation students were recruited to improve the Translation Student Interview Guide. In the third step, I conducted self-reflections

based on the feedback from the teacher and students to finalise the two types of interview guides.

The main issue in the first step was that the teacher sometimes talked about ideas irrelevant to the main topic. In other words, the teacher had too much development over the main topic. This may be due to several reasons after self-reflections: First, the questions are too general, providing the teacher with ample freedom to develop their ideas; second, the teacher possesses extensive research and teaching experiences, providing many ideas to share. However, during the second step, things were totally different. Students in the piloting interviews appeared to lack ideas to share. I took a dominant role in the interviews instead of being a listener. Reasons for this could be that the students have limited academic research experience, especially the experience of participating in interviews. So, the students did not know what and how to answer the questions if the questions were too general.

Considering the differences in piloting the teacher interview guide and the student interview guide, both were refined. In addition to that, the piloting also enhanced my interview skills. After the three-step piloting, the interview guides were appropriate for the current study. I was ready to collect the qualitative data through interviews (see Appendix C and D for the finalised teachers' and students' interview guide).

3.4.3 Classroom observations

The classroom is the place where actual teaching and learning activities take place. Consequently, classroom observation is an effective instrument for examining those activities (Dörnyei, 2007). Several reasons explain why the classroom is effective in exploring actual teaching and learning practices in the classroom context. First, unlike asking participants to express their ideas, classroom observation allows researchers to

record the non-verbal issues in the classroom. Second, it offers researchers first-hand experience with participants. Third, it reveals unusual aspects during observation. Fourth, it is helpful for researchers to find topics that may be uncomfortable for participants to discuss (Creswell, 2018; Dörnyei, 2007). Therefore, classroom observation is suitable for the current research to investigate Chinese translation teachers' teaching practices.

There are two main types of classroom observations: participation and non-participation. Participation observation means that researchers will join in the teaching activities, and non-participation observation means that researchers will not interfere in the teaching activities. In this study, non-participation observation was adopted because this type of observation avoids interference in teachers' teaching, which may produce more authentic data (Creswell & Plano Clark, 2017).

3.4.3.1 Designing classroom observation scheme

The primary goal of using an observation scheme is to systematise the categories pertaining to the observed content, allowing researchers to record activities in a designed format quickly. In this study, classroom observation aimed to record teachers' teaching practices. The way to systematise the teaching practices is to record various teaching activities chronologically. That means teaching activities were recorded from the beginning of the class to the end. The time that the corresponding teaching activity lasted was also recorded for each teaching activity. Therefore, the classroom observation scheme includes three parts: name of teaching activities, time, and notes. Apart from the first two parts, notes were used to record unusual aspects that could be noticed in the teaching process.

3.4.3.2 Classroom observation scheme pilot

The classroom observation scheme was piloted by recruiting one Chinese university translation teacher. The reason for recruiting this teacher is he shared similar characteristics with the actual participants of this study. He was in his 40s with more than 10 years of translation teaching experience, obtained a doctoral degree in translation studies, and taught media translation in the MTI programme. The teacher allowed me to observe his class for two consecutive sessions lasting 90 minutes with a 10-minute break. Minor modifications of the scheme after the piloting observation, including:

- Swapping the scheme on a notebook to two pieces of A4 paper. This is because the A4 paper offers much margin space to write notes.
- An individual timer was used instead of a cell phone to measure time, as the cell phone would distract me from observation.

After being modified, the classroom observation scheme was applied to collect qualitative data (see Appendix E for the finalised scheme).

3.5 Data Collection

This study followed a convergent mixed-methods approach to the inquiry, meaning the quantitative and qualitative data were collected in one single phase. Quantitative data were collected using two self-developed questionnaires: the Chinese Translation Teachers Questionnaire and the Chinese Translation Student Questionnaire. Qualitative data were collected by using interviews and classroom observations.

Quantitative and qualitative data collection was in a single phase, from October 2020 to June 2022. The qualitative data were collected from October 2020 to March 2021,

and the quantitative data were collected from June 2021 to June 2022. This data collection procedure may lead to the following concerns: 1) why the whole data collection procedure took one and a half years; 2) why the qualitative data were collected prior to the quantitative data; 3) whether the current study can be considered as a convergent research design, if qualitative data were collected prior to quantitative data. In the following sections, I will explain such concerns.

The impact of COVID-19

The key factor impacting the first two concerns is COVID-19. The outbreak of the pandemic has affected every aspect of the world, and the current study is no exception. Initially, the research design involved distributing hard copies of questionnaires, face-to-face interviews, and on-site observations. However, due to the pandemic, these methods had to be changed from on-site to online. Switching to online data collection is a highly time-consuming process, especially when there is a short time frame. Therefore, I redesigned the ways of collecting qualitative data first, followed by the method for collecting quantitative data.

One reason for redesigning the method to collect qualitative data first is that classroom observations needed to be done when all teaching practices moved to on-campus. Although online classroom observations were viable, the research design of this study involved observing on-site teaching practices; the redesigned method for collecting data through classroom observations set out to observe on-site teaching practices online. Due to the COVID-19 pandemic, most universities were closed and reopened many times, switching between on-campus and online teaching modes. Fortunately, the period between October 2020 and March 2021 was ideal for the study, as all Chinese universities were in an on-campus teaching mode. Therefore, qualitative data was

collected first during this period in case the target universities were closed suddenly, preventing me from conducting interviews and classroom observations. I was planning to collect the quantitative data when I returned to New Zealand after collecting the qualitative data in June 2021. Unfortunately, I experienced half a year of nationwide lockdown in New Zealand. This resulted in me not being able to return to the campus. The lockdown severely impacted my work as I had to work from home. It was not until May 2022 that I could return to the campus to continue my doctoral study. Therefore, it took longer to collect the quantitative data than the qualitative data.

Timing is not the only determining factor for a convergent mixed-methods research design

Although the qualitative data were collected before the quantitative data, both were collected in a single phase in this study. As a result, the current study still should be considered as a convergent research design due to the evolving nature of a convergent research design throughout history.

When first discussed in the 1970s, a convergent research design has been conceptualised by different scholars who gave it different names, such as a triangulation design (Jick, 1979), a simultaneous triangulation design (Morse, 1991), a parallel study (Tashakkori & Teddlie, 1998), a convergence model (Creswell, 1999), and a concurrent triangulation design (Creswell, 2003). It can be seen from these names that scholars focused on different aspects of a convergent research design, including levels of interaction between quantitative and qualitative data, timing of the two data sets, priority of the two data sets, and ways to interpret them.

Although timing is essential in determining a convergent design for a mixed-methods design, it is not the only determining factor. This is because it is hard to define what is

a simultaneous way to collect both quantitative and qualitative data (Creswell & Plano Clark, 2017). Creswell and Plano Clark (2011) also pointed out that "timing is often discussed concerning the time the data sets are collected, but most importantly, it describes the order in which the researchers use the results from the two sets of data within a study- that is, timing relates to the entire quantitative and qualitative strands, not just data collection" (p. 106). In other words, timing in a convergent design is much more concerning about the sequence researchers use in the research findings of the two databases than the time order to collect the two data sets.

Therefore, in a mixed-methods, if the research findings from one of the data sets are not dependent on the other data set, it is appropriate for the researcher in a convergent research design to collect both the quantitative data and qualitative data in different time order but in "a single phase of the research study" (Creswell & Plano Clark, 2011, p. 106).

Apart from what has been discussed above, Creswell and Plano Clark (2011, 2017) further pointed out that a research design should be considered convergent, if:

- The researcher collects both quantitative and qualitative data to answer the research questions within a study; and
- The two data sets are independent of each other; that is, one data set does not depend on the results of the other; and
- The two data sets are analysed independently and separately; and
- The researcher interprets the research findings by merging the results from each data set.

In the current study, although I collected the qualitative data first, the data were not to be used to collect the quantitative data. So, the qualitative data remained unanalysed

prior to collecting the quantitative data. Moreover, results generated from the qualitative data were not used to interpret quantitative data. Instead, the two data sets would be analysed separately and independently, and results from the two data sets would be merged for interpretation. Therefore, the current study was satisfied to be considered a convergent research design.

3.5.1 Location

Given the massive territory of China, the main place selected for data collection is South China, especially in the Greater Bay Area (GBA). Criteria for selecting the sample location largely depend on this community's economy and education environment.

The GBA is a metropolis containing nine cities in the Guangdong Province and two special administrative regions-Hong Kong and Macau (Ma et al., 2021). Surrounding the Pearl River Delta, GBA is the largest and richest economic region in South China. Its GDP in 2018 ranked in the Top 12 of the world's biggest economies. GBA is abundant in innovative technology companies and has a well-developed platform for startups and innovation. Due to these reasons, GBA might represent China's most vibrant and fast-changing economic region. It is even considered as the Asian Silicon Valley.

Aligning with a boom in the economy and high-end technology, GBA is establishing a plethora of world-class universities to gradually become self-catered in talent that supports the nation's urgent requirement for top-tier talent, although it has attracted many overseas talents (Xie et al., 2021). Against this backdrop, several changes could be observed in higher education within GBA. Firstly, there is a call for innovation and reform in curriculum design. Being self-catered to top-tier talent means traditional teaching curriculums may no longer suit current demand (F. Fang et al., 2022; Wen et

al., 2022). Secondly, it also means what teachers and students think of teaching and learning might be shifted from a traditional way to a more innovative way (Wen et al., 2022). Therefore, education in GBA is probably a mixture of innovation and tradition, which is significant in conducting the investigation.

In addition, I spent almost 10 years studying and working in GBA, which makes it much easier for me to gain access to universities in this region than in other regions in China. Therefore, GBA was chosen for the location to collect the research data for these reasons.

3.5.2 Quantitative data collection

Procedures for collecting quantitative data in the present study include the following four steps: 1) selecting samples of the population; 2) identifying strategies for targeting the sample of the population; 3) gaining consent from the target population; 4) respondents filling in the questionnaires and returning them (Dörnyei & Taguchi, 2009). The first two steps have been presented in Section 3.3.1. Then, this section focuses on the last two steps, describing how sampling strategies were implemented to collect data from the population sample.

3.5.2.1 Collecting data from teacher respondents

As discussed in Section 3.3.1, three sampling strategies, namely convenience, snowball, and random sampling, were used to target teacher respondents for quantitative data. Using a convenience sampling strategy, I first contacted the Faculty Deans to get their permission to distribute the CTTQ. However, due to the impact of COVID-19, contactless data collection became a compulsory requirement of the University of Auckland. Then, I converted the paper-based CTTQ into a web-based version. The link

to the web-based CTTQ was sent to those teachers who were interested in completing this questionnaire. At this stage, a total of 35 teachers were reached. Nevertheless, this number is a relatively small population sample, and more respondents were needed. In order to target more respondents, a snowball sampling strategy was used in the second stage.

Accordingly, I asked the 35 teachers in the convenience sample to help distribute the link to CTTQ to their friends or with whom they frequently interacted. In the meantime, I also posted the CTTQ link to some academic translation communication WeChat groups (WeChat is an instant chatting APP like Messenger and Snapchat. It has a large population of active users in China). Translation teachers in the WeChat groups were from different universities across China. With these two sampling strategies, a total of 563 teachers completed the questionnaire.

3.5.2.2 Collecting data from student respondents

A convenience sampling strategy was also used to collect data from student respondents. The CTSQ has been converted from a hard-copy version to a web-based version, which is more convenient for distributing to the target population. Initially, I contacted 93 university students in the GBA region to be the first batch of respondents. Next, I used random and snowball sampling strategies to recruit more student respondents with the help of teachers. I informed the teachers about the study's aim to explore students' cognitions and requested their assistance in recruiting respondents. Teachers who completed the CTTQ were asked to share the CTSQ link with interested students. Following these recruitment stages, 384 students completed and submitted the online CTSQ.

3.5.3 Qualitative data collection

Qualitative data in this study were collected by using interviews and classroom observations. After recruiting teacher and student participants for qualitative data, the next step is to conduct interviews and classroom observations to collect data. So, in the following sections, procedures of how to do interviews and classroom observations were described.

Before describing the process of conducting interviews and classroom observations to collect qualitative data, it is essential to establish the sequence for these activities. This clarification is crucial due to the lack of literature addressing this sequencing issue in the methodologies reviewed. Additionally, most existing research utilising these two instruments for qualitative data collection typically follows a pattern where teachers are interviewed first and then their classrooms are observed. However, conducting interviews before classroom observations may affect teachers' behaviours, eventually influencing the quality of data collected from classroom observations (D. Wu, Zhang et al., 2019). Specifically, undertaking classroom observations prior to interviews enabled researchers to observe teachers' classes without any presumptions, allowing for open-minded observation and recording of teachers' behaviours. This approach also enhances researchers' ability to identify unusual aspects within the classroom environment.

Moreover, if interviews are conducted before classroom observations, teachers may become aware of the researchers' observing objectives and tailor their teaching activities accordingly. As a result, the most natural teaching behaviours would not be observed, thereby affecting the validity of the data collected through observations. Finally, observing and "recording a phenomenon does not necessarily lead to understanding the reasons why it has happened" (Dörnyei, 2007, p. 185). To address

this limitation, conducting observations before interviews allows researchers to inquire about observed phenomena directly with participants. This allows participants to elaborate on confusing aspects, providing researchers with richer information and insights for data analysis. Therefore, classroom observations were conducted before teacher interviews.

3.5.3.1 Collecting qualitative data through classroom observations

Classroom observations in the current study informed teachers' natural teaching behaviours, such as materials being used, classroom management, teacher-student interactions, and teachers' roles. Accordingly, the observations focused primarily on teachers' classroom behaviours instead of students' performances. The only thing related to students during the observations was their interactions with the teacher. Students had been informed about this in the initial observation.

There were 10 teachers' classes being observed. Each teacher would be observed for two consecutive sessions lasting 90 minutes. So, the total classroom observation time for each teacher reached 180 minutes. Classroom observations started in mid-October 2020 and ended in January 2021.

According to the up-to-date data collection regulations of the University of Auckland, all types of data should be digitalised due to the impact of COVID-19. Consequently, I could not attend and observe the classes physically. To adapt to these circumstances, I contacted the teachers and suggested conducting sessions through online video cameras. It is worth noting that not all classrooms were equipped with video cameras. Therefore, only those classrooms with this technology were viable for observations.

However, considering ethical issues, all observations were audio-recorded. In other

words, video cameras were used to observe the classrooms but not to record images. While observing the classrooms, I took field notes by using the observation scheme and used an extra audio recorder to record the classrooms.

3.5.3.2 Collecting qualitative data through interviews

Interviews in this study include teacher interviews and student interviews. The two types of interviews were undertaken after classroom observations. As there are differences between teacher and student interviews in terms of content and time, discussions on teacher and student interviews will be presented in two separate subsections.

Teacher interviews

Each teacher was interviewed once. The content of the interview mainly focused on collecting teachers' background information, their cognitions about approaches to translation teaching, and how their corresponding cognitions formed. The interview for each teacher lasted approximately 50-60 minutes. As all teacher participants are Chinese, the interview was conducted in Chinese to make them comfortable.

The interviews were conducted through Tencent Meeting, an online meeting platform like Zoom, which has been widely used in China. Unlike classroom observations, online interviews were recorded using an extra audio recorder without recording images. The interviews were conducted within one week after the two sessions of observations were completed. Many scholars suggested it is better to immediately interview the participants at the end of the observations because teachers may clearly remember what they were doing in the classes. However, it is hard to do so from a practical perspective. The first reason is the busy teaching schedules of the teachers. On the observation day,

most teachers in this study had their teaching plans completely filled. Following my observation, they typically had another class, leaving them with insufficient time to participate in interviews. The second reason is related to the teachers' exhaustion. Most teachers felt tired after conducting an intensive 90-minute class and engaging in additional work such as answering questions or reflecting on their teaching methods. Consequently, they lacked the energy required to attend the interviews.

Student interviews

Procedures to collect qualitative data from student participants through interviews were similar to those applied to teacher participants. All interviews were done via Tencent Meeting with an extra audio recorder to record the conversations. Each student has been invited to attend the interview only once, lasting about 30 to 40 minutes. The time for student interviews mainly depended on students' expression ability. As mentioned in the interview pilot (see Section 3.4.2.2), due to their various academic experiences, students may find it hard to express their ideas and vice versa. Accordingly, I must lead the student to the real point and control the time.

Since all student participants are Chinese, the interviews were conducted in Chinese to make them comfortable. The interviews were conducted by asking the students to propose several time slots that suited their schedules. Then, I confirmed the final time according to my calendars.

3.6 Data analysis

3.6.1 Quantitative data analysis

3.6.1.1 Initial data processing

Having a large dataset, it is necessary to process the data before analysing them. The data collected from questionnaires were saved as Excel files for cleaning and manipulating. The 563 teacher respondents' answerers were checked. I found that teachers' questionnaires may have been hacked by someone who aimed to claim money rewards for answering questionnaires. As for ethical considerations, the Participant Information Sheet explicitly noted money rewards for answering questionnaires. The total number of hacked questionnaires was 401. Of the 401 questionnaires, a vast majority of them contained missing values or were entirely left blank (n = 356, 88.7%). The rest (n = 45) contained either implausible or biased answers. For example, some respondents chose the same answer for consecutive items. Some aged 20-29 had more than 31 years of teaching experience. The 401 respondents' answers were deleted, and the remaining 162 were kept for further processing. After checking the 162 answers, 40 contained biased answers, which have been deleted. After these procedures, the teacher dataset remained with 122 questionnaires. Finally, these 122 questionnaires underwent data manipulation by reversing the scores for final analysis, which is a critical step for the current study.

A student dataset has been cleaned and manipulated, as has been done to the teacher dataset. Like the teachers' questionnaires, the students' questionnaires have also been hacked. Of a total of 384 questionnaires, 263 were hacked and have been deleted. The rest of the 121 were kept for further processing. Among the 121 questionnaires, 11 were

found to contain biased answers. These were also deleted. In the end, 110 questionnaires were kept for final analysis.

3.6.1.2 Analysing quantitative data

Quantitative questionnaire data in the current study were processed by using SPSS (Statistical Package for the Social Sciences). The techniques used were descriptive statistics, independent *t*-test, ANOVA, correlation analysis, and multiple regression analysis. Definitions of each technique and research questions to be answered by these techniques were illustrated as follows:

Descriptive statistics

Descriptive statistics were used to describe the overall tendencies of the data for a single variable or research question. In the current study, descriptive statistics contained 1) means (*M*) and 2) standard deviation (*SD*). It should be noted that the *mean* scores obtained to understand teacher cognitions, teaching practices, and student cognitions were calculated based on a reverse code strategy. In the sub-questionnaires of TCTTQ, TPQ, and SCTTQ, scores of the transmissionist extreme would be transformed into the corresponding lower or higher scores using a reversed coding strategy (see Section 3.4.1.3). These two techniques in the current study were used to answer the research questions 1-5.

Independent t-test and Paired samples t-test

The independent *t*-test is also known as the independent samples *t*-test, a technique used to compare the means of two independent groups. This technique can only be used to compare the means of two groups. Therefore, the independent *t*-test in the current study was used to answer the research questions 1.1, 2.1, and 4.

The paired samples *t*-test compares the means of two related groups and paired data sets. It was used in the current study to answer the research question 5.

One-way ANOVA

One-way ANOVA differs from the independent samples *t*-test. One-way ANOVA can compare the means of two or more independent groups. This technique tests the statistical differences among two or more independent groups on the same dependent variable. In the current study, it was used to explore whether there are differences in teachers' cognitions and teaching practices among teachers with different backgrounds. Specifically, teachers with different learning and teaching experiences may vary in their cognitions or teaching practices. Therefore, this technique in the current study was used to answer the research questions 1.1 and 2.1.

Correlation analysis and multiple regression analysis

A standardised covariance, also known as correlation coefficient or Pearson correlation coefficient, compares the means of two variables to see how they are associated with each other. In other words, correlation analysis examines whether one variable associates positively or negatively with the other variable or has no association.

Multiple regression looks at the degree to which one variable predicts the other variable (Field, 2018). For example, correlation analysis can predict a positive relationship between the time a woman spent watching advertisements until she bought the goods. Then, this question could be further researched: If the woman spent 20 minutes watching advertisements, how much would she buy?

Therefore, by using correlation analysis, the current study looks at how several factors affect teachers' cognitions, teaching practices, and students' cognitions. By using

multiple regression analysis, the current study examines the degree to which factors affect teachers' cognitions, teaching practices, and students' cognitions. These two techniques in the current study were used to answer the research questions 2.2 and 3.1.

Effect size

Although a *p*-value can inform whether an effect exists, it will not inform the size of the effect. Therefore, effect sizes were calculated to reveal the magnitude of some phenomena (Kelley & Preacher, 2012). Table 3.8 summarises the magnitudes of the different types of effect sizes.

Table 3.8 Magnitudes of effect sizes (Cohen, 1988)

Measurement	Effect size	Small	Medium	Large
t-tests	Cohen's *d*	.2	.5	.8
One-way ANOVA	η^2	.01	.06	.14
Pearson's correlation	*r*	.1	.3	.5
Multiple Regression	Cohen's f^2	.02	.15	.35

3.6.2 Qualitative data analysis

Before analysing the qualitative data, one of the important steps is to prepare the collected data for analysis. Qualitative data in the current study are audio data collected through interviews and field notes collected through classroom observations. Therefore, this section will be divided into two parts to describe how these two forms of data were prepared before analysis.

3.6.2.1 Transcribing qualitative data

The first step is to transcribe the audio files into written documents to analyse the data collected through interviews. This process is called transcription. Before doing the

transcription, it is necessary to know what transcription is and who and how to do it.

First of all, transcription refers to the "process of converting audio recordings or field notes into text data" (Creswell & Guetterman, 2019, p.239). Researchers then may choose to use a third party, usually a company or a transcriptionist, to do the job or to do it by the researchers themselves. For the current study, I typed all the text files by myself. By doing so, I could have an opportunity to get familiar with the content of transcripts. Finally, ways of doing transcription vary. In general, two approaches to transcription have been widely used: 1) the content-oriented approach and 2) the discourse-oriented approach (Gibbs, 2018; Guest et al., 2012).

The content-oriented approach is a type of word-for-word transcription. It is called orthographic or verbatim transcription. Other than the discourse-oriented transcripts that focus on not only the participants' speech but also how they speak, orthographic transcripts aim to record the words spoken by the participants. That is to say, this type of transcription is much more concerned with what was said (Braun & Clarke, 2013; Gibbs, 2018; Silverman, 2014).

The current study is more concerned with the content produced by the participants. Therefore, orthographic transcripts were made. Yet, converting spoken language into written language word by word is not as straightforward as expected. For example, spoken language will not use commas to indicate pauses. Some conversations may contain inadvertent word repetition. Facing these issues, Dörnyei (2007) suggested adjusting the transcripts at a linguistic level but not editing or changing any content for researchers interested in the transcripts' content rather than the way of articulating. In this regard, a self-transcribing guide was developed (see Table 3.9) to assist the transcription process.

Table 3.9 The self-transcribing guide

Symbol	This symbol stands for
R	The researcher
T1/T2/T3	Different teacher participants
S1/S2/S3	Different student participants
,	A normal pause
(pause)	A short pause, less than a second
…	A long pause, more than a second
.	The end of a sentence
?	Appealing to the participants to answer a question raised
word	1) Questions asked by the researcher 2) Participants' comments that are closely related to the questions asked by the researcher or that are worth making further interpretations
[word]	Researcher's guess of incomplete sentences
<>	Unrecognisable content
=word=	Researcher's comments

Transcribing interviews

Transcribing interviews, as discussed above, was conducted by typing texts into a Word file with the assistance of the transcribing guide. Transcripts were kept in their original language- Chinese- for analysis instead of translating into English. This reduces the risks of generating incorrect findings or conclusions since translated transcripts may sometimes lose original information due to the differences between Chinese and English. However, one thing that needs to be reiterated is that although all interviews were conducted in Chinese, it is inevitable for the participants to use English to discuss specific terms or to facilitate them to explain some concepts. Therefore, the transcripts were mixed with Chinese and English.

Transcribing observations

Classroom observation recordings were transcribed in a different way from transcribing interviews. This is because not only content was needed but also portions of different

teaching sections. Specifically, the current research not only attempted to capture each teacher's distinctive instructional features to make an overview of teachers' actual teaching behaviours but also intended to count the time each teacher spent on different instructional activities. The time proportion allocated to different instructional features was considered evidence to elaborate on teachers' approaches to teaching.

During the transcribing process, all observation recordings were intensively listened to while I checked the observation field notes to compare the original recordings and the notes taken accordingly. By doing so, I attempted to check for any missing information or mistakes in understanding the original recordings. Same as the interview transcripts, the transcripts of classroom observations were also a mixture of Chinese and English because some teachers taught in English. The finalised interview and classroom observation transcripts were used for analysis.

3.6.2.2 Analysing qualitative data

As discussed in the transcription sections, all transcripts were a mixture of Chinese and English. English accounts for a small proportion, and the majority are Chinese. The analysis is based on the original language-Chinese, not copies of the English translation. In writing this doctoral thesis, themes, categories, and quotations were translated into English.

Thematic analysis

Thematic analysis is "a method for identifying themes and patterns of meaning across datasets in relation to research questions" (Braun & Clarke, 2013, p.175). This method focuses on both implicit and explicit meanings produced from the dataset. The produced meaning is called themes. To generate themes, researchers need to thoroughly go

through different data segments and then, mark or label them. These segments could be a word, a phrase, a sentence, or a paragraph. The labelled or marked data segments are called codes. This code-identifying process is called coding (Guest et al., 2012). There might be a wide variety of categories of codes. Codes that are grouped into the same category belong to one theme.

Two approaches were used for identifying themes in the current study: deductive and inductive approaches. These two approaches are often used simultaneously in one single analysis. The deductive approach is a "top-down" way, "where the researcher uses the data to explore particular theoretical ideas or brings those to bear on the analysis being conducted" (Braun & Clarke, 2013, p. 178). In contrast, the inductive approach is a "bottom-up" way of looking at what exists in the data. To compare the two approaches, the inductive approach is a data-driven approach in which there are no prescribed codes or themes when coding the data segments. The codes or themes are awaiting to be established whilst coding. In the current study, I was trying to explore what factors contributed to teachers' and students' cognitions, as well as teachers' teaching practices. I did not, therefore, propose any themes but made every effort to code the data segments that concerned the research questions instead.

On the other hand, the deductive approach brings about a hypothesis before coding. The hypothesis refers to various pre-determined codes or themes based on particular theories or analysing needs. In the current study, I proposed the following themes after searching for literature: approaches towards transmissionist and transformationist teaching. Bearing these pre-established themes in mind, my coding priority would be given to those data segments producing the meaning related to the two pre-established themes.

After two rounds of coding, themes were preliminarily identified. To finalise the themes, I reread the transcripts to ensure that all codes and themes were consistent throughout the transcripts. In addition, two experts who obtained a PhD degree from the University of Auckland were invited as the audit to assist in checking the codes and themes.

3.7 Quality of mixed-methods research

Quality issues matter in every research design. This is of great importance for every research design in that researchers may be deeply concerned about whether their research could generate meaningful results for the academic communities. In addition, readers might be concerned about whether they would trust the research and apply the results to their research. However, scholars have no commonly accepted criteria to assess the quality of a mixed-methods design, although a wide range of literature concerning this topic has been researched (Bryman et al., 2008; Creswell & Plano Clark, 2017; O'Cathain, 2010; Tashakkori & Teddlie, 2008). In general, most researchers would not prefer to use the same criteria to access a mixed-methods approach. They did not prefer to strictly apply the criteria used in either quantitative or qualitative research when assessing a mixed-methods approach. Consequently, one of the appropriate ways to assess mixed methods research is to combine both quantitative and qualitative criteria. Therefore, the current study has been assessed by discussing the quantitative and qualitative components, respectively.

3.7.1 Validity and reliability

Among various criteria to assess the quality of a quantitative study, validity and reliability are the two major criteria frequently employed (Creswell & Guetterman, 2019; Dörnyei & Taguchi, 2009). Validity can be divided into three categories: content

validity, predictive or concurrent validity, and construct validity (Creswell, 2018). Reliability also includes several forms, such as test-retest reliability, interrater reliability, parallel forms reliability, and internal consistency(Dörnyei & Taguchi, 2009). For a single study, it might be impossible to check each form of validity and reliability strictly. The current study focused mainly on content validity and internal consistency. Accordingly, efforts have been made to enhance the quantitative quality from these two perspectives.

First of all**,** content validity is to see whether "the items [of the questionnaires] measure the content they were intended to measure" (Creswell, 2018, p. 153). In order to enhance the content validity, the current study has made the following efforts:

- Three experts were invited to help me check the questionnaires when they were designed. One of the experts was my doctoral supervisor, a specialist in the field of teacher cognition; the other two were experts in translation studies.
- When piloting the questionnaires, a focused group meeting with five doctoral students specialising in translation studies was held to ask their ideas about each item when doing the questionnaire. Meanwhile, one translation teacher and six students were interviewed on their ideas about the questionnaires.
- The initial version of the questionnaires was written in English. It was translated into Chinese under the guidance of one professional translator who also taught C/E-E/C translation courses in a postgraduate programme to ensure the Chinese translation measures the same constructs as the English version.

Internal consistency refers to "the homogeneity of the items making up the various multi-item scales within the questionnaire" (Dörnyei & Taguchi, 2009, p. 93). It is one of the frequently used criteria to test the reliability of an instrument "because your

instrument scale items should be assessing the same underlying construct" (Creswell, 2018, p.154). The internal consistency of questionnaires could be accomplished by obtaining a Cronbach's alpha (α) value. The obtained Cronbach α values for the current study are presented in Table 3.7 in Section 3.4.1.4.

3.7.2 Qualitative validity and reliability

Accessing the quality of the current study through its qualitative components involved employing a collection of techniques designed to evaluate the quality of qualitative research. However, evaluating qualitative research has produced many discussions on whether the techniques designed for quantitative research- validity, reliability, and generalisability, can be applied to qualitative research. Some researchers pointed out that the techniques of validity, reliability, and generalisability are generally limited to the quantitative research. When assessing the quality of qualitative research, alternative terms should be used to replace those in quantitative research. For example, the concepts of validity and reliability are replaced by trustworthiness, and alternatives to trustworthiness include credibility, transferability, and dependability (Denzin & Lincoln, 2000; Lincoln & Guba, 1985). Similarly, Kerlinger (1986) and Winter (2000) indicated that reliability needs to be replaced by consistency and accuracy. In addition, validity needs to be replaced by confirmability, credibility, and trustworthiness.

Nevertheless, some scholars do not use alternative terms for validity and reliability when evaluating the quality of qualitative research (Creswell, 2018; Gibbs, 2018). Gibbs (2018) reiterated that researchers' worldview decides whether validity makes sense in qualitative research. By holding a realistic worldview, researchers intend to "ensure that your analysis is as close as possible to what is really happening is worthwhile" (Gibbs, 2018, p. 128). This idea indicates that validity can be used in

qualitative research. However, one thing that needs to be emphasised is that both Creswell and Gibbs believed that the connotations of validity and reliability differ from those in quantitative research.

Validity in qualitative research does not attempt to ensure that the techniques "will guarantee that your work is a true picture of reality" (Gibbs, 2018, p. 130) but to guarantee that researchers' work has no obvious mistakes. Therefore, Creswell (2018) adopted the term Qualitative Validity in his work, which means "the researcher checks for the accuracy of the findings by employing certain procedures" (p. 199). In addition, Qualitative Reliability reiterates approach consistency between different researchers (Creswell, 2018; Gibbs, 2007, 2018). In other words, qualitative reliability is to see whether approaches employed by researchers are consistent with other researchers' approaches.

In conclusion, regarding the quality of qualitative research, scholars have various ideas about using validity and reliability. In order to keep the consistency of terms in the quality issues, the current study adopted qualitative validity and qualitative reliability to check the accuracy of the research findings and consistency of approaches across different projects. Table 3.10 illustrates the techniques adopted in the current study to enhance qualitative validity and reliability.

3.8 Ethical considerations

This study was approved by the University of Auckland Human Participants Ethics Committee (UAHPEC) to protect the participants: Chinese university translation teachers and students involved in this research. To protect them, the following efforts were made:

Participant Information Sheets (PIS)

PIS is a document that was specially prepared to ensure that the participants engaged in the study were well-informed about:

- Research purpose- Participants would be given information about the research purpose and their responsibilities in the research;
- Involvement of faculties, teachers, and students- Their participation in the research is on a voluntary basis;
- Participants' rights- All participants have the right to withdraw their contributed data;
- Anonymity and confidentiality- Efforts have been made to protect participants' identity and ensure that the data collected are not exposed to the third party;
- In addition to the above efforts, PIS clearly described that whether teachers participate in the research or not, it would not affect their employment and evaluation; meanwhile, students' participation or non-participation would not affect their course evaluation and graduation. Because of the differences in the content of PIS, three versions of PIS were included in the study. They are PIS for faculty deans, and PIS for teacher and student participants.

Consent Form (CF)

CF is a document that needs to be signed by the faculty deans, and teacher and student participants to ask for their consent to participate in the research, ensuring that they have understood the information provided in the PIS. Same as PIS, CF also included three versions: CF for faculty deans, and CF for teacher and student participants.

PIS would be given to each interested in participating in the research so that they would

have a good understanding of the purpose of the research and their rights. Those who consent to participate in the research will be asked to sign the corresponding CF before the official participation starts (see Appendix G and H for the PISs, and Appendix I, J and K for the CFs).

Table 3.10 Techniques to enhance validity and reliability of the qualitative study

	Techniques to be used	Explanations
Qualitative Validity	Data Triangulation	Data were collected from two different databases: • Classroom observations (observing actions); • Interviews (interviewing translation teachers and their students).
	Participant validation	It means asking interviewees to check the accuracy of the transcriptions. • The teachers' interview transcripts were sent back to those who expressed interest in receiving the transcripts to check the accuracy of their transcripts. • A summary report of student participants' interviews was sent to students who expressed interest in providing feedback.
	Constant comparisons	• Whenever a text was coded, it was compared with other texts coded earlier or coded similarly. • Whenever a new code was created, I checked whether the old code was created in the same way and still made sense. • Compare the activities, experiences, and actions that have been coded to look at the differences and variations between them. For example, to compare teachers' teaching approaches with different backgrounds.
	Evidence	It means to demonstrate to readers that researchers have collected first-hand data for interpretations by providing quotations from interviews or other documents that researchers have collected. • The current research provided quotations from interviews in research findings. I have made efforts to control the length of the quotations.
Qualitative Reliability	Transcription checking	It aims to ensure there are no obvious mistakes in the transcriptions. • It took nearly 10 months to check and recheck the transcriptions over three times.
	Avoid definitional drift in coding	Definitional drift in coding refers to the meaning of the codes created earlier, which may be changed when using these codes to code new texts. To avoid this, I have: • Used constant comparisons when coding to avoid inconsistencies in data analysis; • Written memos about the codes to help me remember later what kind of meaning was behind the ideas when I first created them.

Chapter 4 Quantitative results

This chapter presents the quantitative results of the current study. The chapter first outlines background information for the two groups of respondents: Chinese university translation teachers and their students. Then, it presents the findings of the quantitative data collected from both teacher and student respondents. Finally, it provides a summary for each section.

4.1 Background information results

4.1.1 Background information of the teacher respondents

The teacher respondents for the CTTQ were 122 C-E/E-C translation teachers who taught in MA and MTI programmes in Chinese universities. Of the teachers (*n* = 122), 53 were male, and 69 were female. As of age, nearly half of them were in their 40s (*n* = 54, 44.3%). Regarding qualifications, more than 60% of this group of translation teachers held a PhD degree (*n* = 75). The teacher respondents varied in academic ranks, with nearly one-third being professors. They were also varied in translation teaching experiences. Most have six to 10 years of translation teaching experience (n = 37, 30.3%), followed by 20.5% having less than five years of teaching experience (*n* = 25). All the teachers have translation practice experiences. Regarding programmes, the majority of them only taught in the MTI programme (*n* = 84, 68.9%). In contrast, those who only taught in the MA programmes accounted for a small proportion (*n* = 4, 3.2%). However, nearly one-third of them taught in both MTI and MA programmes (*n* = 34, 27.9%). Nearly 75% have overseas learning experience (*n* = 91). More details about the background information are shown in Table 4.1.

Table 4.1 Background information of the CTTQ respondents (n = 122)

		No.	%
Gender	Male	53	43.1
	Female	69	56.1
Age	20-29	3	2.5
	30-39	29	23.8
	40-49	54	44.3
	50-59	32	26.2
	60 or above	4	3.3
Qualification	Bachelor	3	2.5
	Master	44	36.1
	PhD	75	61.5
Academic rank	Assistant Lecturer	5	4.1
	Lecturer	30	24.6
	Associate professor	55	45.1
	Professor	32	26.2
Translation teaching experience (years)	5 or less	25	20.5
	6-10	37	30.3
	11-15	17	13.9
	16-20	16	13.1
	21-25	14	11.5
	26-30	6	4.9
	31 or above	7	5.7
Translation experience	None	0	0
	Barely	11	9
	Limited	47	38.5
	Some	49	40.2
	Plentiful	15	12.3
Programmes	MTI	84	68.9
	MA	4	3.2
	Both	34	27.9
Overseas learning experience	No	31	25.4
	Yes	91	74.6
University level	211 Project*	33	27
	958 Project*	19	15.6
	Foreign language studies universities	27	22.1
	Others	52	42.6
Working experiences	Language teachers	76	62.3
	Professional translators	21	17.2
	Others	6	4.9
	None	30	24.6

Note: The 211 Project and 985 Project are two approaches made by the Chinese government to promote world-class and internationally well-known universities. Universities in these two projects are regarded as the Tier 1 universities of over 3000 higher education institutions in China. Therefore, the teaching quality of these universities is believed to be more outstanding than others not involved in the projects. The 211 Project is comprised of 122 universities, and the 985 Project is comprised of 39 universities.

4.1.2 Background information of the student respondents

The student respondents for the CTSQ were 110 postgraduate students who studied C-E/E-C translation in Chinese universities. Of the students (n = 110), 20 were male, and 90 were female. Most were aged between 22 and 24 (n = 66, 60%). The majority of them were studying in the MTI programme (n = 90, 81.8%), and the rest were studying in the MA programmes. Around two-thirds of the students were in their first year of postgraduate study (n = 70). A vast majority of the students have translation practice experience (n = 105, 95.5%). Over half of the students were English majors (n = 63, 57.3%) in undergraduate study. Most students have translator qualification certificates (n = 81, 74%). Over half were studying for their master's degree in a 211-Project or 985-Project university (n = 58, 53%). Table 4.2 provides more details of the background information of these students.

Table 4.2 Background information of the CTSQ respondents (n = 110)

		No.	%
Gender	Male	20	18.2
	Female	90	81.8
Age	18 or under	None	0
	19-21	8	7.3
	22-24	66	60
	25-27	29	26.4
	28-30	4	3.6
	30 and above	3	2.7
Postgraduate programmes	MTI	90	81.8
	MA	20	18.2
Grade (Postgraduate)	First-year	70	63.6
	Second-year	31	28.2
	Third-year	9	8.2
Undergraduate programmes	English	63	57.3
	Translation	36	32.7
	Others	11	10
Translation practice experience	None	5	4.5
	Barely	53	48.2
	Limited	42	38.2
	Some	9	8.2
	Plentiful	1	.9
Translator certificates	CATTI[a]-1	3	2.7
	CATTI-2	28	25.5
	CATTI-3	53	48.2
	None	36	32.7
University level-Postgraduate	985	24	21.8
	211	34	30.9
	Others	61	55.5

Note: [*]The 211 Project and 985 Project are two approaches made by the Chinese government to promote world-class and internationally well-known universities. Universities in these two projects are regarded as the Tier 1 universities of over 3000 higher education institutions in China. Therefore, the teaching quality of these universities is believed to be more outstanding than others not involved in the projects. The 211 Project is comprised of 122 universities, and the 985 Project is comprised of 39 universities. CATTI[a]: China Accreditation Test for Translators and Interpreters

4.2 Chinese translation teachers' cognitions

4.2.1 Translation teachers' cognitions in general

A general understanding of the cognitions held by a group of C-E/E-C Chinese translation teachers regarding the approaches to translation teaching can be achieved through the teachers' responses to the 16 items in TCTTQ, in which the 16 items were grouped into eight pairs of opposing statements. The first group of eight items represented the transmissionist extreme approaches to translation teaching, and the second group represented the transformationist extreme approaches to translation teaching. Each pair of the opposing statements addressed one specific teaching and learning element, including material use, the teacher's role, ways to assess translation quality, ways to evaluate student learning, instruction strategy, ways to complete translation assignments, ways to offer feedback, and ways to choose teaching content (see Table 3.6 in Section 3.4.1.3). Teachers' responses to the eight pairs of opposing statements were measured by a 5-point Likert scale: 1= Disagree, 2 = Somewhat agree, 3 = Moderately agree, 4 = Strongly agree, 5 = Extremely agree. It should be noted that the rating scores of the eight items representing the transmissionist extreme approaches were calculated by a reverse coding strategy, which means the original score will be transformed into the corresponding lower score and vice versa. Table 4.3 presents the rules used for the reverse coding strategy in this study. By applying these rules, the score for each item representing the transmissionist extreme was transformed into its corresponding value. After this procedure, a general understanding of teachers' cognitions about approaches to translation teaching can be captured by calculating the mean scores of each pair of opposing statements (see Figure 4.1).

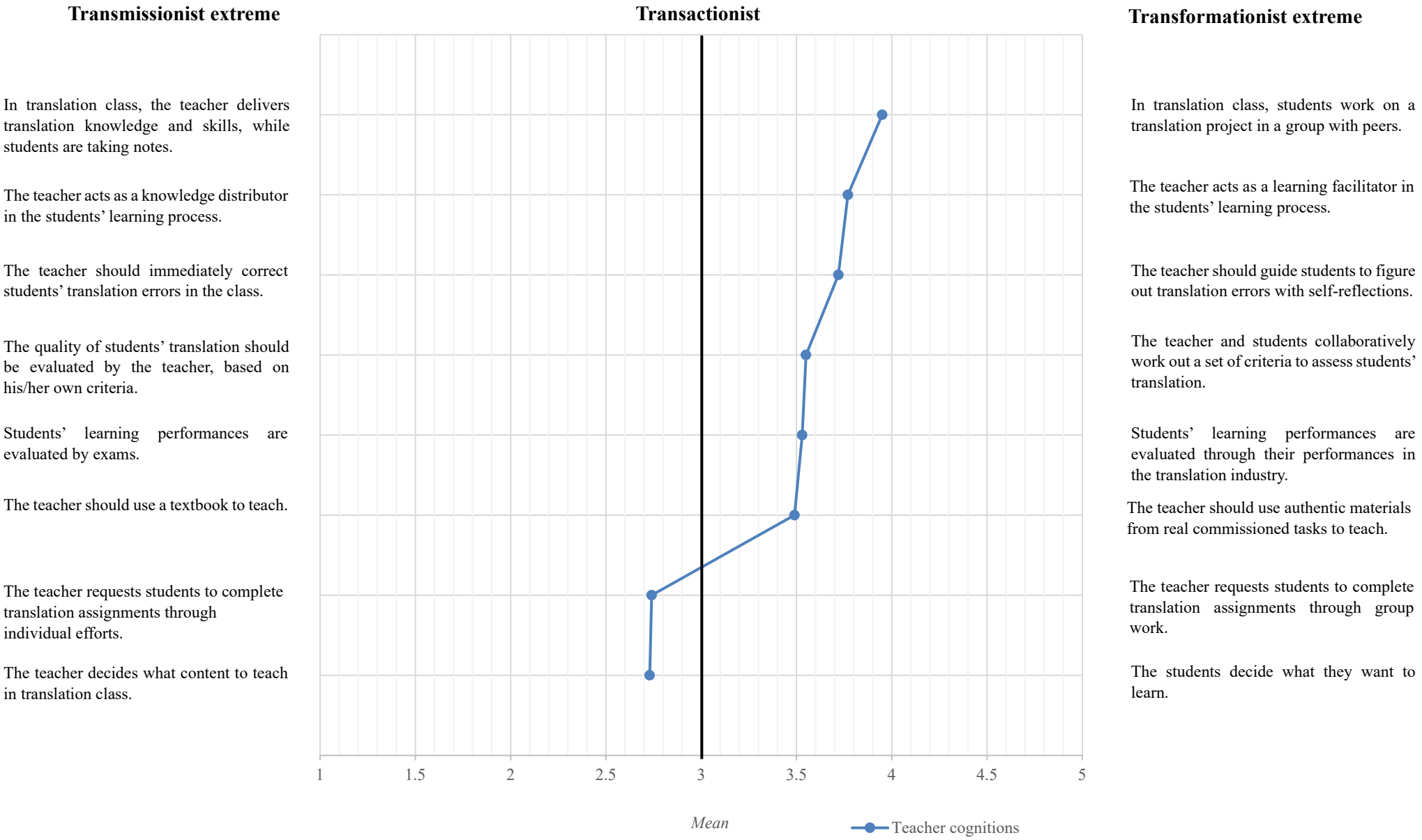


Figure 4.1 A general description of teachers' cognitions about approaches to translation teaching

As seen from Figure 4.1, the overall cognitions about approaches to translation teaching held by this group of translation teachers can be divided into two dimensions: cognitions about the transmissionist-oriented approaches (TMoA) and cognitions about the transformationist-oriented approaches (TFoA). These translation teachers' cognitions about the TMoA included two pairs of items addressing two elements: ways to complete translation assignments and ways to choose teaching content. Their cognitions about the TFoA included six pairs of items that concerned the remaining six elements: instruction strategy, teacher's role, ways to offer feedback, ways to assess translation quality, ways to evaluate student learning and material use. The descriptive statistics of the teachers' overall cognitions about approaches to translation teaching in terms of the two dimensions are presented in Table 4.4.

Table 4.3 The reverse coding rules for the transmissionist extreme variable

Original value	Transformed value
1	5
2	4
3	3
4	2
5	1

Table 4.4 Descriptive statistics of the two dimensions of teachers' cognitions about approaches to translation teaching (n = 122)

Dimension	No. of pairs of items	*M*	*SD*
Transmissionist-oriented approaches	2	2.73	.55
Transformationist-oriented approaches	6	3.66	.45

4.2.2 Characteristics of translation teachers' cognitions

A close examination of the characteristics of the two dimensions of these teachers' cognitions was achieved by using descriptive statistics to rank the mean scores of the eight pairs of opposing statements from the highest to the lowest (see Table 4.5).

4.2.2.1 Translation teachers' cognitions about the transformationist-oriented approaches to translation teaching

It can be seen from Table 4.5 that the mean scores of the eight pairs of opposing statements, based on the elements they addressed, were ranked from the highest to the lowest: instruction strategy, teacher's role, ways to offer feedback, ways to assess translation quality, ways to evaluate student learning, material use, ways to complete translation assignments, and ways to choose teaching content. Of the eight elements, the first six were related to the TFoA.

Instruction strategy received the highest mean score (3.95), nearly four (strongly agree). This shows that the respondents tended to believe that collaborative learning should be adopted in teaching translation. For example, teachers should engage in various teaching activities, such as participating in group discussions with students and collaboratively solving translation problems. The teacher's role received the second highest score, 3.77 (close to strongly agree). It implies that the teacher respondents considered themselves as a facilitator for developing students' autonomous learning abilities rather than a controller of the learning process. Ways to offer feedback obtained the third highest score (3.72), indicating that this group of teachers tended to refrain from directly correcting their students' translation errors during class. Instead, they preferred to engage in discussions with their students, guiding them to think about the reasons behind the errors and finding solutions together.

Table 4.5 Descriptive statistics of teacher respondents' ratings of the eight pairs of opposing statements regarding teachers' cognitions (*n* = 122)

Elements being addressed by pairs of opposing statements	*Means*	*SD*
Instruction strategy	3.94	.72
Teacher's role	3.77	.61
Ways to offer feedback	3.72	.62
Ways to assess translation quality	3.55	.70
Ways to evaluate student learning	3.52	.59
Material use	3.48	.68
Ways to complete assignments	2.74	.74
Ways to choose teaching content	2.73	.72

Note: It is a 5-point Likert scale: 1= Disagree, 2= Somewhat agree, 3= Moderately agree, 4= Strongly agree, 5= Extremely agree

4.2.2.2 Translation teachers' cognitions about the transmissionist-oriented approaches to translation teaching

The other two elements were related to the TMoA. Each of the two elements received a relatively lower score under three. The element: ways to complete translation assignments received a mean score of 2.74, and ways to choose teaching content received 2.73. It is evident that these two scores were closely aligned. This means that the teachers had very similar cognitions regarding these two elements. Firstly, this group of teachers were dominant in selecting the teaching content, which resulted in students having limited opportunities to choose the learning content they were interested in. Secondly, the teachers preferred to assign translation tasks to students to complete individually rather than through groups or teamwork.

To conclude the findings, a holistic picture of the teacher respondents' cognitions about

approaches to translation teaching was provided. To be specific, two dimensions of cognitions were identified, namely cognitions about the transmissionist-oriented approaches and cognitions about the transformationist-oriented approaches. The first dimension conceptualised the teaching and learning of translation, which is achieved through individual efforts and teachers' control of the learning process. In contrast, the second dimension conceptualised learning of translation, which is achieved through collaborations and learner-centred activities.

4.2.3 Individual differences in translation teachers' cognitions

The above section presented the overall understanding of cognitions held by translation teachers about approaches to translation teaching. The present study also aimed to investigate individual differences in cognitions held by translation teachers with various backgrounds, such as gender, age, academic ranking, and teaching experience. To answer these questions, independent samples *t*-tests and one-way ANOVA were conducted to explore those factors' impacts on translation teachers' cognitions.

The independent *t*-tests were performed to compare differences in the teachers' cognitions regarding gender, overseas study experience, professional translation experience, and language teaching experience. The test results are presented in Table 4.6.

Table 4.6 Independent samples *t*-tests results of teacher cognitions by gender, language teaching experience, and types of working institutions (*n* = 122)

Transmissionist-oriented approaches					Transformationist-oriented approaches				
Group	*n*	*M*	*SD*	*t*	Group	*n*	*M*	*SD*	*t*
Male	53	2.53	.55	-3.68**	Male	53	3.58	.43	-1.78
Female	69	2.88	.50		Female	69	3.73	.45	
With OSE	91	2.71	.58	.78	With OSE	91	3.68	.44	-.55
Without OSE	31	2.80	.46		Without OSE	31	3.63	.47	
985U	19	2.63	.39	.86	985U	19	3.45	.38	2.35*
Non-985U	103	2.75	.57		Non-985U	103	3.70	.45	
With PTE	21	2.51	.57	2.04*	With PTE	21	3.67	.48	-.11
Without PTE	101	2.78	.54		Without PTE	101	3.66	.44	
With LTE	76	2.76	.57	-.73	With LTE	76	3.69	.41	-.69
Without LTE	46	2.68	.51		Without LTE	46	3.63	.50	

Note: ** $p < .001$; * $p < .05$; OSE = overseas studying experience, 985U = 985 Project universities, LTE= language teaching experience; PTE= professional translator experience.

It can be seen from Table 4.6 that significant differences in teachers' cognitions about the TMoA were found between male and female t (122) = -3.68, $p < .001$, as well as between teachers with and without professional translator experience t (122) = 2.04, $p < .05$; that is the cognitions of male teachers tended to be more transmissionist-oriented and less transformationist-oriented than those of female teachers, and cognitions of teachers who have professional translator experience tended to be more transmissionist-oriented and less transformationist-oriented than those of teachers who have no professional translator experience.

There were also significant differences in teachers' cognitions about the TFoA between teachers working in 985-Project universities and non-985-Project universities t (122) = 2.35, $p < .05$; that is, the cognitions of teachers who worked in non-985-Project universities tended to be more transformationist-oriented and less transmissionist-oriented than those of teachers who worked in 985-Project universities. No significant differences were found regarding teachers' overseas study experience and language teaching experience.

Since p value only indicates statistical significance, effect sizes need to be calculated to quantify the magnitude of differences. For independent t-tests in this study, Cohen's d value was adopted to report the magnitude of effect sizes. The tests returned $d = .67$ for the different gender groups, $d = .60$ for the different university groups, and $d = .48$ for the different professional translator experience groups. All revealed medium effect sizes. This indicates that, to a moderate degree, female translation teachers would be more likely to shift away from the TMoA to TFoA than male teachers. Also, teachers working in the non-985-Project universities would be more likely to consider adopting the TFoA than teachers working in the 985-Project universities. Finally, teachers having no professional translator experience, to a moderate degree, were more likely to shift away

from the TMoA to TFoA than those with professional translator experience.

Afterwards, several one-way ANOVA analyses were performed to explore statistical differences in teachers' cognitions about approaches to translation teaching among teachers with different backgrounds, such as age groups, academic rankings, years of teaching experience, qualifications, and programmes.

Several one-way ANOVA analyses were conducted to explore whether teachers of different ages held different cognitions about approaches to translation teaching. The teacher respondents were grouped into five age groups: Age 1 (20-29), Age 2 (30-39), Age 3 (40-49), Age 4 (50-59), and Age 5 (60 and above). The results showed statistically significant differences in teachers' cognitions about the TFoA (F (4, 117) = 2.57, $p < .05$) between different age groups. The effect size for one-way ANOVA returned $\eta^2 = .08$, which indicates a medium effect size. No statistically significant differences were found in teachers' cognitions about the TMoA in terms of their age (See Table 4.7).

Table 4.7 ANOVA results of cognitions by age groups

Source		*df*	*F*	*p*	η^2
Transmissionist-oriented approaches					
	Between	4	.955	.435	.03
	Within	117			
Transformationist-oriented approaches					
	Between	4	2.566	.042*	.08
	Within	117			

Note: * $p < .05$.

LSD post hoc tests were then performed to explore the inter-group differences in these teachers' cognitions about the TFoA (See Table 4.8). The tests revealed that statistical

differences appear in three pairs of age groups. The three pairs of age groups are: the first pair: A1 (M = 2.97, SD = .21) and A2 (M = 3.64, SD = .48); the second pair: A1 (M = 2.97, SD = .21) and A3 (M = 3.75, SD = .42); and the third pair: A1(M = 2.97, SD = .21) and A4 (M = 3.64, SD = .43). As three age groups (A2, A3, A4) were found to have differences with the A1 group, it implies that, to a moderate degree (η^2 = .08), the younger the teachers, the less likely these teachers would consider to apply the TFoA to translation teaching than the older teachers.

Table 4.8 Post hoc results of ANOVA of teachers' cognitions about transformationist-oriented approaches by age

	Age group		p
Transformationist-oriented approaches	A1	A2	.013*
	A1	A3	.003*
	A1	A4	.012*

Note: * $p < .05$. Age1 = 20-29 years old; Age2 = 30-39 years old; Age3 = 40-49 years old; Age 4 = 50-59.

In terms of programmes, statistically significant differences were also found by conducting several one-way ANOVA. The results are presented in Table 4.9 and Table 4.10. It can be seen that no statistical differences were found in cognitions about the TMoA in terms of programmes in which the teachers taught. However, statistical differences in this group of teachers' cognitions about the TFoA were found between teachers who taught in the MTI programme (M = 3.73, SD = .45) and teachers who taught in the MA programmes (M = 3.19, SD = .24).

Table 4.9 ANOVA results of cognitions by programmes

Source		*df*	*F*	*p*
Transmissionist-oriented approaches				
	Between	2	.027	.974
	Within	119		
Transformationist-oriented approaches				
	Between	2	4.145	.018*
	Within	119		

Note: * $p < .05$.

Table 4.10 Post hoc results of ANOVA of teachers' cognitions about transformationist-oriented approaches by programmes

	Programmes		*p*
Transformationist-oriented approaches	MTI	MA	.017*

Note: * $p < .05$.

Then, η^2 was calculated to explore the effect size. It returned $\eta^2 = .07$, which indicates a medium effect size. It implies that, to a moderate degree, teachers who taught in the MTI programme were more likely to teach in a transformational way than teachers who taught only in the MA programme.

The teacher respondents were also grouped into different categories according to their years of translation teaching experience, levels of translation practice experience, qualifications, and academic ranking. Like other categories, several one-way ANOVA analyses were performed to investigate whether these teachers had statistical differences. The results showed no significant differences (see Table F1, F2, F3, and F4 in Appendix F).

4.2.4 Factors influencing translation teachers' cognitions

The present study intended to explore the factors that influence translation teachers' cognitions about approaches to translation teaching by collecting their ratings of a list of items in the FITCQ (see Table 3.5 in Section 3.4.1.3). These items can be grouped into two factors: teachers' translation-related experience, and teachers' personal learning and working experience. The respondents were required to indicate how influential these items were in helping them form their cognitions about approaches to translation teaching. The descriptive statistics of the two factors are presented in Table 4.11.

Table 4.11 Descriptive statistics of teacher respondents' ratings of the two factors that influenced their cognitions (n = 122)

Factors	*M*	*SD*
Teachers' translation-related experience	3.56	.69
Teachers' personal learning and working experience	2.81	.59

Note: This is a 5-point Likert scale: 1= Insignificant, 2= Minor, 3= Moderate, 4= Major, 5=Severe.

The mean scores of the two factors and the mean scores of teachers' cognitions about approaches to translation teaching were used to conduct a correlation analysis to examine the relationship between them. The results are shown in Table 4.12 and Table 4.13

Table 4.12 Correlations of teachers' general cognitions about approaches to translation teaching and teachers' translation-related experience

		TTC	TTE
Translation teachers' cognitions	Person correlation	1	.299**
	Sig. (1-tailed)		.000
	N	122	122
Teachers' translation-related experience	Person correlation	.299**	1
	Sig. (1-tailed)	.000	
	N	122	122

Note: ** Correlation is significant at the .01 level. TTC = Translation teachers' cognitions; TTE = Teachers' translation-related experience

Table 4.13 Correlations of teachers' general cognitions about approaches to translation teaching and teachers' personal learning and working experience

		TTC	TTLW
Translation teachers' cognitions	Person correlation	1	-.044
	Sig. (1-tailed)		.315
	N	122	122
Teachers' personal learning and working	Person correlation	-.044	1
	Sig. (1-tailed)	.315	
	N	122	122

Note: TTC = Translation teachers' cognitions; TTLW = Teachers' personal learning and working.

As shown in the two Tables, the bivariate correlation between Chinese translation teachers' cognitions about approaches to translation teaching and its two influencing factors showed a complex relationship between teachers' overall cognitions and its two influencing factors. On the one hand, there was a significant correlation between this group of teachers' general cognitions about approaches to translation teaching and their translation-related experience at the .01level for a one-tailed prediction, Pearson's *r* =.30. Based on the effect sizes matrix in Section 3.6.1.2, the effect size (*r* =.30) indicates

a moderate correlation, which means to a moderate degree the current results could suggest that teachers' translation-related experience, such as doing translation practice and reading literature on translation studies would contribute to these teachers' cognitions about approaches to translation teaching.

On the other hand, the bivariate correlation between teachers' cognitions about approaches to translation teaching and their personal learning and working experience showed no significant correlation between them at the .01 level for a one-tailed prediction. Furthermore, it is surprising that they were negatively correlated (r = -.044, p = .315). The lack of significant correlation between this group of teachers' cognitions and their personal learning and working experience implies that teachers' cognitions about approaches to translation teaching may be subject to other influencing factors.

Based on the results of the correlation analysis, the extent to which teachers' translation-related experience influences teachers' cognitions was examined through simple regression, as there was only one independent variable found to be correlated to the dependent variable. The regression model showed that the overall regression was statistically significant F (1, 120) = 11.74, $p < .001$, R^2 = .09, which means that the factor explained 9% of the variance in the data of teachers' cognitions about approaches to translation teaching. Table 4.14 shows the regression coefficients. It is found that translation-related experience significantly predicted teachers' cognitions about approaches to translation teaching (β = .30, $p < .05$). In short, teachers' translation-related experience significantly influenced teachers' cognitions about approaches to translation teaching. It accounted for 9% of the variation observed in the data on teachers' cognitions about different approaches to translation teaching, indicating that other factors might contribute to teachers' cognitions about approaches to translation teaching.

Table 4.14 The regression coefficients of translation-related experience on teachers' cognitions about approaches to translation teaching

	B	*SE*	β	*t*
(Intercept)	2.83	.18		15.90***
Translation-related experience	.17	.05	.30	3.43**

Note: *** $p < .001$, ** $p < .05$.

4.3 Chinese translation teachers' teaching practices

The second category of research questions in the current study concerns translation teachers' teaching practices, individual differences in teachers' teaching practices in terms of their different backgrounds, and the factors that contributed to the teachers' teaching practices. In order to answer these questions, the methods used to analyse the quantitative data are the same as those used in Section 4.2.

4.3.1 Translation teachers' teaching practices in general

Translation teachers' general teaching practices were examined by calculating the mean scores of the eight pairs of opposing statements that required the teacher respondents to rate their frequencies of conducting the teaching activities (see sub-questionnaire TPQ). The methods used to calculate the mean scores of teaching practices were the same as those used in calculating teachers' cognitions (see Section 4.2.1). Figure 4.2 presents the general description of these translation teachers' teaching practices.

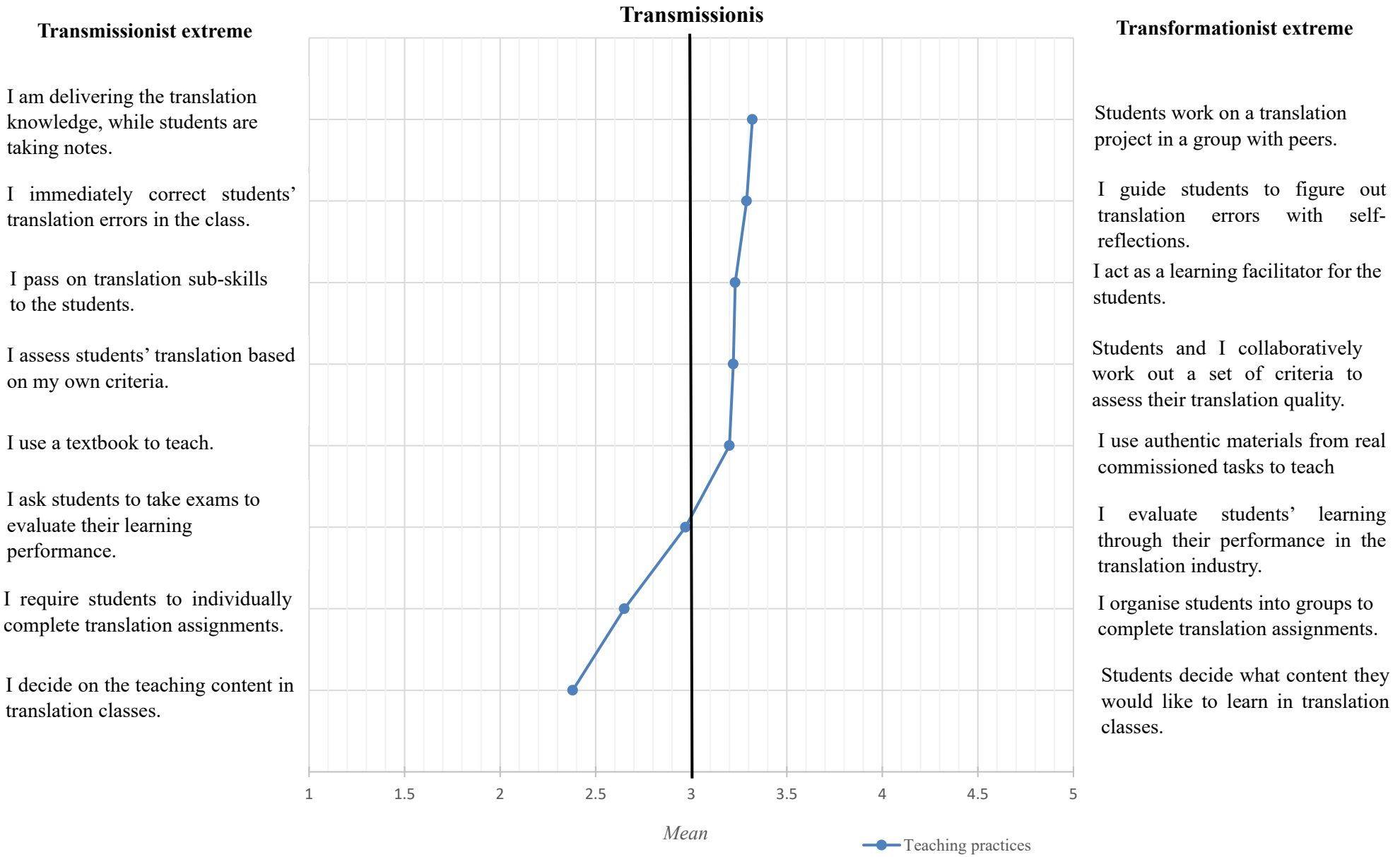


Figure 4.2 A general description of teachers' teaching practices

As seen in Figure 4.2, there were five mean scores above three, and the remaining three were less than three. It is, therefore, suggested that two dimensions of teachers' teaching practices can be identified: transmissionist-oriented teaching practices (TMoP) and transformationist-oriented teaching practices (TFoP), which are consistent with the two dimensions identified in the translation teachers' cognitions.

The teachers' teaching practices, consistent with the TMoP, included three pairs of items concerning three distinct elements: ways to evaluate student learning, ways to complete translation assignments, and ways to choose teaching content. However, the mean score of the pair of items concerning ways to evaluate student learning was very close to three, the transactionist approaches. In addition, the teachers' teaching practices, consistent with the TFoP, included five pairs of items concerning five distinct elements: instruction strategy, ways to offer feedback, teacher's role, ways to evaluate translation quality and material use. The descriptive statistics of the teachers' teaching practices in terms of the two dimensions are presented in Table 4.15.

Table 4.15 Descriptive statistics of the two dimensions of teachers' teaching practices (n = 122)

Dimension	No. of pair of items	*M*	*SD*
Transmissionist-oriented approaches	3	2.66	.44
Transformationist-oriented approaches	5	3.25	.35

4.3.2 Characteristics of translation teachers' teaching practices

A general description of these translation teachers' teaching practices has been drawn in Figure 4.2. It is, then, necessary to take a close look at the characteristics of each

dimension that was identified in the Figure. This is achieved by examining the mean scores of each pair of opposing statements in the TPQ. Table 4.16 presents the statistical description of the eight pairs of opposing statements regarding teaching practices.

Table 4.16 Descriptive statistics of teacher respondents' ratings of the eight pairs of opposing statements regarding teachers' teaching practices (*n* = 122)

Elements being addressed by pairs of opposing statements	*Mean*	*SD*
Instruction strategy	3.32	.62
Ways to offer feedback	3.29	.48
Teacher's role	3.23	.52
Ways to assess translation quality	3.22	.54
Material use	3.21	.63
Ways to evaluate student learning	2.97	.64
Ways to complete translation assignments	2.65	.61
Ways to choose teaching content	2.38	.61

Note: It is a 5-Likert scale: 1= Never, 2= Rarely, 3= Sometimes, 4= Frequently, 5= Very frequently.

4.3.2.1 Teaching practices that are transformationist-oriented

As seen from Table 4.16, instruction strategy received the highest score (*M* = 3.32), indicating that this group of teachers, to a more frequent degree, adopted collaborative teaching activities in their classes, compared with other teaching activities. For example, they may organise group presentations to explain translation problems. Following the instruction strategy, ways to offer feedback received the second highest score (*M* = 3.29). It implies that this group of teachers, to a limited frequency degree, discussed translation errors with their students while helping them figure out the translation problems. The mean scores for teacher's role, ways to assess translation quality, and material use ranged from 3.23 to 3.21. This shows that the frequencies of these teaching

activities were almost the same.

4.3.2.2 Teaching practices that are transmissionist-oriented

As for the remaining three pairs of items, the mean scores were less than three (3 = the mean score of the 5-point Likert scale). These items can be categorised as the TMoP. The TMoP concerned ways to evaluate student learning, ways to complete assignments, and ways to choose teaching content. Of the three elements, ways to choose teaching content received the lowest score (M = 2.38), close to two; translation teachers may always choose teaching content based on their experience and knowledge instead of students' needs. In contrast, ways to evaluate student learning received the highest score in these three elements (M = 2.97), close to three. It shows that this group of teachers' ways of evaluating students' learning outcomes were more likely transactionist, the approaches situated in the middle of the transmissionist extreme of approaches and the transformationist extreme of approaches. In other words, these translation teachers sometimes used exams to evaluate students' learning outcomes. In the meantime, they sometimes used students' performances in the translation markets to evaluate their learning outcomes. In addition, ways to complete translation assignments received a mean score of 2.65. It shows that these translation teachers organised students to complete translation assignments through individual efforts instead of group work.

To conclude, both the TFoP and TFoP were identified in this group of teachers' teaching practices. Of these two dimensions of teaching practices, TFoP addressed more elements than the TMoP in teachers' self-reported teaching practices. More interestingly, one element was very close to the transactionist approaches, although it has been categorised as the TMoP.

4.3.3 Individual differences in translation teachers' teaching practices

To examine the differences in translation teachers' teaching practices regarding their backgrounds, two methods were adopted: independent samples *t*-tests and one-way ANOVA.

Firstly, independent *t*-tests were conducted to explore the statistical differences in teachers' teaching practices between males and females. The results (see Table 4.17) showed that this group of teachers' teaching practices have significant differences between males and females regarding the TMoP, t (122) =-2.94, p = .004. The results suggest that male teachers' teaching practices tended to be more transmissionist-oriented and less transformationist-oriented than female teachers. In addition, no significant differences were found in the TMoP by considering teachers' overseas study experience, professional translator experience, language teaching experience, and working institutions.

As for the TFoP, there were significant differences between teachers who worked in 985-Project universities and non-985-Project universities t (122) = 2.55, p = .012. In other words, the teaching practices of teachers who worked in non-985-Project universities tended to be more transformationist-oriented and less transmissionist-oriented than those of teachers who worked in 985-Project universities. In addition, no significant differences were found in both approaches to teaching practices regarding teachers' overseas study experience, professional translator experience, and language teaching experience.

Table 4.17 Independent samples *t*-tests results of teaching practices by gender, language teaching experience, and types of working institutions (n = 122)

Transmissionist-oriented approaches					Transformationist-oriented approaches				
Group	*n*	*M*	*SD*	*t*	Group	*n*	*M*	*SD*	*t*
Male	53	2.53	.49	-2.94*	Male	53	3.22	.32	-.93
Female	69	2.77	.38		Female	69	3.28	.37	
With OSE	91	2.68	.46	-.68	With OSE	91	3.28	.37	-1.57
Without OSE	31	2.62	.39		Without OSE	31	3.17	.29	
985U	19	2.58	.34	.92	985U	19	3.07	.37	2.55*
Non-985U	103	2.68	.46		Non-985U	103	3.29	.34	
With PTE	21	2.61	.42	.61	With PTE	21	3.37	.34	-1.66
Without PTE	101	2.68	.45		Without PTE	101	3.23	.35	
With LTE	76	2.70	.41	-1.03	With LTE	76	3.26	.33	-.27
Without LTE	46	2.61	.49		Without LTE	46	3.24	.38	

Note: *$p < .05$. OSE=overseas study experience; 985U= 985 Project universities; PTE= professional translator experience; LTE=language teaching experience.

Cohen's d values were calculated for each group of teachers to examine the effect sizes where significant differences were found. The calculations returned medium effect sizes with d = .55 for different genders and d = .62 for different types of working institutions. These Cohen's d values suggest that the male teachers, to a moderate degree, were more likely to teach translation in a transmissionist-oriented way than the female teachers. In addition, to a moderate degree, the teachers who worked in the non-985 Project universities were more likely to teach translation in a transformationist-oriented way than those who worked in 985-Project universities.

Several one-way ANOVA were then conducted to examine the differences in teachers' teaching practices regarding their age, qualifications, programmes, academic rankings, years of translation teaching experience, and level of translation practice experience.

The teacher respondents were grouped into three qualification groups: the bachelor's degree group, the master's degree group, and the PhD group. The results showed that there were statistically significant differences in teacher's TMoP in terms of qualifications (F (2, 119) = 3.067, p = .050, η^2 = .05). No statistically significant differences were found in terms of teachers' TFoP (see Table 4.18).

Table 4.18 ANOVA results of teaching practices by qualifications

Source		*df*	*F*	*p*	η^2
Transmissionist-oriented teaching practices					
	Between	2	3.067	.050*	.05
	Within	119			
Transformationist-oriented teaching practices					
	Between	2	1.519	.223	
	Within	119			

Note: * p < .05.

LSD post hoc tests were then conducted to explore the inter-group differences in the TMoP (see Table 4.19). The tests revealed significant differences between the bachelor's degree group ($M = 2.17$, $SD = .83$) and the Master's degree group ($M = 2.75$, $SD = .43$). In other words, teaching practices of teachers who obtained a bachelor's degree tended to be more transmissionist-oriented and less transformationist-oriented than those of teachers who obtained a master's degree. However, the effect size returned $\eta^2 = .05$, which indicates a small effect size.

Table 4.19 Post hoc results of ANOVA of teachers' transmissionist-oriented teaching practices by qualifications

	Qualifications		*p*
Transmissionist-oriented teaching practices	Bachelor	Master	.026*

Note: * $p < .05$.

In addition to qualifications, no significant differences were found in these teachers' teaching practices concerning their ages, academic rankings, programmes, years of translation teaching experience, and level of translation practice experience (see Table F5, F6, F7, F8, and F9 in Appendix F).

4.3.4 Factors influencing translation teachers' teaching practices

In the sub-questionnaire FITPQ, a set of items have been grouped into two categories, namely teacher experience and student needs, as well as curricula and facilities. These two categories were considered factors that may influence teachers' teaching practices. To examine the relationship between each factor and this group of teachers' teaching practices, the mean scores of the two factors and teachers' general teaching practices were subjected to correlation analyses. Table 4.20 presents the descriptive statistics of

the two factors. Table 4.21 and Table 4.22 present the correlation between each factor and these teachers' teaching practices.

Table 4.20 Descriptive statistics of teacher respondents' ratings of the two factors that influenced translation teachers' teaching practices (n = 122)

Factors	*M*	*SD*
Teacher experience and student needs	3.45	.61
Curricular and facilities	3.01	.51

Note: This is a 5-point Likert scale: 1= Insignificant, 2= Minor, 3= Moderate, 4= Major, 5=Severe.

Table 4.21 Correlations of teachers' general teaching practices and teacher experience and student needs

		TTP	TES
Translation teachers' teaching practices	Person correlation	1	.263**
	Sig. (1-tailed)		.002
	N	122	122
Teacher experience and student needs	Person correlation	.263**	1
	Sig. (1-tailed)	.002	
	N	122	122

Note: **. Correlation is significant at the .01 level (1-tailed). TTP = Translation teachers' teaching practices; TES = Teacher experience and student needs.

Table 4.22 Correlations of teachers' general teaching practices and curricula and facilities

		TTP	CF
Translation teachers' teaching practices	Person correlation	1	.055
	Sig. (1-tailed)		.272
	N	122	122
Curricula and facilities	Person correlation	.055	1
	Sig. (1-tailed)	.272	
	N	122	122

Note: **. Correlation is significant at the .01 level (1-tailed). TTP = Translation teachers' teaching practices; CF = Curricular and facilities.

As shown in Tables 4.21 and 4.22, the bivariate correlation between these translation teachers' teaching practices and its two influencing factors showed the complex relationships between teachers' overall teaching practices and its two influencing factors. On the one hand, there was a significant correlation between this group of teachers' general teaching practices and their experiences and student needs at the .01 level for a one-tailed prediction Pearson's r =.30, which indicates a medium effect size. Therefore, it would be claimed that there was a moderate correlation between these two variables. On the other hand, the bivariate correlation between teachers' teaching practices and curricula and facilities showed no significant correlation between them at the .01 level for a one-tailed prediction r = .06, p = .272. This implies that curricula and facilities, such as the requirements of the faculty syllabus, may not influence this group of teachers' teaching practices.

Based on the results of the correlation analysis, the extent to which teacher experience

and student needs would influence teachers' teaching practices was examined by using simple regression, as there was only one independent variable found to be correlated to the dependent variable. The regression model showed that the overall regression was statistically significant F (1, 120) = 8.9, $p < .01$, $R^2 = .07$, which means that this factor explained 7% of the variance in the data of teachers' teaching practices. Table 4.23 shows the regression coefficients. It is found that translation teacher experience and student needs significantly predicated teachers' teaching practices (β = .26, $p < .001$). In short, teacher experience and student needs significantly influenced teachers' teaching practices, and it accounted for 7% of the variation observed in the data on teachers' teaching practices, indicating that there might be other factors that would contribute to teachers' teaching practices.

Table 4.23 The regression coefficients of translation teacher experience and student needs on teachers' teaching practices

	B	*SE*	β	*t*
(Intercept)	1.99	.49		4.06***
Teacher experience and student needs	.48	.16	.26	2.98**

Note: *** $p < .001$, ** $p < .05$.

4.4 Chinese translation students' cognitions

The third category of research questions in the current study concerns translation students' cognitions about approaches to translation teaching and the factors that influenced these students' cognitions. In order to answer these questions, methods used to analyse the quantitative data were the same as those used in exploring the teachers' cognitions. (see Section 4.2).

4.4.1 Translation students' cognitions in general

Items in the sub-questionnaire SCTTQ were the same as those in TCTTQ. Consequently, the approach to capturing a general understanding of the cognitions about approaches to translation teaching held by a group of postgraduate Chinese C-E/E-C translation students was the same as that used to understand the cognitions held by translation teachers. Figure 4.3 makes a general description of the student respondents' cognitions about approaches to translation teaching.

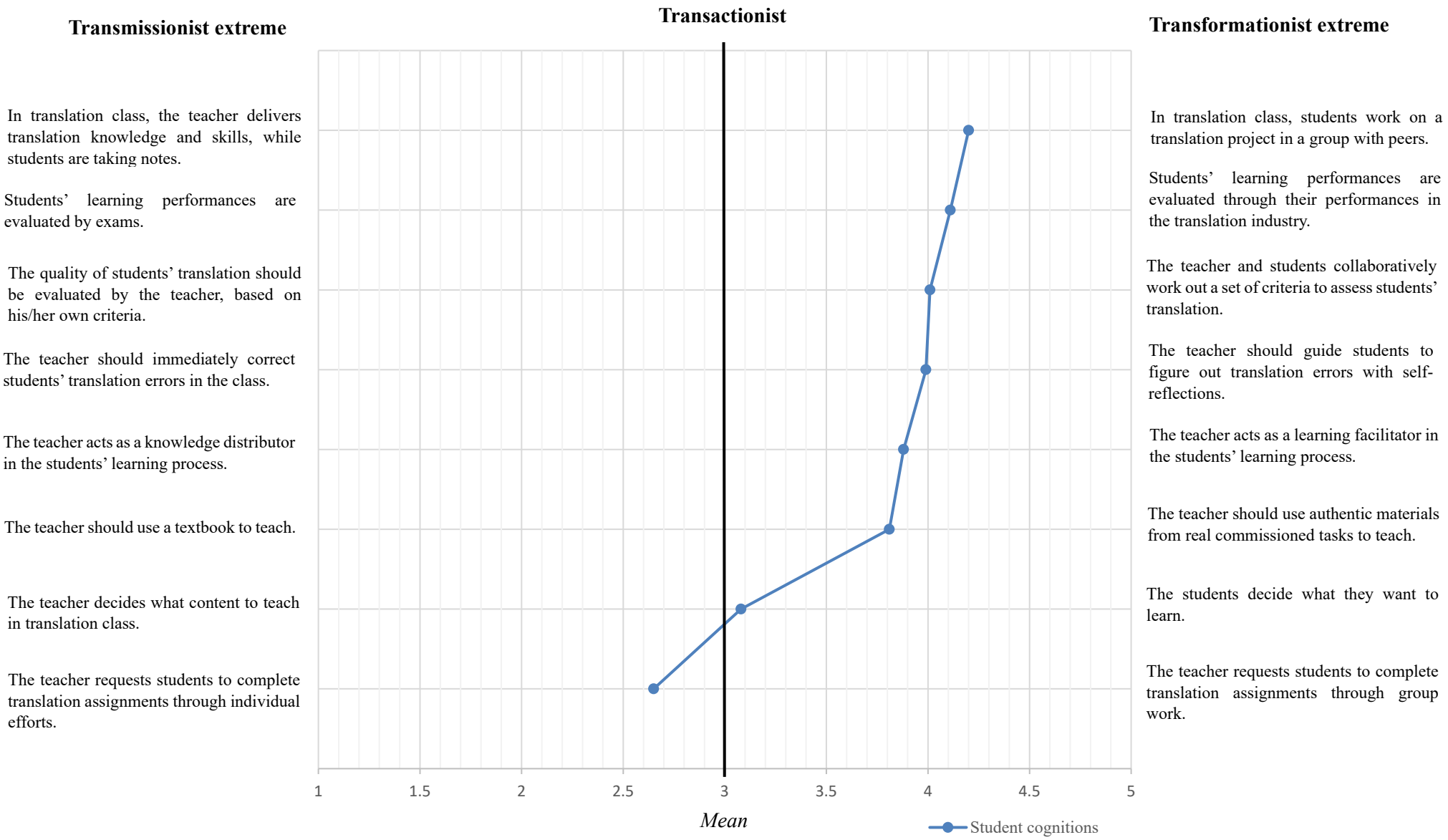


Figure 4.3 A general description of students' cognitions about approaches to translation teaching

As shown in Figure 4.3, the student's general cognitions about approaches to translation teaching can be divided into two dimensions: cognitions about the transmissionist-oriented approaches (TMoA) and the transformationist-oriented approaches (TFoA). The students' cognitions about the TMoA included one pair of items concerning ways to complete translation assignments. Their cognitions about the TFoA included seven pairs of items concerning the remaining seven elements. However, one pair of items should be noted, which are the items concerning the ways to choose teaching content. The mean score seemed to be very close to the transactionist approaches. The descriptive statistics of the students' cognitions about approaches to translation teaching in terms of the two dimensions are presented in Table 4.24.

Table 4.24 Descriptive statistics of the two dimensions of student cognitions about approaches to translation teaching (n = 110)

Dimension	No. of pair/s of items	*M*	*SD*
Transmissionist-oriented approaches	1	2.65	.89
Transformationist-oriented approaches	7	3.87	.39

4.4.2 Characteristics of translation students' cognitions

Having gained a general understanding of the translation students' cognitions about approaches to translation teaching, a close examination of the characteristics of the two dimensions of these students' cognitions was conducted. Achieving this objective involved using descriptive statistics to rank the mean scores of the eight pairs of opposing statements from the highest to the lowest (see Table 4.25).

Table 4.25 Descriptive statistics of student respondents' ratings of the eight pairs of opposing statements regarding students' cognitions (*n* = 110)

Elements being addressed by pairs of opposing statements	*Means*	*SD*
Instruction strategy	4.20	.56
Ways to evaluate student learning	4.11	.74
Ways to assess translation quality	4.01	.70
Ways to offer feedback	3.98	.66
Teacher's role	3.88	.76
Material use	3.81	.77
Ways to choose teaching content	3.08	.70
Ways to complete translation assignments	2.65	.89

Note: it is a 5-Likert scale: 1= Disagree, 2= Somewhat agree, 3= Moderately agree, 4= Strongly agree, 5= Extremely agree.

4.4.2.1 Translation students' cognitions about the transformationist-oriented approaches to translation teaching

As can be seen in Table 4.25, there were seven pairs of items receiving a mean score that is above three. They can be categorised as the transformationist-oriented approaches to translation teaching (TFoA).

Of the seven pairs of items, three mean scores were over four (4 = strongly agree). These three pairs of items concerned the elements of instruction strategy (*M* = 4.20), ways to evaluate student learning (*M* = 4.11), and ways to assess translation quality (*M* = 4.01). These results imply that this group of translation students strongly believed that teaching and learning translation should be in a transformationist-oriented way. For example, students in the class would be more likely to interact with their peers and teachers rather than simply take notes on what the teachers were saying.

Apart from these three pairs of items, another three pairs of items' mean scores were close to four. These three pairs of items concerned the elements of ways to offer feedback (M = 3.98), teacher's role (M = 3.88), and material use (M = 3.81). These results indicate that this group of students believed that teaching and learning translation should be in a transformationist-oriented way in terms of receiving feedback, the roles teachers played in the learning process, and the teaching materials being used in the learning process.

Finally, it is interesting that the element: Ways to choose teaching content was categorised into the TFoA but received a mean score close to three. It shows that this group of student respondents believed that they should have the right to be engaged in choosing learning content. However, the final answer to this process is in their teachers' hands. This opinion is, to some extent, consistent with the transactionist view of translation teaching proposed by (González Davies, 2004)

4.4.2.2 Translation students' cognitions about the transmissionist-oriented approaches to translation teaching

In Table 4.25, one pair of items received the lowest mean score, which is below three. This pair of items concerned ways to complete translation assignments (M = 2.65). It implies that the student respondents preferred to complete translation assignments by themselves. Therefore, they believed that learning translation was possibly achieved through individual efforts instead of collaborative efforts, which is the learning concept consistent with the transmissionist epistemology. As a result, these ideas can be categorised as the TMoP.

4.4.3 Factors influencing translation students' cognitions

In the sub-questionnaire FISCQ, a set of items were used to collect student respondents' ratings of the factors that might influence the formation of their cognitions about approaches to translation teaching. To explore the relationships between these factors and students' cognitions, descriptive statistics of these factors are provided in Table 4.26. Afterwards, a correlation analysis was performed to examine their relationship (See Table 4.27).

Table 4.26 Descriptive statistics of student respondents' ratings of factors that influenced their cognitions about approaches to translation teaching (n = 110)

Factors	*M*	*SD*
Learning experience	3.30	.49
Teacher and student personality	3.50	.44
Socio-culture contexts	3.65	.53

Note: This is 5-point Likert scale; 1= Insignificant, 2= Minor, 3= Moderate, 4= Major, 5= Severe.

Table 4.27 Correlation matrix of students' cognitions about approaches to translation teaching, learning experience, teacher and student personality, and socio-cultural contexts

		Learning experience	Teacher and student personality	Socio-cultural contexts
Student Cognitions	Pearson correlation	.437**	.165	.344**
	Sig.（2-tailed）	.000	.085	.000

Note: **. Correlation is significant at the .01 level (2-tailed).

As can be seen from the correlation results, two factors: students' learning experience and socio-cultural contexts, were found to be significantly correlated to these

translation students' cognitions about approaches to translation teaching, with the correlation $r = .44$, and $r = .34$. In contrast, teacher and student personality did not have correlations with the student respondents' cognitions ($r = .17$, $p = .085$). In other words, the correlation analysis showed that students' learning experience and the social contexts contributed to the student respondents' cognitions about approaches to translation teaching. In contrast, teacher and student personality may not influence students' cognitions.

In the next step, the extent to which students' learning experience and social contexts influenced translation students' cognitions about approaches to translation teaching was examined by performing a multiple regression analysis. The results are presented in Table 4.28.

Table 4.28 Predictors[a] for students' cognitions

Model	F	R^2	Sig.	Cohen's f^2
1	15.28	.23	.000	.29

Note: Predictors[a]: students' learning experiences and social contexts.

As can be seen from the predictions of students' learning experience and social contexts for students' cognitions, there was a statistically significant regression equation. The effect size for a multiple regression analysis Cohen's f^2 received a value of .29, which is a relatively large effect size. Furthermore, $R^2 = .23$ means the two factors explained 23% of the variance in the students' general cognitions about approaches to translation teaching, which can be considered a decent amount of variance. The regression coefficients are shown in Table 4.29.

Table 4.29 The regression coefficients of students' learning experience and social contexts on students' cognitions about approaches to translation teaching

Model		B	Standardised Errors	Beta	*t*	Sig.
1	(Intercept)	2.349	.255		9.228	.000***
	Students' learning experience	.265	.070	.355	3.773	.000***
	Socio-cultural contexts	.135	.065	.194	2.059	.042**

Note: *** Correlation is significant at the .01 level (2-tailed); ** Correlation is significant at the .05 level (2-tailed).

It can be seen from Table 4.29 that both factors had a positive linear relationship with students' cognitions about approaches to translation teaching, which means the higher the mean scores of the influencing factors, the higher the mean scores of their cognitions about approaches to translation teaching. The comparison of the two factors' standardised regression coefficients showed that students' learning experience (β = .36) had a larger effect than socio-cultural context (β = .19).

In conclusion, this group of students' cognitions about approaches to translation teaching were influenced by two factors: students' learning experience and socio-cultural contexts. Of these two factors, students' learning experience was more influential than the socio-cultural contexts to contribute to the students' cognitions about approaches to translation teaching. However, the third factor: teacher and student personality, was not found to have statistically significant influences on these students' cognitions about approaches to translation teaching.

4.5 Relationships between teacher cognitions and teaching practices, and teacher cognitions and student cognitions

The last category of research questions in the current study explores two sets of relationships: the relationship between translation teachers' cognitions about approaches to translation teaching and corresponding teaching practices and the relationship between translation teachers' and students' cognitions about approaches to translation teaching. To answer these two questions, contrastive profiles of the two sets of variables were first drawn to have a general understanding of the relationships. Then, paired samples *t*-tests were performed to gain insight into the two sets of relationships.

4.5.1 The relationship between teacher cognitions and teaching practices

4.5.1.1 The relationship between teacher cognitions and their teaching practices in general

The general relationship between the teacher respondents' cognitions about approaches to translation teaching and their teaching practices can be understood by drawing the contrastive profiles of teachers' cognitions and corresponding teaching practices based on the descriptive statistics of the eight pairs of opposing statements in TCTTQ and TPQ respectively (see Table 4.5 and Table 4.16). Figure 4.4 shows the contrastive profiles of these translation teachers' cognitions and teaching practices.

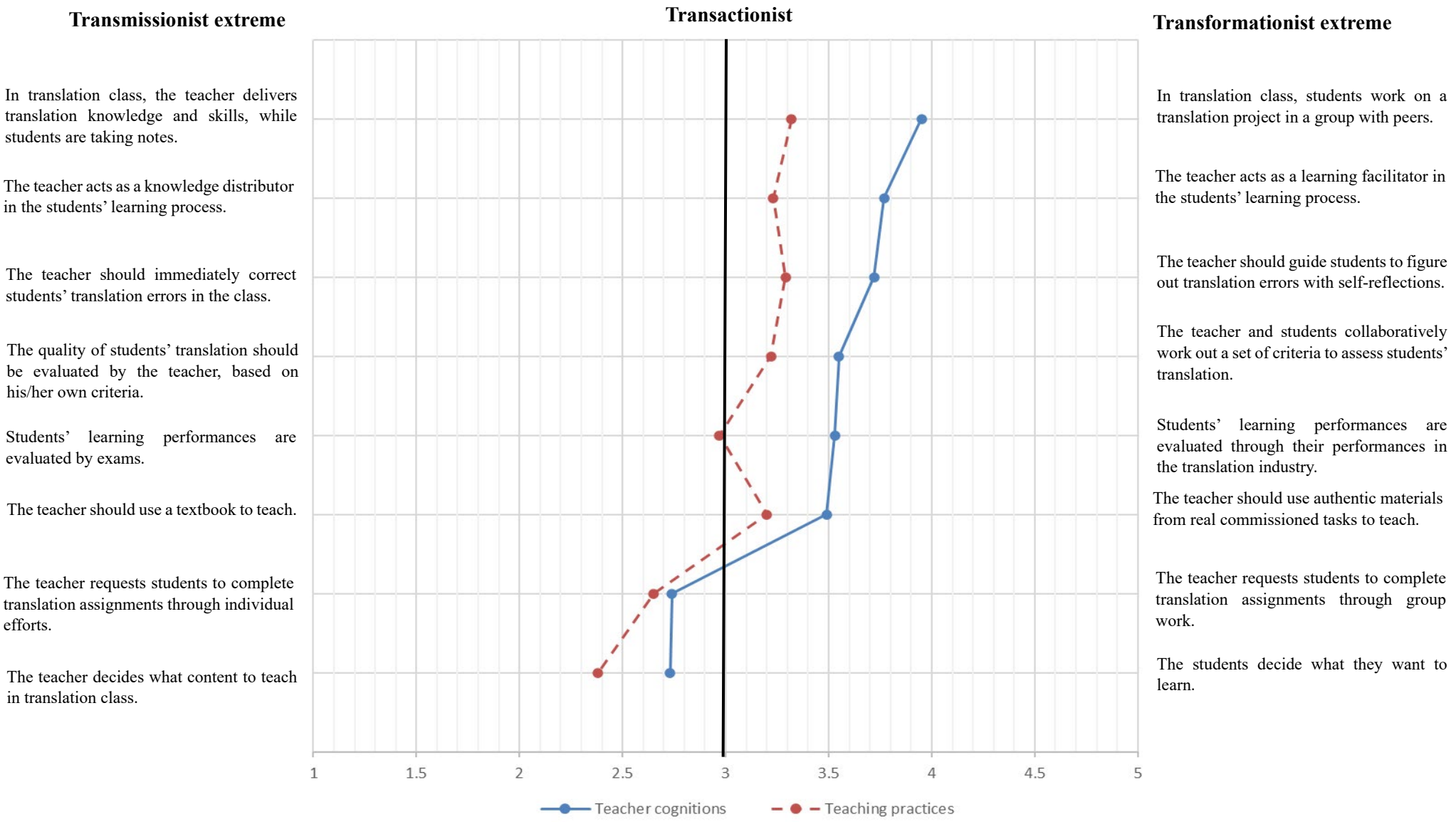


Figure 4.4 Contrastive profiles of teachers' cognitions and teaching practices

It is observed that the overall relationship between these teachers' cognitions and teaching practices was complex, as both consistency and inconsistency were observed. Firstly, the teachers' cognitions were consistent with the teaching practices to some extent. As seen in Figure 4.4, both teachers' cognitions and teaching practices go in the same direction. If we closely examined each pair of items, we can see that as the mean scores of teachers' cognitions moved to the transformationist extreme, so did the teaching practices. In contrast, if those of teachers' cognitions moved to the transmissionist extreme, the teaching practices moved in the same direction. However, there was one exception regarding ways to complete translation assignments; teachers' cognitions and the corresponding teaching practices moved in the opposite direction. Another reason to say that the teachers' cognitions were consistent with the teaching practices was that both teachers' cognitions and teaching practices confirmed their orientation, which is more transformationist-oriented and less transmissionist-oriented, as seen in Figure 4.4.

Secondly, the teachers' cognitions were somewhat inconsistent with the teaching practices. As seen in Figure 4.4, there was a gap between teachers' cognitions and teaching practices regarding each pair of items. In other words, no overlapping point was observed. To be specific, the teachers' cognitions were more transformationist-oriented than the teaching practices, as all mean scores of the eight pairs of opposing statements in TCTTQ were larger than those in TPQ. It is hard to identify the largest mean score gap between teachers' cognitions and teaching practices by observing Figure 4.4. However, the smallest mean score gap between them was ways to complete translation assignments.

4.5.1.2 The characteristics of the relationship between teacher cognitions and teaching practices

After the contrastive profiles of the relationship between teacher cognitions and teaching practices had been drawn, the paired samples *t*-tests were performed to get an insight into the relationships. Table 4.30 shows the descriptive statistics of the paired samples. Table 4.31 shows the results of the correlations between the teachers' cognitions and the teaching practices. The correlation Table shows that at the .01 level, there were statistically significant differences between teachers' cognitions and teaching practices. Cohen's *d* value was then calculated to examine the effect size. The result returned $d = .50$, which is a medium effect size. In other words, to a moderate degree, teachers' overall cognitions about approaches to translation teaching differed from their corresponding teaching practices.

Table 4.30 Descriptive statistics of teachers' cognitions about approaches to translation teaching and their teaching practices ($n = 122$)

Pair	*M*	*SD*
Teacher cognitions	3.20	.39
Teaching practices	3.03	.33

Table 4.31 Correlations between teachers' cognitions about approaches to translation teaching and their teaching practices

Pair	*M*	*SD*	*t*	*p*	Cohen's *d*
Teacher cognitions-Teaching practices	.166	.288	6.346	.000***	.457

Note: *** $p < .01$ (2-tailed).

In order to figure out the factors contributing to such discrepancies between the teachers' cognitions and the corresponding teaching practices, a series of paired samples *t*-tests

were performed to compare the teachers' cognitions and the corresponding teaching practices in terms of the eight teaching and learning elements (see Table 4.32).

Table 4.32 Paired samples *t*-tests results of the teacher respondents' cognitions and teaching practices in terms of the eight teaching and learning elements (n = 122)

	t	*p*	Cohen's *d*
Teacher's role	9.93	.000***	.96
Instruction strategy	10.48	.000***	.93
Ways to evaluate student learning	9.47	.000***	.91
Ways to offer feedback	8.15	.000***	.78
Ways to choose teaching content	5.82	.000***	.52
Ways to assess translation quality	5.63	.000***	.49
Material use	4.67	.000***	.43
Ways to complete translation assignments	1.77	.079	

Note: ***Correlation is significant at the $p < .01$ level.

The results showed significant differences in seven teaching and learning elements, including material use, instruction strategy, teacher's role, ways to evaluate student learning, ways to offer feedback, ways to assess translation quality, and ways to choose teaching content. Cohen's *d* values were then calculated to examine the magnitude of the differences. It can be seen that three elements returned large effect sizes, including instruction strategy, teacher's role, and ways to evaluate student learning, d = .93, .96, .91, respectively. It shows that, for example, although the teachers considered themselves learning facilitators in the teaching process, they acted as a controller in the teaching process. In addition, ways to offer feedback returned d = .78, which is very close to large effect sizes. Furthermore, two elements returned medium effect sizes, including ways to assess translation quality d = .49 and ways to choose teaching content d = .52. Finally, material use returned d = .43, which indicates a small effect size. To

conclude, these results imply that there were considerably significant differences between teachers' cognitions about approaches to translation teaching and the corresponding teaching practices in terms of instruction strategy, teacher's role, ways to evaluate student learning, ways to offer feedback, ways to assess translation quality, and ways to choose teaching materials.

4.5.2 The relationship between teacher cognitions and student cognitions

4.5.2.1 The relationship between teacher cognitions and student cognitions in general

In the current study, the set of items used in TCTTQ to explore translation teachers' cognitions about approaches to translation teaching were the same as those used in SCTTQ to explore students' cognitions. Such a research design aims to explore the relationships between teachers' and students' cognitions. To answer this question, a contrastive figure of teachers' and students' cognitions was first drawn to have a general understanding of the relationships (see Figure 4.5). Afterwards, independent samples *t*-tests were performed to gain insight into the relationships.

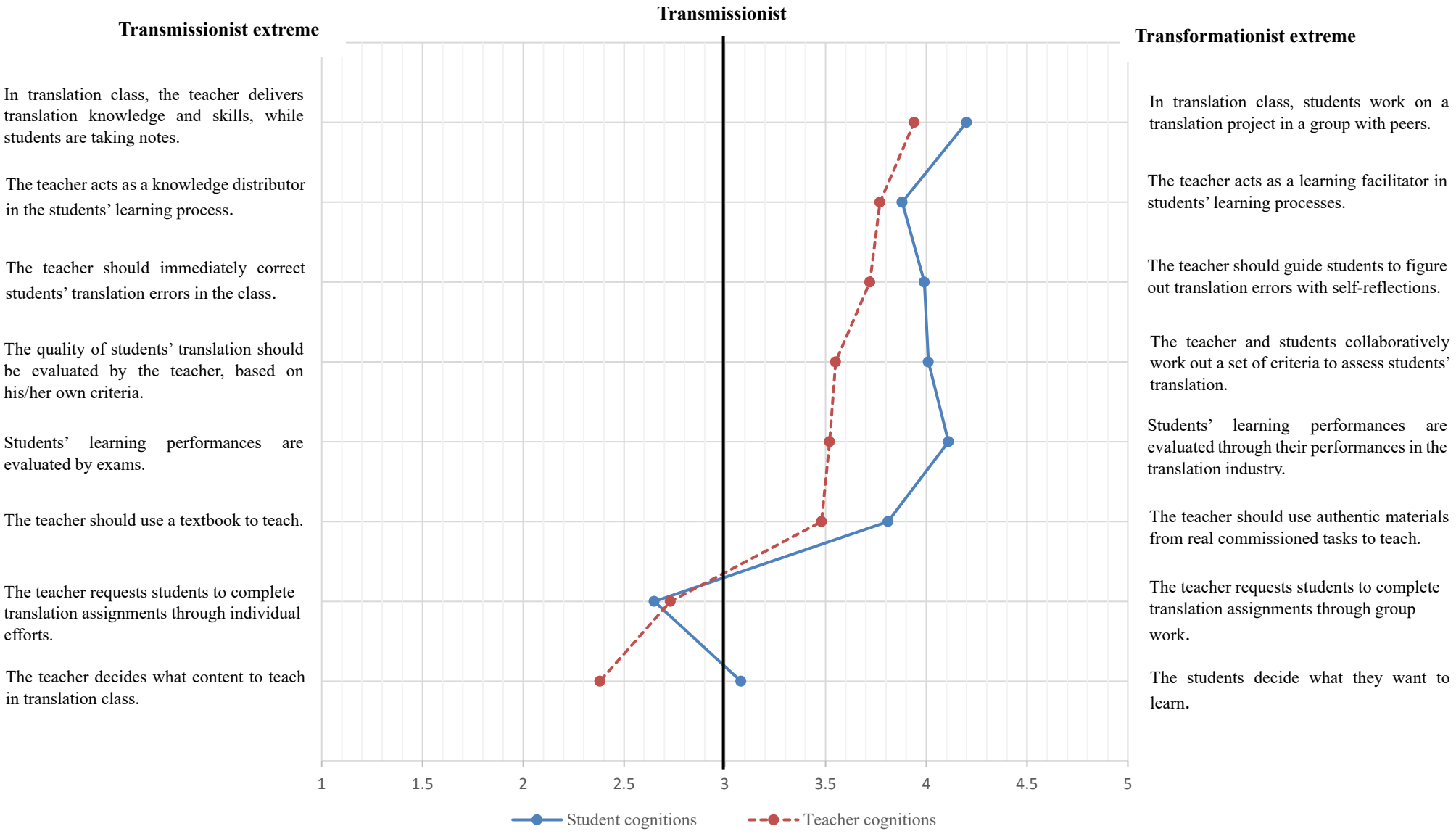


Figure 4.5 Contrastive profiles of teachers' and students' cognitions about approaches to translation teaching

It can be observed from Figure 4.5 that the relationships between teachers' and students' cognitions were complex, as both consistency and inconsistency were observed. Firstly, teachers' cognitions were consistent with students' cognitions to some extent. As seen in Figure 4.5, both teachers' and students' cognitions went in the same direction regarding seven out of eight pairs of items. Specifically, six mean scores of teachers' cognitions moved to the transformationist extreme, and so did the students' cognitions. In addition, one mean score of teachers' cognitions moved to the transmissionist extreme, and that of the students also moved in the same direction. Another reason the teachers' cognitions were consistent with those of the students was that both teachers' and students' cognitions confirmed their orientation, which is more transformationist-oriented and less transmissionist-oriented, as seen in Figure 4.5.

Secondly, the teachers' cognitions were inconsistent with those of the students to some extent. As mentioned in the above paragraph, seven out of eight pairs of means scores went in the same direction. However, the remaining pair of mean scores moved in the opposite direction. As seen in Figure 4.5, the mean score of the teachers' cognitions regarding ways to choose teaching content moved to the transmissionist extreme, whereas that of the students moved to the transformationist extreme. Another reason for the inconsistent relationship between teachers' and students' cognitions was a gap between teachers' and students' cognitions regarding each pair of items. To be specific, students' cognitions were more transformationist-oriented and less transmissionist-oriented than those of the teachers, as seven out of eight pairs of mean scores from the students' cognitions were larger than those of the teachers. In contrast, the mean score of ways to complete translation assignments from students' cognitions was smaller than that of it from teachers' cognitions. In other words, regarding ways to complete translation assignments, students' cognitions tended to be more transmissionist-

oriented and less transformationist-oriented than those of teachers.

4.5.2.2 The characteristics of the relationship between teacher cognitions and student cognitions

In order to quantitatively get an insight into the relationships between teachers' and students' cognitions about approaches to translation teaching, independent samples *t*-tests were then performed. Table 4.33 shows the independent samples *t*-tests results of the general relationship between teachers' and students' cognitions about approaches to translation teaching.

Table 4.33 Independent samples *t*-tests results of the general relationship between teachers' and students' cognitions

	Group	*n*	*M*	*SD*	*t*	*p*	Cohen's *d*
CATT	Teacher	122	3.19	.39	-10.36	.000***	1.36
	Student	110	3.71	.37			

Note: CATT = Cognitions about approaches to translation teaching; *** Correlation is significant at the $p < .01$ level (2-tailed).

Table 4.33 showed significant differences between the teacher and student groups regarding their cognitions about approaches to translation teaching $t = -10.36$, $p < .001$. The effect size of the independent samples *t*-test returned $d = 1.36$, which indicates a considerably large effect size. It implies that this group of teacher respondents' CATT, to a large extent, differed from the student respondents' CATT. Specifically, these translation teachers' CATT were just stepping away from the transactional approaches and moving to the transformationist extreme. In contrast, the students' CATT were much closer to the transformationist extreme than the teachers. Apart from the general differences between teachers' and students' CATT, a series of independent samples *t*-

tests were also performed to explore the relationships between teachers' CATT and students' CATT regarding the eight teaching and learning elements. Table 4.34 shows the results.

Table 4.34 Independent *t*-tests results of differences in cognitions between teacher group and student group in terms of the eight teaching and learning elements

	Group	*n*	*M*	*SD*	*t*
Ways to evaluate student learning	Teacher	122	3.52	.59	-6.65***
	Student	110	4.11	.74	
Ways to offer feedback	Teacher	122	3.72	.62	-3.20**
	Student	110	3.99	.66	
Instruction strategy	Teacher	122	3.94	.72	-3.06**
	Student	110	4.20	.56	
Ways to assess translation quality	Teacher	122	3.55	.70	-4.96***
	Student	110	4.01	.69	
Ways to choose teaching content	Teacher	122	2.38	.61	-8.06***
	Student	110	3.08	.70	
Material use	Teacher	122	3.48	.68	-3.48**
	Student	110	3.81	.77	
Ways to complete translation assignments	Teacher	122	2.73	.74	.78
	Student	110	2.65	.89	
Teacher's role	Teacher	122	3.77	.61	-1.22
	Student	110	3.88	.76	

Note: *** Correlations are significant at the $p < .01$ level (2-tailed); ** Correlations are significant at the $p < .05$ level (2-tailed).

As the results showed, of the eight elements, six were found to have significant differences between the teacher group and student group, including ways to evaluate student learning (t = -6.65, p < .001), ways to offer feedback (t = -3.20, p < .05), instruction strategy (t = -3.06, p < .05), ways to assess translation quality (t = -4.96, p < .001), ways to choose teaching content (t = -8.06, p < .001) and material use (t = -3.48, p < .05), while the other two elements, including ways to complete translation assignments and teacher's role, were found to have no significant differences between teacher group and student group.

Afterwards, Cohen's d statistics were calculated to determine the magnitude of the effect sizes. Among the six elements that have been found to have significant differences, two of them returned large effect sizes: ways to choose teaching content (d = 1.07) and ways to evaluate student learning (d = .88). In addition, another two elements returned medium effect sizes, including ways to assess translation quality (d = .66), and material use (d= .45). However, the last two elements returned small effect sizes, including ways to offer feedback (d = .42) and instruction strategy (d = .40). These showed that in terms of ways to choose teaching material and ways to evaluate student learning, the teachers' cognitions differed considerably from their students' cognitions. Furthermore, the teachers' cognitions moderately differed from the students' cognitions in terms of ways to assess translation quality and material use.

In short, the contrastive figure, descriptive statistics, and independent samples t-tests results suggested that the teacher and student respondents were incomparable regarding their general cognitions about approaches to translating teaching, as well as about the eight distinct teaching and learning elements.

Chapter 5 Qualitative results

This chapter presents qualitative results gathered through interviews and classroom observations. It starts with background information on participants and then explores teachers' cognitions and teaching practices, followed by students' cognitions about approaches to translation teaching. The chapter concludes by discussing the relationships between teachers' cognitions and teaching practices, as well as those between teachers and students.

5.1 Background information results

5.1.1 Background information of teacher participants

Ten teacher participants from four universities were engaged in the qualitative study. All participants were interviewed using a semi-structured format, and their classes were observed. The 10 teacher participants in this study had diverse backgrounds, including seven males and three females. Their ages also varied, with one in their 60s, one in their 20s, two in their 40s, three in their 30s, and three in their 50s. All held a master's or Ph.D. degree. Their academic rankings ranged from Teaching Assistance to Professor. They were also varied in years of (translation) teaching experience and overseas study experience. They were all experienced translators, with one translating more than four million words. Their translation tasks were assigned by the government department, translation agencies, and their working institutions. The courses they taught were diversified from fundamental translation to specialised translation. As for programmes, the majority of them taught in the MTI programme (n = 9). It is noted that eight participants taught both C/E and E/C translation, while the remaining two focused on C/E translation. Details of the participants' profiles are provided in Table 5.1.

Table 5.1 Profiles of teacher participants for interviews and classroom observations (n = 10)

Name	Gender	Age range	Education Qualification	Academic rank	Teaching experience	Translation Experience (words)[#]	Overseas study experience	Course	Programme	Working institution
T1	Male	Over 60	MA in AL	Professor	37 years[a] 29 years*	Over 4 million	1 year	Advanced Translation	MTI	A
T2	Male	50-59	MA in TS	Professor	20 years[a] 16 years*	Over 3 million	none	Literary Translation (Chines to English)	MA	A
T3	Male	50-59	PhD in ELL	Professor	34 years[a] 20 years*	Over 5 million	One and a half years	Business Discourse Translation	MTI	A
T4	Male	50-59	PhD in AL	Associate Professor	30 years[a] 21 years*	Ove 5 million	2 years	Legal Translation	MTI	A
T5	Female	30-39	PhD in TS	Lecturer	18 years[a] 3 years*	About 1 million	A few weeks	Business Documents Translation	MTI	A
T6	Male	40-49	PhD in TS	Professor	16 years[a] 10 years*	Over 0.75 million	1 year	Fundamental Translation	MTI	B
T7	Male	30-39	PhD in TS	Associate Professor	18 years[a] 10 years*	About 0.5 million	1 year	Fundamental Translation	MTI	C
T8	Female	40-49	PhD in TS	Associate Professor	20 years[a] 18 years*	About 2 million	1 year	Tourism Translation	MTI	C
T9	Female	20-29	MTI in IT	Teaching Assistant	4 years[a] 4 years*	About 0.3 million	1 year	Fundamental Translation	MTI	D
T10	Male	30-39	PhD in Arts	Associate Professor	12 years[a] 6 years*	About 1 million	3 months	Chinese to English Translation	MTI	D

Note: AL= Applied Linguistics, TS= Translation Studies, ELL= English Language and Literature, IT=Interpreting; [a]=General teaching experience; *=Translation teaching experience; [#]Translation experience refers to the number of words that the teachers have translated as a professional translator in translation projects commissioned by government departments, translation agencies, and working institutions. Courses taught by the teacher participants include language patterns from Chinese to English and English to Chinese, otherwise explained.

5.1.2 Background information of student participants

The 20 student participants of the semi-structured interviews were from the 10 teacher participants' classes. Of the 20 students, six were males, and 14 were females. Their average age of them was 23.8 years old. These students have a variety of undergraduate learning experiences. They were doing their bachelor's degree in five disciplines: linguistics, management, engineering, medicine, and agriculture. These five disciplines cover 12 different programmes. These students varied in their postgraduate programmes. Seventeen were studying in the MTI programme. However, of the 17 students, two studied interpreting, and the others studied translation. Three students were studying in the MA programmes. Of the three students, two researched translation studies, and one researched applied linguistics. The majority of the students were in their first year of postgraduate study (n = 13). Furthermore, the students varied in their working experience, ranging from no working experience to 9-year working experience. Information on the student participants is presented in Table 5.2

Table 5.2 Profiles of student participants for semi-structured interviews (n = 20)

Name	Gender	Age	Postgraduate programme	Current year in Psg	Undergraduate programme	Working experience	Teacher
S1	Male	22	MTI in IT	1st year	Energy and Power Engineering	No	T1
S2	Female	22	MTI in IT	1st year	TESOL	No	
S3	Female	23	MA in translation studies	2nd year	Agricultural Mechanisation and Automation	No	T2
S4	Female	24	MA in Translation studies	2nd year	ESL	No	
S5	Male	22	MTI in TS	1st year	Financial Engineering	No	T3
S6	Male	22	MTI in TS	1st year	C-E/E-C Translation	No	
S7	Male	23	MTI in TS	2nd year	Business English	No	T4
S8	Female	23	MTI in TS	2nd year	English Language and Literature	No	
S9	Female	23	MTI in TS	2nd year	Preventive Healthcare	No	T5
S10	Female	23	MTI in TS	2nd year	C-E/E-C Translation	No	
S11	Male	25	MTI in TS	1st year	English Language and Literature	Half year	T6
S12	Female	26	MTI in TS	1st year	English Language and Literature	One and a half years	
S13	Female	25	MA in AL	3rd year	Business English	No	T7
S14	Female	32	MTI in TS	1st year	Economics	9 years	
S15	Male	22	MTI in TS	1st year	Hospitality management	No	T8
S16	Female	27	MTI in TS	1st year	English Language and Literature	5 years	
S17	Female	22	MTI in TS	1st year	C-E/E-C Translation	2 months	T9
S18	Female	22	MTI in TS	1st year	Landscape Architecture	No	
S19	Female	22	MTI in TS	1st year	English Language and Literature	3 months	T10
S20	Female	26	MTI in TS	1st year	Human resource management	3 years	

Note: MTI= Master of Translation and Interpreting; There are two majors in the MTI programme: Translation and Interpreting. IT= Interpreting; TS= Translation; MA= Master of Arts; AL= Applied linguistics; Psg= postgraduate. Students' working experiences refer to their official working experiences between the gap years of undergraduate and postgraduate study (internship is not included).

5.2 Qualitative findings of Chinese translation teachers' cognitions

This section presents the qualitative findings of three research questions related to Chinese translation teachers' cognitions. The first is about Chinese translation teachers' cognitions about approaches to translation. The second is about individual differences in the teachers' cognitions. The third is about factors influencing the teachers' cognitions.

5.2.1 In-depth examination of translation teachers' cognitions

The teacher participants generally commented on eight elements related to the translation teaching approach. Table 5.3 summarises the eight elements. As seen, the teachers' cognitions contained both transmissionist-oriented approaches (TMoA) and transformationist-oriented approaches (TFoA) regarding the eight elements.

Table 5.3 Chinese translation teachers' cognitions about approaches to translation teaching in detail (n = 10)

Teacher name	Teacher's role (10)		Material use (10)		Instruction strategy (10)		Teaching objectives (10)		Feedback (10)		Student evaluation (9)		Translation assessment (7)		Teaching content (8)	
	TMoA 4*	TFoA 6*	TMoA	TFoA 10*	TMoA 4*	TFoA 6*	TMoA 3*	TFoA 10*	TMoA 5*	TFoA 9*	TMoA 6*	TFoA 6*	TMoA 5*	TFoA 2*	TMoA 6*	TFoA 5*
T1	√			√	√			√	√				√			
T2	√			√	√		√	√	√	√	√	√		√	√	
T3		√		√		√	√	√	√	√	√				√	√
T4		√		√		√		√		√		√				
T5		√		√		√		√		√		√		√		√
T6	√			√	√			√		√	√	√	√		√	√
T7		√		√		√		√	√	√	√	√	√		√	
T8		√		√		√		√	√	√	√		√		√	
T9	√			√	√		√	√		√	√		√		√	√
T10		√		√		√		√		√		√				√

Note: TMoA= Transmissionist-oriented approaches; TFoA= Transformationist-oriented approaches; the number in the bracket represents the total number of teacher participants commenting on this element; * refers to the number of times teacher participants using the concepts of TMoA/TFoA to describe the corresponding teaching element.

When being asked about the understanding of translation teaching, the 10 teacher participants in the interviews addressed eight teaching elements, including teacher's role, material use, instruction strategy, teaching objectives, ways to offer feedback, ways to choose teaching content, ways to assess translation quality, and ways to evaluate student learning. The teacher's cognitions about approaches to translation teaching regarding each element, except for material use, contained mixed ideas from the TMoA and TFoA. Details of teachers' cognitions regarding each element are presented as follows:

Teacher's role

The main topics about the teacher's role involved the teacher's responsibility, authority, good teacher, facilitator, guide, and coach. In the interviews, the 10 teacher participants all mentioned their roles in the approaches to translation teaching. Four of the 10 teacher participants considered them a transmissionist-oriented role, although they discussed it differently. The following excerpts provide more details, for example:

> *[…]to some extent, it is a good way to loaf on the job (by asking students to have discussions in class), because it allows me more time to take breaks. However, I think being a teacher, I have the responsibility to teach them how to translate (T2).*

> *[…] Such (translation) technology produced even better translations than the teachers. So, I think the teacher's authority has been undermined. However, […] teachers' job actually is to extract information for students and then to deliver the information to students (T6).*

As seen from the excerpts, T2 considered engaging students in discussion as a way of the teacher's laziness. This implies that it is the teacher's responsibility to provide students with direct instruction. T6 held a similar idea as T2. He believed that teachers

had authority over students' learning before the advancement of translation technology. This authority represents the teacher's controlling role. In addition, T6 further mentioned that teachers' jobs were to extract and deliver knowledge to students. This is additional evidence illustrating teachers' ideas about serving as knowledge extractors and delivers in translation teaching. It suggests that students' learning performances relied heavily on "a good teacher" (T1) who was an experienced translator and was able to "supervise the inexperienced translators (students)" (T9). By supervising student translators, T9 means telling students much more about ways of dealing with translation problems based on her experience. In short, all four teachers' ideas suggested the teachers' teaching or lecturing role, and they often emphasised the teacher's job and authority when describing their roles.

In addition to the four teachers, the remaining six believed they were more likely to act as a facilitator in the teaching process, which is consistent with the TFoA. They believed that teaching translation is much about providing support to students when necessary; therefore, teaching or instructing is not the primary job of teachers. For example:

> *I felt like I am more like a coach but not a teacher, as I think learning translation is like playing tennis. Student translators are tennis players who compete on the court. They have to play the game alone, and I will provide support when necessary. Learning translation is the same (T5).*

Another teacher held similar ideas about his role in the teaching practices and also considered him a coach, as he said:

> *I think I need to act as a learning facilitator rather than a knowledge distributor. I often think I am like a coach and my students are athletes. The athletes need to compete in the games by themselves, so do my students […] (T10).*

Other than acting as a coach, the teachers also held that they were performing as project managers or clients. A client did not "need to make a decision for them (the students)" (T4). Accordingly, the students had to make decisions by themselves to meet the clients' requirements. Similarly, a project manager "supervised the students to do translation project" (T7) to serve the clients. During the supervision, the teachers would oversee the operation of translation projects. The students needed to complete their own tasks, such as terminology management and proofreading, allowing them to control the learning process and "learn more skills rather than translation" (T7). Therefore, acting as a client and a project manager provided the necessary support for students instead of controlling the teaching process. In short, these teachers' ideas suggested their facilitating roles and preference to use metaphors to describe their roles (e.g., a tennis coach).

Material use

The main topic of material use is authenticity. All teacher participants emphasised this element. The 10 teachers talked about the types of materials that were applicable for teaching translation. They all believed that authentic materials should be used in teaching practices. However, they have different definitions of authentic materials.

Firstly, the teachers all held that the teacher must translate authentic material before passing it over to students for learning, regardless of its source. For example,

> *I think, at least, I have translated the materials that would be used in teaching by myself, even though these materials were excerpts from a textbook. You (teachers) cannot directly use a sentence or paragraph copied from the textbook in teaching. That's meaningless and not authentic (T1).*

> *When I started teaching translation, I used some classic examples from a*

translation textbook, but I would translate them by myself first and then find out how to present the problems in the examples to my students (T7).

Some teachers maintained the view that authentic materials should be translated by teachers before being incorporated into teaching practices. These materials should originate from genuine translation projects commissioned by authentic clients. For example,

I think we (teachers) should use authentic materials. I mean the materials from the translation projects I have been working on. I have many first-hand materials as I have stable connections to law firms and court […] (T4).

Most materials used in my translation class are translated by myself. These materials are from authentic translation tasks. For example, I have done many business translations, such as contracts. I also do medical translation. These first-hand materials can be used directly in my classes. Sometimes, I seek help from industry experts to request translation materials (T5).

Another feature of authentic materials pertained to whether they needed to be simplified for translation teaching. Four teachers mentioned this topic. T4, T5, and T8 believed that the materials did not need to be simplified because they are suitable for students to learn how to deal with texts from different sources, as source texts in the translation market received by students after graduation were not simplified. However, T1 mentioned that "the source texts needed to be edited before used in teaching" if the texts were unsuitable for translation due to the original author's writing style. Nonetheless, T8 held opposite ideas. She believed that translators should "show respect to the original author". Accordingly, the source texts should not be edited.

Instruction strategy

Teachers' cognitions about approaches to translation teaching regarding instruction strategy were closely related to their roles in the teaching process. In other words, for teachers who held transmissionist-oriented ideas about their roles, their corresponding ideas about instruction strategy were also transmissionist-oriented. The same is true for teachers whose ideas about their roles were transformationist-oriented.

Four of the 10 teachers (T1, T2, T6, and T9) believed their roles were more transmissionist-oriented as they primarily took a controlling role in teaching. Accordingly, their instruction strategy was much more transmissionist-oriented. They mainly believed that learning translation relied primarily on the teacher's instruction. For example,

> *A good translation class […] (should be) engaging from the beginning to the end. Students can follow the logic I designed before class during my instruction. If students cannot be engaged in the teacher's instruction, the teacher fails this class (T1).*
>
> *I don't think it (a student-centred approach) is appropriate for the current translation class. Students now have so many ways to acquire information and knowledge. So, what I do in the teaching process is to extract the most useful information and then deliver the knowledge to them. So, they need to listen to my instruction (T6).*

On the other hand, the remaining six teachers believed their roles were more transformationist-oriented as they primarily facilitated teaching practices. Accordingly, their instruction strategy was much more transformationist-oriented. They organised students to have discussions in classes, participate in translation projects, and present translation work. For example:

[…] but students grew fast by allowing them to explore independently. Otherwise, they won't grow up if considered babies. So, I think the most effective and fastest way is Project-based learning. It allows students to explore independently, and I won't over-intervene in the students' projects (T5).

I always believed that students could learn the content in the teaching syllabus by reading textbooks. So, asking them to do presentations and peer discussions may be more engaging (T10).

Teaching objectives

The main topics about teaching objectives in the teachers' interviews can be summarised as translation competence, translation concept, translator competence, critical thinking, and language service. All 10 teacher participants addressed teaching objectives. Analysis of their interviews revealed that this group of teachers' cognitions about the objectives of translation teaching were transformationist-oriented. They all did not believe that translation skills were the only objective of translation teaching.

Both T6 and T8 believed that enhancing students' translation competence is the overall teaching objective of translation classes. However, translation competence did not simply mean translation skills, such as omission and amplification. T6 considered that translation competence is "knowing the paradigms of translating specific texts such as business, law, and so on." Similarly, T8's ideas about translation competence involved more factors, such as cultural awareness, idiomatic expression, and rewriting. In short, the two teachers believed that translation competence was not translation skills but the ability to deal with specific texts. T6 also gave an example, "In news report translation, it (the ability to deal with specific texts) refers to knowing ways to translate Headline and Lead."

Another two teachers believed that the objectives of translation teaching extended beyond acquiring translation skills. Instead, they aimed to assist students in constructing their understanding of translation concepts. For example,

> *Let me tell you. The concepts are alive. For example, even after 10 years, students who attended my class still remembered the translation concepts I taught but forgot the skills […] So, concepts are more important than skills (T1).*

T10 also believed that "building translation concepts" was the most important objective of his translation class. However, T1 and T10 had different views of translation concepts. For T1, he believed that building translation concepts started from translation theories, such as translation as rewriting, skopos theory, and so forth. He said,

> *Why I am brave enough to tell students that translation is writing, and therefore, it is reasonable to revise the original text before translating because we know the Skopos theory* (T1).

For T10, he believed that translation concepts contained four aspects, including features of translation projects, translation discourse, translation technology, and lifelong learning. It is evident that T10 expanded translation concepts by analysing the competence required for translating, recognising translation as a "complex activity" (T10) that demands comprehensive skills.

Another two teachers talked about teaching objectives from a language service perspective. T4 believed that his teaching objective was for students to have their translations accepted by clients who preferred professional language services. T5 added that professional language service was more than providing acceptance translation. T5 believed that professional language service competence also involved "searching and investigation competence, which is useful when doing consultant translation" and "self-

adjustment of stress, which is helpful when learning new knowledge". T4 and T5 shared similar cognitions regarding the teaching objectives of translation classes, as they echoed the current call for shifting from translation competence to translator competence in translator training. Translation competence is the core of translator competence, but translator competence encompasses much more than translating. As T5 said, it is necessary for translators to apply abilities related to translation to different fields, which is an effective way to enhance students' overall competitiveness after graduation.

Lastly, it is interesting that three teachers held mixed cognitions regarding the teaching objectives of translation classes, as they mentioned both transmissionist-oriented and transformationist-oriented objectives of translation teaching. T9 said, "My objectives were to let students know the process of translating, develop their bilingual ability, and know something about the translation market" (T9). As evident from the comments, the first two objectives were transmissionist-oriented, whereas the last one was transformationist-oriented, moving beyond language learning toward the translation market or the translator profession. T2 held similar ideas to T9. His comments involved enhancing students' bilingual competence and developing critical thinking. Similarly, T3 mentioned three teaching objectives. The first two were transformationist-oriented, as he talked about how to help students produce the translation that meets social needs and develop critical thinking ability. In contrast, the last was transmissionist-oriented, focusing on students' English language competence. He said,

> *One of the teaching objectives is their language expression, as I think they cannot write idiomatic English sentences as they were doing Chinese-English translation, and vice versa. So, it is also crucial for them to memorise idiomatic English expressions (T3).*

Ways to offer feedback

All 10 teacher participants mentioned this element. One teacher's cognitions about this element aligned with the TMoA, whereas five out of 10 teachers' cognitions aligned with the TFoA. The remaining four teachers' cognitions were a mixture of the TMoA and TFoA.

Firstly, the main topic for the only teacher's cognitions (T1) that aligned with the TMoA was the teacher's own criteria. This means T1 believed that the primary way to offer feedback to students was to use his own criteria and explanations without engaging students' participation in the process of offering feedback. As T1 stated:

> *I acknowledged the importance of offering feedback to every student. If I found that you didn't translate well in some parts, I would tell you how to improve it with my own translation concepts […] I would point out your errors and explain with my own concepts […] and give you my translation […] (T1).*

T1 emphasised the importance of explaining translation errors using his own translation concepts while offering feedback to students. The way he did this was to point out the errors and give his own translations directly, but without leaving time for students to think about the errors or have further discussions with students.

Secondly, five teachers' (T4, T5, T6, T9, and T10) cognitions aligned with the TFoA regarding ways to offer feedback. The main topics of these teachers' cognitions were self-reflection, indirect correction, and organising interactive activities. All the five teachers believed in the significance of students' self-reflection on the feedback received from teachers. However, self-reflection might not be effective enough, as all the five teachers further mentioned that they hoped that students could have face-to-face discussions with the teachers after self-reflection. As T6 mentioned:

> *Self-reflection is important for them (students), but some students might misunderstand the teacher's comments while thinking of the comments by their own. So, if students can discuss with me, they can ask specific questions regarding my comments. This is the correct way (to offer feedback) (T6).*

As seen, T6's ideas about ways to offer feedback acknowledged the importance of student's self-reflection. However, self-reflection can be seen as a preparation for individual face-to-face discussions with teachers. Students can benefit from such discussion by asking specific questions to receive teachers' clarifications and personalised feedback guidance, which aligns with the TFoA.

In addition, these teachers also believed the value of indirect correction of students' errors in their assignments. This means that for errors other than grammatical issues, teachers would prefer to use circles, underlines, or other marking signs to indicate the errors for students to further think about these errors (T4, T5, T8, T9). However, T10 held an opposite view to these teachers, believing that translation teaching was not a process of error corrections. Therefore, teachers would not need to review and comment on students' assignments but to design and organise interactive activities. As he said,

> *I felt like I wasn't commenting on translation assignments, but the English writing […] So, I didn't think leaving a comment on students' assignments is effective. Instead, designing interactive activities (e.g., peer review, group discussion, teacher-student discussion) might be effective, as the teachers could tell whether the students think about the errors in the interactions (T10).*

T10's ideas about ways to offer feedback on students' assignments changed the traditional order in that students' critical thinking occurs after reading teachers' comments. Instead, he believed that students' critical thinking came ahead of teachers'

comments. Accordingly, the teacher's comments focused not on students' translation quality but on students' critical thinking ability, which is the core concept of the TFoA.

Thirdly, four teachers' (T2, T3, T7, and T8) cognitions were a mixture of the TMoA and TFoA regarding offering feedback. The main topics were group feedback and group discussion. On the one hand, they believed in the value of group feedback, which means the teacher would "collect students' questions and then explain the questions in detail" (T3) when teachers analysed the assignments in classroom instruction. On the other hand, they also mentioned group discussion or critical thinking after class regarding feedback on students' assignments. T2 insisted that "think the problems first before coming to the classroom" because he believed that the teacher's instruction would only be effective if students understood the problems and brought them to class.

Ways to evaluate student learning

The element: ways to evaluate student learning, was talked about by nine teacher participants, except T1. They concerned two significant aspects: ways to carry out student evaluation and abilities and competencies to be evaluated. Of the nine teachers, six talked about ways to carry out student evaluations. Their cognitions about this element were a mixture of the TMoA and TFoA. They generally believed that student learning was evaluated via a combination of classroom performance and final examination. However, the cognitions held by the three of them were much more transmissionist-oriented, as the three teachers explicitly expressed that the final examination should be the primary way for students' learning evaluation, despite that they also talked about transformationist-oriented evaluation approaches. For example,

> *Let me think […] I would say taking an exam is one of the best ways to test a teacher's teaching and students' learning […] of course, dissertation and*

translation assignments can also be used to evaluate students' learning (T8).

T8's comments revealed that compared with the TFoA to evaluate student learning, such as dissertation and translation assignment, she believed that taking exams were more effective than other ways. Therefore, her cognitions about ways to evaluate student learning were much more transmissionist-oriented. This is also true for T3 and T9. As T9 said, she considered the final examination "a fair way" (T9) for student evaluation.

In addition, T2 and T6 said that the classroom performance and final exams or translation reports accounted for 50% of the overall grades, respectively. Although T7 did not allocate a specific ratio to classroom performance and final examination, he also addressed these two aspects. Interestingly, all these six teachers' ideas about classroom performance included but were not limited to student presentation, attendance, and translation assignments.

The remaining four teachers' cognitions were transformationist-oriented regarding ways to evaluate student learning. However, the focus of their ideas, different from the other six teachers, mainly placed on the competencies to be evaluated. The main topics included critical thinking and comprehensive working abilities. For example,

Students' translation quality or their translation skills are not my focus. Let's hand over students' learning evaluations to the future and their employers after graduation. It is fair to me if they (students) could still remember what they have learned in my class after graduation (T5).

T5's comments on abilities and competencies to be evaluated reflected her emphasis on students' comprehensive working abilities instead of the quality of translation products, which aligns with the core concept of the TFoA, seeing students as growing individuals

in the evaluation. Therefore, "students' performance during daily learning processes" (T2) and their "critical thinking development" (T10) become the focus of student evaluation. As T4 said, "At least, I think students' translation quality is always not the evaluation focus."

Ways to assess translation quality

The element: ways to assess translation quality, was mentioned by seven teacher participants. They addressed three sub-elements, including ways to carry out the assessment, ways to set assessment criteria and assessment focus.

Firstly, five teachers' cognitions aligned with the TMoA (T1, T6, T7, T8, and T9). They talked about ways to assess translation quality. The main topics of the teachers' ideas about this sub-element were scoring and grading. They generally believed in the effectiveness of scoring and grading students' translation products. Accordingly, students might "receive a lower score or grade" (T1 and T6) if teachers thought the translation contained too many errors. Secondly, three teachers (T6, T8, and T9) mentioned assessment focus. The main topics of this sub-element were grammar, language expression, understanding, and vocabulary. The three teachers believed that students' translation quality "had to be scored or graded by the teachers" (T9) based on grammar accuracy, idiomatic expression, and so forth. Accordingly, a higher score or grade would be given if the translation was excellent. For example,

> *I think students would receive a Grade A if the target texts they translated without understanding and grammatical errors and with outstanding sentence structure and vocabulary. Otherwise, on penalty." (T8).*

Thirdly, all five teachers addressed ways to set assessment criteria. The main topics of this sub-element involved personal teaching experience and subjectiveness. T8 and T9

believed in the value of personal teaching experience in setting the assessment criteria. T1, T6, and T7 believed that the criteria for translation quality assessment were quite subjective. There is "no perfect or unique final translation product" (T7), so the same source texts would have many translation versions. Therefore, "I (the teacher) have to be the one that could make final decisions" (T6) to assess students' translation. It can be seen from these teachers' ideas that although they considered translation assessment subjective, the final decision or the assessment process was dominated by the teacher, which aligns with the conceptions of TMoA.

On the other hand, the remaining two teachers (T2 and T5) believed the TFoA to assess translation quality. They addressed the sub-element: ways to carry out the assessment. The main topics of this sub-element were peer review, group discussion, and professional assessment group. The two teachers stated that translation quality assessment was not a teacher's job, given that the assessment is subjective. Therefore, they considered that teachers have no right or ability to dominate the assessment. Accordingly, they believed that teachers should hand over translation assessments to students who would be advised to do peer review, which is an idea opposing scoring or grading students' translation by the teachers. As T5 said,

> *I didn't' agree on the idea (scoring students' translation). It is better to hand over everything, including designing assignments to students from the beginning […], asking them to decide what material to translate, and then doing peer review to assess translation quality […] (T5)*

Ways to choose teaching content

The main topic of ways to choose teaching content was whether students had the right to choose teaching content they were interested in. Three (T2, T7, and T8) teachers'

cognitions were the TMoA regarding this element. They generally believed that the teachers' decisions on teaching content would not be affected by students' ideas, although some teachers indicated that they would allow students to make suggestions. For example,

> *I think students are allowed to give voice to it (selecting teaching content), but […] I usually would not hand over this right to them […] I felt like I am the parents, and they are my kids […] I know what is good for the kids (T7).*

Two (T5 and T10) teachers' cognitions aligned with the TFoA. They generally believed that teacher and student collaboration achieved a successful translation class. They emphasised that teachers should consider students' ideas when choosing what to teach. If students "strongly disagreed with the content selected by the teacher" (T10), the teacher needed to discuss the content with students or "ask students to select the content" (T5).

The other three teacher participants (T3, T6, and T9) held a mixture of the TMoA and TFoA about this element. On the one hand, they said they would not allow students to choose the teaching content. On the other hand, they indicated that students were allowed to choose the content for assignments. For example,

> *I would say it (students' preference or interests) won't affect my decision […] They can choose content based on their interests in group work after class, but in classroom teaching, I won't cater for their interests (T6).*

These teachers emphasised the teacher's control and responsibility in classroom teaching. However, they would like to remove the control after class so students can get involved in after-class learning activities, such as group discussions and teamwork.

5.2.2 Translation teachers' cognitions with various backgrounds

In Section 5.2.1, Table 5.3 presented teacher participants' cognitions about approaches to translation teaching by analysing eight teaching and learning elements. In order to examine the differences in cognitions held by these teachers, Table 5.4 summarises each teacher participant's general cognitions about approaches to translation teaching based on Table 5.3.

Table 5.4 Comparisons of each teacher's cognitions about the TMoA and the TFoA regarding the eight elements

	Number of elements addressed*	TMoA[a]	TFoA[a]
T1	6	4	2
T2	8	6	5
T3	7	4	6
T4	6	/	6
T5	8	/	8
T6	8	5	5
T7	8	4	6
T8	8	4	5
T9	8	6	4
T10	7	/	7

Note: TMoA=Transmissionist-oriented approaches; TFoA= Transformationist-oriented approaches; * refers to the number of elements addressed by the teacher out of a total of nine elements; TMoA[a] and TFoA[a] refer to the times of the teacher using the TMoA or the TFoA to comment on the addressed elements. It should be noted that for each teacher, the number in TMoA[a] added to the number in TFoA[a] might exceed the number of elements addressed[*]. This is because each teacher may comment on the same element using both the TMoA and TFoA. For example, the total times of using the TMoA and the TFoA by T2 are 11, which exceeds the total number of elements addressed: 8. This is because T2 used both the TMoA and TFoA to comment on three different elements (see Table 5.3).

As can be seen in Table 5.4, two teachers' cognitions (T1 and T9) about approaches to translation teaching were more transmissionist-oriented compared with the remaining teachers, as the number of times they used the conceptions of TMoA to express their ideas was larger than those using the TFoA, despite the TFoA also being used. Another five teachers' cognitions (T3, T4, T5, T7, and T10) were almost transformationist-

oriented, as the number of times they used the conceptions of TFoA to express their ideas was larger than those using the TMoA. The remaining three teachers' cognitions (T2, T6, and T8) about approaches to translation teaching were a mixture of both the TMoA and TFoA, as the number of times they used the conceptions of both approaches to express their ideas was almost the same.

Table 5.5 compares the opinions held by two groups of teacher participants on some teaching elements. Group 1 is the excerpts or statements that were summarised from three teachers (T1, T2, T9) whose cognitions aligned with the TMoA, whereas Group 2 is the excerpts or statements that were summarised from another three teachers (T4, T5, T10) whose cognitions aligned with the TFoA.

Table 5.5 Comparisons of two groups of teacher participants' cognitions

The element addressed by Group 1 and 2	Group 1: The transmissionist-oriented group	Group 2: The transformationist-oriented group
Teacher's role	A good translation class is decided by a good teacher responsible for delivering knowledge to students. (Summary of statements of T1, T2, T9)	Teachers are like a coach or acting learning facilitators whose job is to help students learn but not to dominate. (Summary of statements of T4, T5, T10)
Instruction strategy	Teachers preferred to share translation knowledge and instruct on translation in classrooms. (Summary of statements of T1, T2, T9)	I think the most effective and fastest way is Project-based learning. It allows students to explore independently, and I won't over-intervene in students' projects (T5).
Ways to offer feedback	I would point out your errors and explain with my own concepts […] and give you my translation (T1).	So, I would like not to review and comment on students' assignments but to design interactive actives […] During these activities, what I paid attention to is not your translation quality but your critical thinking, as I could tell whether you think about the errors or not during interactions (T10).
Ways to evaluate student learning	I think whether a student learns translation well is to see their translation quality (T9).	At least, I think students' translation quality is not always my focus (of student evaluation) (T4).

As can be seen, the two groups of teachers had contrasting opinions about four teaching elements, including the teacher's role, instruction strategy, ways to offer feedback, and ways to evaluate student learning. The first group's ideas aligned with the TMoA, and therefore, they believed that translation teaching was relatively teacher-controlled, knowledge-delivered, instruction-oriented, and stimulus-boosted. In contrast, the

second group's ideas aligned with the TFoA, and therefore, they believed that translation teaching was relatively teacher-facilitated, knowledge-constructed, collaboration-oriented, and autonomous-learning-boosted.

In addition to these contrasting cognitions about approaches to translation teaching between the two groups of teachers (n =6), it was challenging to compare the cognitions held by the remaining four teachers within the two groups in the qualitative study. The core reason is that it was not an easy thing to determine the degree to which teachers' cognitions were transmissionist-oriented or transformationist-oriented, while teachers' cognitions about most teaching elements were a mixture of the TMoA and TFoA. In the quantitative approach of this study, the survey asked the respondents to rate each teaching element on a 5-point Likert scale. So, it was much easier to tell whether cognitions about a certain teaching element differed from others. However, participants were required to articulate their ideas in qualitative data, and the data were narrative. It would be difficult to tell whether a teacher's cognitions were much more transmissionist-oriented or transformationist-oriented if the teacher's cognitions about a certain teaching element contained both the TMoA and TFoA. For example,

> *In fact, I have three teaching objectives. I first would like to ask students to overcome Chinglish […], and second to improve students' bilingual (Chinese and English) competency […] third, to develop their critical thinking (T2).*
>
> *One of the teaching objectives is their language expression, as I think they cannot write idiomatic English sentences as they were doing Chinese-English translation […] I asked them to do think-aloud, asking them to speak out what they were thinking when translating this material […] (T3).*

As can be seen from the two excerpts, both teachers talked about teaching objectives.

Their opinions contained both the TMoA and TFoA. First of all, they both talked about improving students' language competency, although different expressions were used. T2 referred to it as bilingual competency, and T3 referred to it as idiomatic English. In the meantime, both also aimed to develop student's critical thinking abilities, as T2 directly used critical thinking and T3 used think-aloud, a translating approach to develop the translator's critical thinking abilities. What can be learned from the above excerpts is both teachers' cognitions about teaching objectives were a mixture of the TMoA and TFoA. However, the qualitative data cannot directly provide evidence for the degree of orientation when the two teachers acknowledged both approaches regarding teaching objectives. Therefore, it was unrealistic to compare differences in mixed teachers' cognitions.

5.2.3 Sources of translation teachers' cognitions

In the interviews, when the teacher participants stated the ideas of approaches to translation teaching, they were also required to explain the reasons that influenced their cognitions. Their explanations can be categorised into four factors, including prior experiences, translation teacher/student diversity, institutional context, and socio-cultural context. Table 5.6 presents the factors that influenced teachers' cognitions as explained by the teacher participants.

Table 5.6 Factors influencing the teacher participant's cognitions about approaches to translation teaching (n = 10)

	Prior learning experiences		Teacher and student diversity			Institutional context			Socio-culture context	
	Teacher as learner	Translation and Teaching experience	Student ability	Student psychology	Teacher ability and personality	Teaching syllabus	Teaching time	Class size	Education policy	Social Resource
1	√		√	√				√		
2	√	√	√	√				√		√
3		√	√				√	√		√
4	√	√	√			√		√		√
5	√	√	√		√			√	√	√
6	√		√		√			√	√	√
7	√	√	√	√		√	√	√		
8	√	√	√		√	√	√	√	√	
9	√	√	√		√			√		
10	√	√	√	√	√	√				

Prior experiences

Teachers' prior experiences play a crucial role in shaping the teacher participants' cognitions. All 10 teachers claimed the influences of this factor on their cognitions about approaches to translation teaching. Based on their explanations, the prior experiences involved two aspects: teachers' translation learning experiences as learners in schools and teachers' translation practice and translation teaching experiences.

Firstly, teachers' translation learning experiences as learners in schools significantly impacted these teachers' cognitions about the TMoA regarding the teaching objectives and the teacher's role. For example,

> *In fact, the best thing for a person in their whole life is to have a good teacher […] he (my teacher) has a high level of bilingual (English and Chinese) proficiency […] he told me you could do translation well only if you have a high level of bilingual competence. So, you would know how my teacher taught me by observing how I taught my students (T2).*
>
> *[…] I would recall when I was a translation student in the MTI programme. My teacher's smart choice of words in their translations often impressed me, and I think they're really amazing. It makes me think that if I could have those shining moments as a teacher, the feeling would be very awesome (T9).*

As can be seen, one reason the teachers recognised the importance of enhancing students' bilingual abilities and acting as a role model for the students was that they learned translation in a similar way when they were students. Focusing on students' bilingual abilities and being role models were the ideas that align with the TMoA concepts. Therefore, it can be said that these teachers' experience as learners contributed to the teachers' cognitions about the TMoA.

Secondly, teachers' translation experience and translation teaching experience were found to influence these teachers' cognitions about the TFoA regarding material use. Translation as a practice-oriented activity requires translation teachers to do translation practice, especially to be engaged in authentic translation practice like a professional translator. As their translation experiences increased, they increasingly felt that the materials they countered were "living and breathing" (T3), which is highly meaningful for teaching. T5 even felt "safe to have hands-on authentic materials" as teaching translation emphasised practice and real-world application, which aligns with the TFoA concepts. Furthermore, with the increase in the translation teaching experience, the teachers gradually found that "using others' materials in translation teaching failed to get to the heart of translation" (T7). This also made the teachers acknowledge the importance of using authentic materials in translation teaching. In short, the teachers' cognitions about using authentic teaching materials came from years of translation experience and translation teaching practice.

Translation teacher and student diversity

Translation teacher and student diversity was another powerful factor that influenced the teachers' cognitions about approaches to translation teaching. All 10 teachers claimed the influences of this factor. Translation teacher and student diversity involves the teacher's ability and personality and the student's ability and psychology.

Firstly, most teachers believed in the significance of improving students' language ability, adopting a teacher-centred instruction strategy and using teachers' criteria to assess students' translation quality, which aligns with the TMoA. The teachers claimed that one of the reasons for them to hold such cognitions was their students' learning abilities. For example, the two teachers talked about the teaching focus on improving

students' language abilities:

> *I think it is hard for me to teach in the way I was expecting […] Students had a very low level of language ability […] So, improving students' language ability is a long-term goal […] (T3).*
>
> *[…] Students often make grammatical errors. If the students cannot write grammatically correct English sentences, it may not be very meaningful to talk about other teaching objectives (T9).*

It can be seen that although the teachers would like to emphasise other teaching objectives, students' low level of language proficiency became a significant reason that prevented the teachers from adopting other objectives. Therefore, they have to emphasise the importance of enhancing students' language abilities. In other words, students' low language ability influenced teachers' transmissionist-oriented understanding of translation teaching objectives. Similarly, students' limited translation learning ability contributed to the teachers' cognitions about the TMoA for the instruction strategy and ways to assess translation. Due to the students' such ability, the teacher seemed "not to trust the student's ability" (T1) in finding out the errors in their translations. Thus, students probably "cannot say anything meaningful" (T6). Therefore, it is necessary for teachers to use teacher-controlled strategies to instruct and share more the teacher's experience with the students.

Secondly, student psychology was found to impact teachers' cognitions, especially their cognitions about the TMoA regarding the teacher's role and ways to choose teaching content. T1 believed that postgraduate students were adults who "have the ability to think rationally". Therefore, students can tell what good and bad teaching is. This situation, in turn, made the teacher believe that what he could do was to be a role model

for students in translation teaching. Similarly, T7 related his transmissionist-oriented ways to choose teaching content to the students' psychology. However, T7 regarded the postgraduate students as immature. Due to students' immaturity, T7 claimed that the students would only "have some ambiguous ideas about selecting teaching materials." Accordingly, the students have to be "taken care of by the teacher like parents took care of their kids" (T7). This situation made the teacher believe they knew the suitable teaching materials. So, teaching materials were better to be selected by teachers.

Thirdly, teacher ability and personality were identified to influence translation teachers' cognitions about approaches to translation teaching, particularly their cognitions about the TFoA regarding instruction strategy and the teacher's role. For example, teachers' ability directly determined whether teachers could adopt the TFoA, such as project-based learning via a translation technology platform. As T5 stated, most translation teachers in the MTI programme were experienced translators. They have "the ability to undertake and complete translation project". Therefore, they knew the significance of involving the students in translation projects. Accordingly, teachers should implement project-based learning in translation teaching.

Regarding the teacher's role, T8 believed teachers should "self-control different emotions and behave humbly when facing students". This personality type would make students feel approachable, and then the students would like to ask for the teacher's help in a collaborative learning environment. Moreover, a teacher who can "admit their own lack of knowledge" (T5) and "appreciate their students' translation abilities" (T10) would like to be a learning facilitator in the teaching processes. When teachers acknowledge their limitations, they would like to encourage students to play a more active role in the translation learning processes and contribute their knowledge to others. Therefore, it can be said that the teacher's personality influences their ideas about the

facilitating role they play in translation teaching.

Institutional context

The institutional context in the current study contained three sub-factors, including class size, teaching time, and teaching syllabus. These sub-factors contributed to teachers' cognitions about the TMoA and TFoA to translation teaching regarding various elements. More importantly, the institutional context was identified as a critical factor that led to the inconsistencies between the teachers' cognitions and the teaching practices.

First of all, class size contributed to teachers' cognitions about the TMoA to ways to evaluate student learning and ways to offer feedback. The current MTI programme usually has a large class size, containing 20 to 30 students. A large class size means more efforts and heavy workloads if teachers offer individual face-to-face feedback. For example, the following three teachers were talking about ways to offer feedback,

> *I think the best way to offer feedback was to have individual face-to-face discussions with each student. However, I got such a large class with more than 20 students. Suppose everyone was provided personal feedback and then had discussions with me; a whole semester passed. We wouldn't have time to do other things (T1).*
>
> *I just scored everyone's assignments without further feedback. It took too much effort to offer specific feedback for each student as I got a 35-student class (T7)*
>
> *It is a considerable workload for me to offer feedback on students' translation assignments, as more than 60 students were in my class […] I could not give specific feedback on their assignments, just selectively left general comments on*

some students' assignments (T9)

As can be seen, the three teachers believed that ways to offer feedback involved scoring and general comments without further discussions, which aligns with the TMoA. One possible reason for such ideas was the large size of the class. However, this does not mean teachers rejected individual discussions, which aligns with the TFoA. They hoped to offer specific feedback to students and have individual discussions with them. However, the large class size prevented teachers from doing so because a large class size meant a heavy workload, and teachers' energy was limited. Consequently, these teachers all believed in providing general feedback on students' assignments, such as scoring and leaving general comments.

Similarly, a large class size also prevented teachers from implementing the TFoA to evaluate students' learning. For example, T9 would like to record the students' learning process and make comparisons of each student's learning outcomes. However, she explained that if "I had a small size of class", this would be able to take place; the teacher believed in the effectiveness of taking exams to evaluate student learning because the large class size prevented her from implementing an evaluation approach focused on students' learning process. T3 explained a similar reason as T9. He hoped to focus on each student's progress. However, the large class size made him give a general score for the group performance as a way to evaluate student learning.

Secondly, the teaching syllabus contributed to the teachers' understanding of the TMoA and TFoA to translation teaching. For example, T8 believed authentic tourism texts needed to be used in teaching tourism translation because the "teaching syllabus specifies that" real tourism texts should be used to help students understand the characteristics of such texts and the differences between Chinese and Western tourism

texts. In addition, teachers believed in the effectiveness of direct feedback on students' assignments. This is because the teaching syllabus specifies that "the translation course only needs to be run every other week" (T7). Therefore, the teacher did not have enough time to provide specific feedback to each student. However, the teacher believed that the feedback on students' assignments should be detailed and that discussing it with each student would be better.

Thirdly, many teacher participants mentioned the influence of limited classroom teaching time on their cognitions. For example, when talking about the reasons teachers played a leading role in translation teaching, T3 claimed:

> *Well, I have to take the lead in the classroom because, you know, time is very short. We only have 80 minutes for each class. Some colleagues like to have classroom discussions, but honestly, I found it pretty unrealistic. It may work for writing publications, but in reality, it's just not practical.*

T7 held a similar view, and he said:

> *No (no group work in classrooms). Well, you know it is time-consuming for group work. So I usually lead the class to ask the students to answer my questions. This way, I can effectively manage my teaching time. I would not like to leave the students thinking about the questions alone. They could discuss them with peers and brainstorm. But, you know, we don't have the time to do this in class.*

The two teachers mentioned one keyword: time-consuming. They attributed the leading role in the teaching processes to the limited classroom teaching time. Since the classroom time was limited, they considered a leading role helpful in organising and achieving effective teaching. However, the teachers' explanations indicate that playing a facilitating role might be possible if time allows. They would like to organise group

work because it may help students develop critical thinking abilities.

Socio-cultural context

The socio-cultural context in the current study included two sub-factors: education policy and resource accessibility. The two sub-factors were found to contribute to teachers' cognitions about the TMoA and TFoA to the teaching elements, such as material use, instruction strategy, ways to evaluate student learning, and ways to assess translation quality. The sub-factors contributing to the teachers' cognitions about the TMoA were also found to cause discrepancies between the teachers' cognitions and teaching practices.

Firstly, three teachers claimed the influence of education policy on their understanding of ways to evaluate student learning and the instruction strategy. T6 and T8 believed in the value of exams to evaluate student learning, which aligns with the TMoA. They claimed that such ideas came from the influence of CATTI. They said CATTI as a nationwide test "guided the development of" (T6) the training of professional translators at the tertiary level. In addition, the pass rate of students in CATTI was also considered "an evaluation metric for the MTI programme" (T8). This policy made the teachers believe that asking the students to take the test was an effective way to evaluate their learning. Educational policies also made teachers believe in the necessity of using project-based learning. For example, T5 claimed that

> *They (the students) need various certificates to prove their abilities when finding jobs. So, I hope the translation projects in my classes can issue certificates to them. The certificates demonstrated how many words the students translated or proofread. So they can use the certificates to prove their abilities.*

The above excerpt indicates the teacher's focus on preparing students for the job market.

This is caused by the educational policies requiring tertiary education to produce qualified graduates for the workforce. Consequently, teachers considered using project-based learning to prepare students for employment.

Secondly, resource accessibility influenced teachers' understanding of material use. For instance, T3 believed in the significance of using authentic materials for translation teaching, which aligns with the TFoA. This is because the teacher claimed that the university where he worked was one of the first in China to establish a translation department. This platform enabled him to access first-hand authentic materials significantly more than 20 years ago, a time when many universities in the country lacked independent translation departments. Opportunities to access such materials were limited, accordingly. After using these authentic materials, he increasingly felt the importance of using authentic materials in translation teaching. The teaching experiences would not be the same if textbook materials were only used.

In addition, resource accessibility influenced teachers' understanding of ways to assess translation quality and caused inconsistencies between teachers' cognitions and teaching practices. For example, when explaining the reason the teacher assessed students' translation based on his criteria, T2 claimed:

> *I think it would be awesome if we could get a group of foreign experts to assess students' translations (Chinese to English). But let's face it, we don't have the resources or funds to make that happen. Actually, I don't think it is meaningful to have one person assess the translations. Unfortunately, I have no choice but to do it myself.*

It can be seen that the limited resources of foreign experts caused the teacher to assess students' translations based on his criteria. However, he believed in the effectiveness of

incorporating the third party into the assessment of translation quality. Therefore, it can be said that limited resources contributed to teachers' cognitions about the TMoA to assessing translation quality and caused inconsistencies between teachers' cognitions and teaching practices.

Based on the above findings, relationships between each influencing factor and specific teaching elements are shown in Figure 5.1. It is evident that teachers' cognitions about approaches to translation teaching were influenced by four factors, including prior experiences, teacher and student diversity, institutional context, and socio-cultural context.

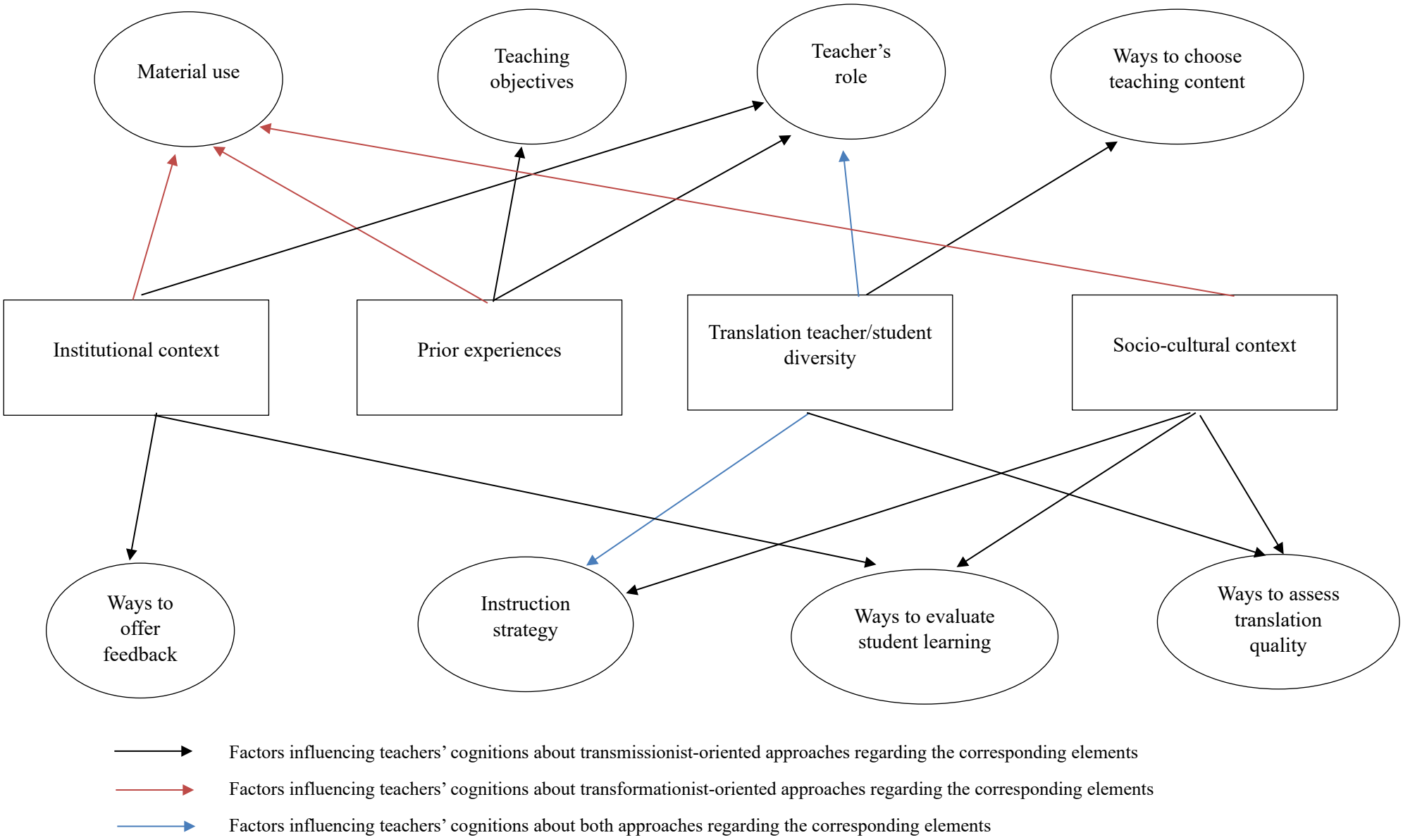


Figure 5.1 Factors that influence Chinese translation teachers' cognitions about approaches to translation teaching

5.3 Qualitative findings of Chinese translation teachers' teaching practices

5.3.1 In-depth examination of teaching practices

This section presents the qualitative research findings of translation teachers' teaching practices. Findings were generated from classroom observations. The findings showed that the teacher participants generally preferred adopting the TMoA in teaching practices, although the TFoA have also been adopted.

Classroom observations focused on three main aspects of each teacher's teaching practices, including material use, teaching focus, and teaching organisation. The reasons for reporting these three aspects were due to the higher accessibility of the data that the researcher could collect during observations. This was in comparison to other data sources, such as students' after-class group work, teaching schedules, and so forth, which were less accessible. However, the limited accessibility of these data caused the research limitations of this study, which will be discussed in Section 7.5.1.

5.3.1.1 Two types of courses observed in the teaching practices

Before reporting the results of the three observed aspects of each teacher's teaching practices. It is necessary to clarify each teacher's course type, as different course types influence teachers' approaches to their teaching practices.

The 10 teacher participants' translation classes can be categorised into two general types: a translation theory-practice combined course and a translation feedback-oriented course. A translation theory-practice combined course was taught by five teachers (T1, T4, T5, T8, and T9), which means the course was taught as teachers presented translation theories followed by translation practice that the theories can explain. Therefore, the teaching routine of the course typically started with the teacher's

presentation of translation theories. Then, the teacher would organise students to do in-classroom translation exercises related to the theories.

In addition, a translation feedback-oriented course was taught by the remaining five teachers (T2, T3, T6, T7, and T10), and it focused on offering feedback on students' translation assignments or projects. Accordingly, the course usually started with students' translation or translation project presentations. Then, teachers would organise in-classroom activities to offer feedback on the translation or translation project.

The following sections have reported findings of the three main aspects observed in the teaching practices, including material use, teaching focus, and teaching organisations. Findings of material use and teaching focus will be reported according to the two types of courses clarified above, and findings of teaching organisation have been reported without considering the course types. The reasons for doing so were because the findings of the teaching organisations were based on a time-allocation method, which helped to identify each teacher's teaching practices by looking at the figure drawn. However, findings on material use and teaching focus were mainly descriptive information. Reporting them based on the course types made a clearer structure of this thesis.

5.3.1.2 Findings of material use and teaching focus for the translation theory-practice combined course

Five teacher participants taught translation using translation theories and principles, including T1, T4, T5, T8, and T9. It was found that they generally adopted teacher-centred approaches in their teaching practices.

Material use

Regarding the materials used for translation teaching, all five teachers used authentic materials. First of all, authentic materials hereafter refer to those being used for in-class and after-class translation practices but not to those related to translation theories or principles. The authentic materials that were used for translation practices have two features. First, parts of the materials, instead of coming from real translation projects, were from textbooks or online resources (T1, T5, T9). For example, T9, when presented with the information function of language, extracted the source text from the novel *Pride and Prejudice* by Jane Austen: "It's of no importance. I shall see her in January" and its target text published by Shanghai Translation Publishing House: "[…] 我们正月里就可以见面了". Then, T9 presented her translation "[…] 我们一月份就可以见面了" to help students understand that the translation needed to deliver the natural message of the source language. As can be seen, although the example was not from real translation projects the teacher participated in, the teacher translated the sentence prior to teaching. Such materials can be regarded as authentic materials. This is the first feature of authentic materials.

The second feature of authentic materials is that the materials were from an actual translation project the teacher participated in (T4 and T8). For example, T4, in order for students to learn how to keep consistency in legal translation, presented his translation of one property contract about a house with limited property rights, an actual translation project commissioned by the local court.

Teaching focus

A mixture of TMoA and TFoA for teaching focus

The teaching focus of the five teachers (T1, T4, T5, T8, and T9) who organised the translation classes in a theory-practice-oriented way included translation theories and

principles and how to use the knowledge to explain and guide translation practices, which can be considered as a mixture of the TMoA and TFoA for the teaching focus. For example, T8 in her tourism translation class taught as follows:

(The teacher handed out copies of the materials to students. The material from Macau Science Centre contained source text in Chinese and its corresponding English translation. The content of the material is about Macau's climate.)

She asked the students to read the source and target texts and then:

T8: from a reader's perspective, the English translation was a bit awkward. So, let's revise it. However, what's the basis for revising? […] That is rewriting. Now, I will share with you the concept of translation as rewriting.

T8: How and who to rewrite? Andre Lefevere proposed the famous theory of rewriting […] in his view, translation was influenced by power, ideology, institution, poetics, and so on […]

T8: What are the motivations for rewriting? Ok, it's ideology […] critical reviewers […] and poetics, 诗学. Poetics means the norms, right? Norms of language […]

T8: So, the translation of tourism texts, I think, is more influenced by poetics. For example, there are many Chinese poems in our tourism texts. The poems described beautiful scenes. However, there are no corresponding words between Chinese and English poems. This is why we need to rewrite the translation.

T8: Let's have a look at this example. There is a sentence from the National Geographic Channel. This sentence has numerous nouns, such as tower stones, balanced rocks, and arcs. So, how about translating these nouns word-for-word? We would like to use adjectives, especially the four-character adjectives in Chinese. This is a typical feature

of Chinese poetics.

T8: So, how about we translate these nouns into "石头塔", "平衡的石头" and "拱形顶"? Such a translation isn't beautiful, right? So, we need to rewrite these nouns as, for example, balanced rocks didn't mean the rocks are very stable but "摇摇欲坠的石头" and tower stones can be rewritten as "穹顶". So, now we know that tourism texts might not be easy to translate word by word. However, if we rewrite the translation from the perspectives of the target language, it would be more appropriate […]

As seen from the excerpts of T8's teaching episode, T8 focused on tourism translation, which needs rewriting. She first presented the theory of translation as rewriting. Then, she presented the Chinese rewriting of one English sentence from the national geographic channel, including rewriting "tower stones" into "穹顶" and balanced rocks into "摇摇欲坠的石头" or "石头都是摇摇欲坠的". It was found that using different translation examples to help students further understand the translation theories and, in turn, applying these theories to translation practices recurred in this teacher's two observed teaching practices.

Although the above focus was the major objective of the teacher's teaching practices, it does not mean teachers ignored other objectives. T8 also brought attention to keeping students posted on the latest information related to their careers. For example, at the beginning of each observed teaching practice, the teacher would share with the students the up-to-date information that might be linked to students' employment after graduation. In the first observed teaching practice, the teacher started the class by explaining the Regional Comprehensive Economic Partnership Agreement (RCEP), as this might become the material for the CATTI test. Then, she talked about the latest news of the CATTI test because CATTI might be linked to academic rankings in the

future, which would influence students' future careers. Talking about future careers, she introduced how to search parallel texts, which is helpful for professional translators. She reiterated that this is another ability that professional translators need beyond translation skills.

Furthermore, it is also observed that the teacher emphasised the importance for students to broaden their perspective beyond the textbook as MTI students. That is to say, the teacher realised that students might not become qualified translators if they only learned translation skills and theories from textbooks. In summary, a significant teaching focus of the teachers' teaching practices was translation theories and principles and their application in translation practice. Moreover, teachers brought knowledge and abilities other than translation into the class, such as encyclopaedia knowledge, searching ability and so forth. Such knowledge and abilities were related to students' careers.

5.3.1.3 Finding of material use and teaching focus for the translation feedback-oriented course

Five teacher participants, T2, T3, T6, T7, and T10, taught translation in a way that offered feedback on students' translation assignments. The differences between this type of course and the theory-practice courses taught by T1, T4, T5, T8, and T9 were as follows:

- Learning translation theories and principles was not the primary focus
- Instead of doing in-class translation exercises-mostly were single sentences, and the materials were usually paragraphs
- Instead of learning how to apply translation theories to translation practices, teachers and students were talking about the problems in the translation assignments

A difference among the five teachers' classes (T2, T3, T6, T7, and T10) was whether student presentations were involved. Three out of the five teachers (T3, T6, and T10) involved student presentations on their translation assignments, whereas the other two teachers (T2 and T7) did not. Therefore, there were differences in the teaching practices between the teaching practices involving student presentations, which will be discussed later. They shared common features on teaching materials and teaching focuses in the observed teaching practices. The details are discussed in the following paragraphs.

Material use

It is observed that all five teachers used authentic materials for students' assignments. T2's and T3's materials were from published textbooks that the teachers themselves wrote. Particularly, T2's textbook was a novel translated by himself. He selected several paragraphs from the book for students to translate. T3's textbook contained translation practices selected from the real translation projects that he participated in. Therefore, the materials were authentic, although the teachers used textbooks.

The remaining three teachers (T6, T7, and T10) used materials from the authentic translation projects they had been engaged in. For example, T6's materials were a business contract from a real translation project the teacher participated in. T7's materials were a recruitment form commissioned by the Human Resources Department of the University where the teacher was working. T10's materials were parts of a book he translated. The book is about the history and culture of a Middle Eastern country and will be published soon.

In short, the teachers translated all the teaching materials before using them as students' translation assignments. These materials were either from published textbooks and novels or real translation projects that the teacher participated in.

Teaching focus

Of the five teachers, T2, T6, and T7 were teaching Chinese to English translation (C/E), while T3 and T10 were teaching English to Chinese translation (E/C). However, it was found that the teaching focus of the four teachers' classes- T2, T3, T6, and T7, was similar. They placed a primary focus on analysing the original texts and target texts from the perspectives of grammar, vocabulary, sentence structure, and understanding for students to improve translation quality, which aligns with the conceptions of the TMoA. In contrast, T10's teaching focus aligned with the concepts of the TFoA. He focused on developing students' problem-solving and critical-thinking abilities compared with the other four teachers.

In the following sections, the details of these teachers' teaching focus will be discussed by grouping teachers into categories-the transmissionist-oriented group (T2, T3, T6, T7) and the transformationist-oriented group (T10). Since the first group contained both C/E and E/C translation, two examples, including one C/E class and one C/E class, would be given. In the end, a comparison of the two groups of teachers' teaching foci will be made.

The transmissionist-oriented teaching focus

Parts of teaching episodes of Teacher 3 (E/C translation)

(The teacher presented the original text and read the sentences: The SPAR Express assortment is focused towards the convenience shopper looking for food on the go or to top up their weekly shop from the larger supermarkets. The SPAR Express format provides shoppers with everything they need when they need it.)

T3: Ok, the problems from your assignments regarding this paragraph are the word

"assortment", and the understanding of "looking for[..] or to top up […]".

T3: Let's look at the word "assortment" first. As we all know, assortment means "品种" "花色", but if it has been translated into "各种花色", the meaning might not be very clear. Then, I think it should be explained in detail. So, I translated it into "各种商品". That is to say, Spar focused on convenience shoppers. We know the word "shopper" comes from "shop". So, I think convenience shopper can be translated into "喜欢逛便利店的人".

T3: The next is "looking for food on the go or to top up their weekly shop". Many of you may be confused about the relationships between the two phrases linked by "or". So, my understanding is that the two phrases served as attributive clauses. This might be a reasonable explanation. We know that infinitive verbs function as noun modifiers, and present participles can also function as noun modifiers. Then, what's the difference between them, as they all function as noun modifiers?

T3: So, present participle refers to the ongoing actions, and infinitive verbs refer to the actions that will happen in the future. For example, a project to be completed means the project isn't completed but will be in the future. So, this sentence can only be understood this way, although I think there was a problem in the original text. We all know "or" is a conjunction. It usually links two words and phrases that are in the same form. If it is "topping up" and the other is "looking for", it is reasonable to use "or". However, it linked infinitive verbs and present participles here. This is where we are confused. So, I think it is appropriate to regard them as noun modifiers.

T3: Then, I think the most difficult to translate is […]

It can be seen that to help improve students' translation quality, T3 placed a major focus

of his teaching on understanding the meaning of the original English text by analysing sentence structure, including the function of infinitive verbs, present participle, and conjunction. The other focus is to understand the meaning of vocabulary and express the original meaning in translation by using appropriate Chinese words. It was observed that such teaching routines recurred in T3's teaching practices. Meanwhile, T6, who taught C/E translation, shared a similar teaching focus in his class.

Parts of teaching episodes of Teacher 6 (C/E translation)

(The student was reading her Chinese translation in a Word file projected to a big screen. After the student read the translation, the teacher said:)

T6: Pay attention to the consistency of terms. "交付", which word to be used to translate "交付"? You used "deliver" in the previous sentences. How come it has been translated into "submit" here? I think "交付" should be translated into "deliver, " an idiomatic expression. "Submit" only refers to "提交", but "deliver" means I have accomplished the tasks. Right?

T6: There is another word. How did you translate "在x年x月x日之前"? I remember you have already learned a very idiomatic expression. Of course, you can use "before". What did you learn? Lucy (anonym of one student), do you know?

Lucy: I think it is "by".

T6: Do you think "before" and "by" have the same meaning? "By" means before but including that data. "Before" doesn't include that date. Nobody remembered another idiomatic expression?

T6: "Prior to", I think you have used it many times. Ok, let's move on to the second

line, "Party B shall in accordance with […]". What does this mean? Can "shall" be followed by a preposition directly? I think you may fail your CATTI exam if you translate this way. Can a preposition function as a predicate?

T6: You can say "shall be in accordance with" or "shall accord with" Right? A preposition cannot function as a predicate. You have to pay attention, and many students make such mistakes.

The above teaching episode of T6 revealed that regarding Chinese to English translation, the teacher placed the major teaching focus, firstly, on correcting students' grammar errors, including the misuse of "shall" as a verb which needs to come first in the verb, and the misuse of a noun as a predicate; secondly, pointing out idiomatic expression issues in students' translation, such as "交付"- "deliver", and "在…日期之前"- "prior to". It is observed that this teaching episode with the focus on grammar and idiomatic expression recurred in T6's teaching practices.

The transformationist-oriented teaching focus

Of the five teachers who organised translation classes in a translation-feedback-oriented way, one teacher's teaching focus of translation classes was more transformationist-oriented. While the other four teachers focused on students' translation quality, this teacher emphasised students' ability to find and solve translation problems rather than quality. Below are parts of the teacher's teaching episode:

(T10 asked students to criticise and revise the English-Chinese translation, and then students were required to present their revisions and critique reports to the translation)

S1: Let's look at this paragraph. The original Chinese translation was "卫兵沿着线路行进", but we think it should be translated into "沿着车厢行进" as we referred to the

image in our mind […] then here, the original was "吹响汽笛". We discussed it for a very long time. We referred to the image of a train whistle and thought that "吹响汽笛" might be appropriate. Then we revised it into "列车长吹响哨子", as the original English text used the verb "blow". So, it should not refer to the bell or whistle that needed to be pulled but to be blown.

T10: What do you guys think about it "拉响汽笛" and "吹响哨子"? (The teacher stood up from the chair and faced up to other students, and the other students started peer discussions).

T10: If you took a train, you might notice that the train would produce a warning sound by the whistle, especially when the train was arriving or departing the station, right? Let's consider the time when the story happened. It must be a steam-powered train. So, whether "blew the whistle" is "吹响哨子" or "拉响汽笛" needs further consideration. I think it is more possible to change "blew the whistle" to "pull the whistle" as we refer to the image of a steam-powered train […]

(Another student started presenting her revision to another paragraph. This paragraph was about a letter.)

S2: The beginning of this letter was "To the guard". We have translated it into "SS 党卫队", as it played an important role in this event. The procuration of this letter was "on behalf of the Minister". So, we translated the procuration into "部长 孔卡博士" […]

T10: Sorry to interrupt you. In the last class, we talked about how to deal with "To the Guard". We didn't know the content of this letter, as the original letter was written in Slovakian. "To the guard" was the English translation of the original letter. So, we

decided to translate it into "向卫队致敬". However, this translation was inappropriate. Why? The letter wasn't translated […] It was only sent to the local authority responsible for Jewish affairs.

T10: In the following paragraphs, there were explanations for the meaning of "To the Guard" in Slovakian. What does this mean in Slovakian? In the following paragraphs of this book, there was an example. If a Nazi wrote to his fellow, the letter would end as "Heil Hitler". So, in Slovakian, "To the Guard" can be considered as a Slovakia way to say "Heil Hitler", but it didn't refer to a specific person […] So, "To the Guard" was a popular phrase in the official letters in that era. Just like a Nazi used "Heil Hitler". You can find more supporting evidence in the following paragraphs.

T10: So, I suggest you develop a habit that when you come across something unclear in a longer text, do not be harsh. Mark it or highlight it, and just go ahead. You might find some clues or supporting evidence when you look back. So, if you did not notice how to deal with "To the Guard", you did not find the explanations in the following paragraphs.

Two teaching episodes of T10's teaching practices were given above. The two episodes revealed T10's teaching foci of his translation class, which were approaches to finding and solving translation problems instead of improving translation quality through analysing the source and target texts from a grammatical level. The first episode revealed the way of solving the translation problem, which was to refer to the image that was described in the original English text, including the image of a steam-powered train to distinguish "吹响哨子" and "拉响汽笛". This method has been emphasised many times by both the student presenter and the teacher. The second episode revealed the way of finding translation problems, which was to find supporting evidence in the

context to solve problems that were currently unclear, such as the meaning of "To the Guard" in the Slovakian language.

In addition to analysing the teacher's comments on students' interpretations, one of the student presenters' concluding marks also revealed the teaching focus of T10's teaching practices. The student presenter concluded her presentations as follows:

S3: Before closing my presentations, I would like to talk more about this (find translation problems). When I first learned translation, I thought language transfer was the most difficult, such as finding corresponding words in the target language. In the second phase, I thought searching for information to testify the original text was the most difficult, and T10 also emphasises this. While I was gradually good at searching, I found that the most challenging thing was finding problems. However, the fact is I always find everything is correct. There are no problems […]

S3's conclusion to her presentation revealed the two shifts of T10's teaching foci, which were from language transfer to information searching and from information searching to finding and solving translation problems. The student claimed that finding problems from those that seemed correct was challenging. This claim provided supporting evidence to the teacher's teaching focus on helping develop students' abilities to find and solve translation problems, which were also found through analysing the teacher's comments on students' interpretations.

In the above sections, teaching materials and teaching focus of the 10 teacher participants' translation classes were presented by analysing the data collected from classroom observations. It can be seen that regarding teaching materials, the 10 teacher participants' teaching approaches were transformationist-oriented, as they adopted authentic teaching materials in their teaching practices despite slight differences in the

materials. In addition, most teachers' teaching adopted the TMoA regarding teaching focus, while differences were observed.

5.3.1.4 Findings of teaching organisation for the 10 translation teachers' teaching practices

Teaching organisation was the third element examined by the data collected through classroom observations. This element was examined by nine sub-elements, including teacher instruction, student presentation, ways to offer feedback, teacher-student interactions, and so forth. Findings were presented by calculating the time allocated by the 10 teachers to the corresponding sub-element in the observed sessions. Figure 5.2 summarises the percentage of time the 10 teachers allocated to the nine elements in organising their teaching.

First of all, the total time calculation was based on an 80-minute scale to indicate the differences in each sub-element. This is because although each participant was observed for two consecutive sessions lasting for 160 minutes, the second session contained recurring patterns of teaching practices, in which the time allocated to each sub-element by the teachers was almost the same as the time allocated in the first observed session. Therefore, the time for the recurring teaching practices in the second observed session was excluded from the calculation. By doing so, the total time calculated was 800, with each teacher for 80 minutes.

It can be seen from the Figure that overall, the 10 teachers adopted both the TMoA and TFoA in the observed teaching practices. The total time allocated to the TMoA nearly accounted for 65% of the total observed time calculated, while the total time allocated to the TFoA was less than 35%. Therefore, it can be said that this group of teacher participants preferred the TMoA in the teaching practices.

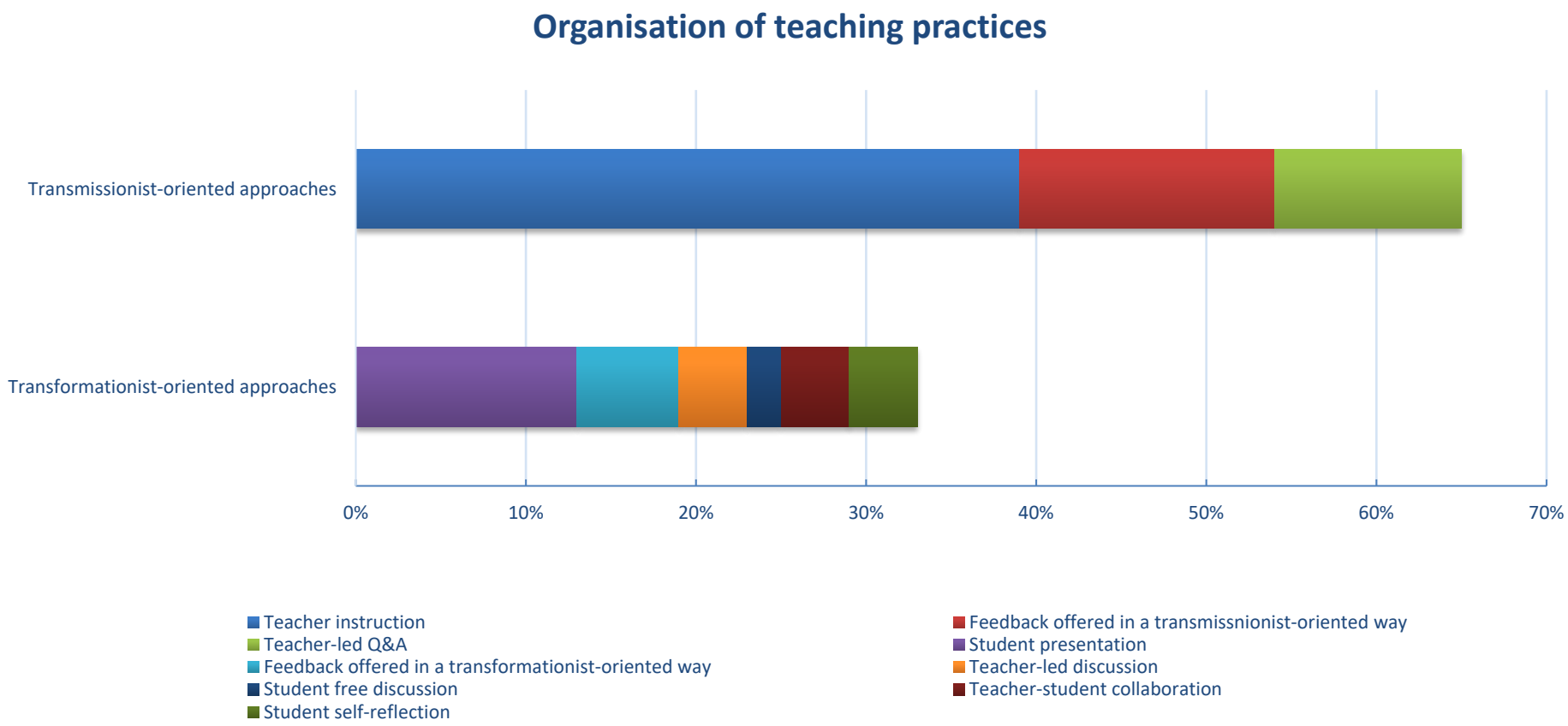


Figure 5.2 Time percentage of each sub-element in the organisation of teachers' teaching practices

Regarding the TMoA, the time for teacher instruction accounted for nearly 40% of the total calculated time, followed by the time for feedback offered in a transmissionist-oriented way, making up 15%. Here, feedback offered in a transmissionist-oriented way refers to teachers who offered feedback to students' translation exercises or assignments by directly giving them answers or analysing grammatical errors to help students improve translation quality. The third-ranked sub-element is teacher-controlled Questions-Answers (Q&A), accounting for 11% of the total calculated time. The reason for categorising teacher-controlled Questions-Answers into the TMoA is that the students in this activity were not actively engaged in the teaching practices but were passively chosen by teachers to answer questions. Accordingly, this activity can be regarded as a stimulus to motivate students to learn. Therefore, it was categorised into the TMoA.

In addition, 65% of the total calculated time allocated to the TMoA, including teacher instruction, teacher's direct feedback, and teacher-controlled Questions and Answers, also revealed teachers' leading role in the observed teaching practices. This is because all three teaching activities needed the teacher's control of the teaching process. Therefore, it can also be said that the teachers spent 65% of the total calculated time playing a leading role in the observed teaching practices, which aligns with the TMoA.

Regarding the TFoA, student presentation was the major activity the teachers conducted, accounting for 13% of the total calculated time. It needs to be noted that a student presentation refers to the presentation with students' interpretations of translation problems and understanding of translation theories. However, in the observed teaching practices of T6 who organised student presentations, it was found that the student presenters read the slides without further interpretations. Therefore, the time for such a student presentation was not calculated. The second major activity was feedback

offered in a transformationist-oriented way, making up 6% of the total calculated time. This way of offering feedback refers to teachers organising a one-on-one discussion with students (e.g., T8) or feedback that focuses on helping students develop abilities to find and solve translation problems (e.g., T10). In addition to the two sub-elements, the proportions of the other three sub-elements, including teacher-led discussion, teacher-student collaboration, and student self-reflection, were the same, all at 4%. Last but not least, students' free discussion accounted for the least proportion (2%) compared to the others.

Furthermore, 35 % of the total calculated time allocated to the TFoA discussed above revealed a facilitating role teachers played in the observed teaching practices. Instead of controlling teaching processes, teachers in transformationist-oriented activities such as students' free discussion and student presentations provided help to students when necessary. Therefore, it can also be said that teachers spent 35% of the total calculated time playing a facilitating role in the observed teaching practices, which aligns with the TFoA.

In short, the teachers spent much more time using the TMoA to teach translation and playing a leading role in the activities, such as teacher instruction, teacher-controlled Questions and Answers, and directly correcting students' translation errors. Although the TFoA have been used in the observed teaching practices, the proportion of the time teachers allocated to these approaches was considerably smaller than the time allocated to the TMoA.

5.3.2 Teaching practices with various backgrounds

To understand individual differences in teachers' teaching practices, the time teachers allocated to each teaching activity was calculated (see Figure 5.3) based on a standard

80-minute scale used in Figure 5.2. The differences between Figure 5.2 and Figure 5.3 were that there were 10 elements in Figure 5.3. The extra sub-element was non-communicative activity, which refers to activities irrelevant to the TMoA and TFoA, such as teachers giving assignments to students, adjusting the colour of slides, and so forth.

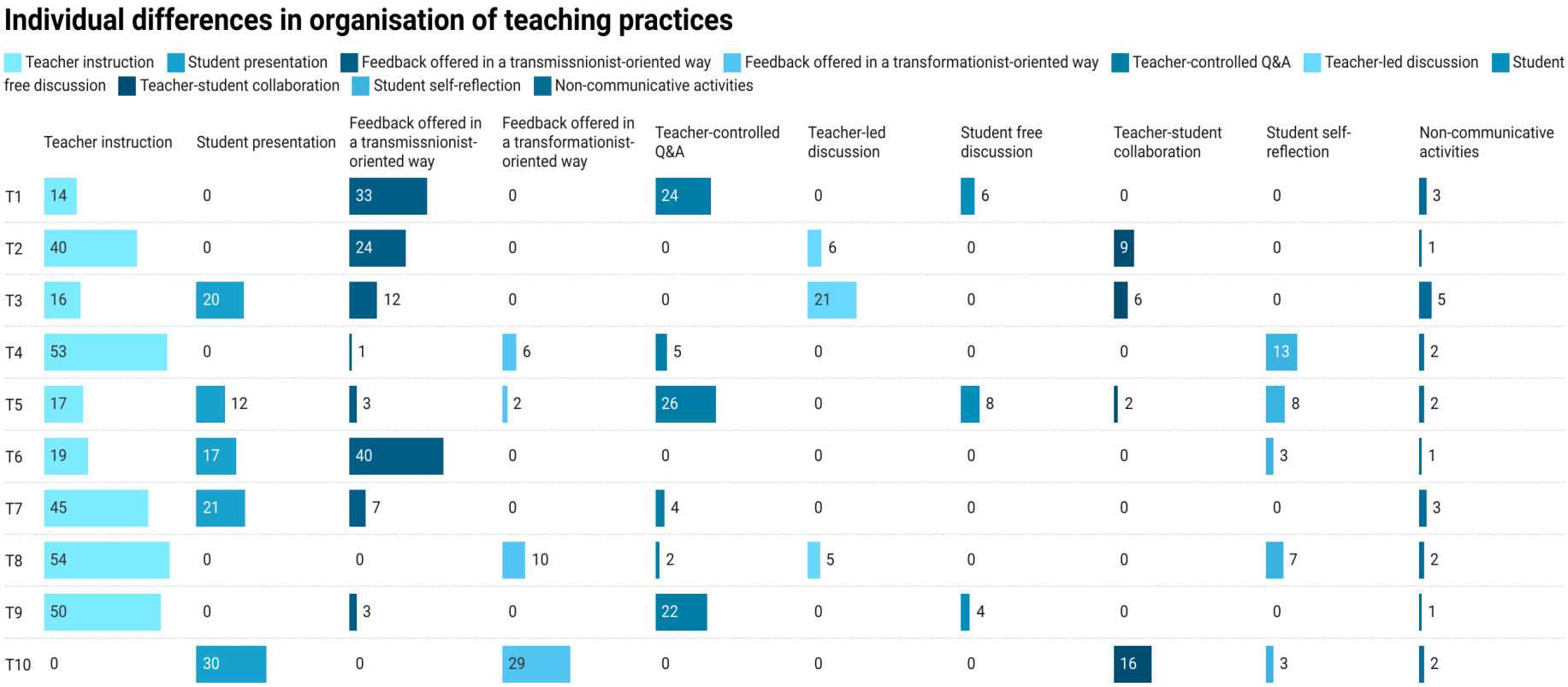


Figure 5.3 Time allocated to each activity in the organisation of teachers' teaching practices (n = 10)

Teacher instruction and student presentation

As can be seen, nine out of 10 teachers adopted teacher instruction, except T10. Among the nine teachers who adopted teacher instruction, five regarded it as a major teaching activity, with at least half of the total calculated time allocated to teacher instruction. Furthermore, three teachers (T4, T8, and T9) spent more than 50 minutes on this activity, accounting for 63% of the total calculated time.

In contrast, of the 10 teachers, five teachers adopted a student presentation in the observed teaching practices, while the other five teachers did not do so. Of the five teachers who adopted this activity, T10 regarded it as a major teaching activity with 30 minutes, accounting for around 38% of the total calculated time. This percentage was much lower compared to the time the teachers spent on teacher instruction.

Feedback offered in a transmissionist-oriented way and in a transformationist-oriented way

Seven teachers used a transmissionist-oriented way to offer feedback (see Section 5.3.1.4 for its meaning) to students' translations. Two of the seven teachers regarded it as a major teaching activity, with T1 spending 33 minutes (41% of the total calculated time) on it and T6 spending 40 minutes (50% of the total calculated time).

In contrast, only one teacher, T10, regarded offering feedback in a transformationist-oriented way (see Section 5.3.1.4 for its meaning) as a major teaching activity. T10 spent 29 minutes on it, making up 36% of the total calculated time. However, the other three teachers (T4, T5, and T8) spent little time on it, with T5 only spending 2 minutes.

Teacher-controlled Q&A and the rest

Teacher-controlled Questions and Answers (Q&A) were used by six teachers. However,

only three of them regarded it as a major teaching activity. The three teachers spent almost the same time, around 25 minutes, on this activity, which accounted for 31% of the total calculated time. The other three teachers spent less than 5 minutes on it, with the least 2 minutes being spent by T8. Therefore, this activity was a minor teaching activity for T4, T7, and T8.

Compared to teacher-controlled Q&A, the rest tended not to be regarded as the major teaching activities. However, three cases needed to be noted. The first is T3, who regarded teacher-led discussion as a major teaching activity compared to the other nine teachers. The second case was T10, who spent 16 minutes on teacher-student collaboration, which means the teacher and students conducted free discussion against solving translation problems without the teacher providing answers to the problems as reference. The third case was T4, who left 13 minutes for the students to self-reflect on translation problems, compared to the other teachers who only spent several minutes on it.

Transmissionist-oriented approaches and transformationist-oriented approaches

In the above results, individual differences in each sub-element were given. In this section, individual differences in the 10 cases were presented. In general, the 10 teachers adopted both the TMoA and TFoA to the nine sub-elements, except for T9 and T10. It can be seen that T10's teaching approaches were much more transformationist-oriented. His classes were organised through a collaboration between the teacher and students. In the observed teaching practices, the student's job was interpreting their translation assignments, while the teacher's job was facilitating students' interpretation. However, T9's classes were much more transmissionist-oriented. T9 primarily organised the classes through teacher instruction and teacher-controlled Q&A. These

two teaching activities reached 75 minutes, accounting for 94% of the total calculated time. Therefore, the teacher's job was to deliver translation knowledge to students.

In addition to T9 and T10, T5 balanced the TMoA and TFoA compared to the other teachers. T5 allocated 46 minutes to the TFoA, such as students' presentations, free discussions, and so forth. Meanwhile, she allocated 32 minutes to the TMoA. This indicates that students were allowed to make decisions in the process of translation learning, while the teacher made the final decision.

5.3.3 Factors shaping teachers' teaching practices

In Section 5.2.3, two situational factors: institutional and socio-culture contexts, contributing to the teachers' cognitions were found to cause the inconsistencies between the teachers' cognitions and teaching practices. Two factors were also identified by requiring the 10 teacher participants to explain the reasons contributed to material use, teaching focus, and teaching organisations in the observed sessions. The first factor is the internal factor, including teachers' translation ability, translation teaching experiences, and motivation; the second is the external factor, including teaching facilities. Figure 5.4 presents the two factors' influence on the teachers' teaching practices.

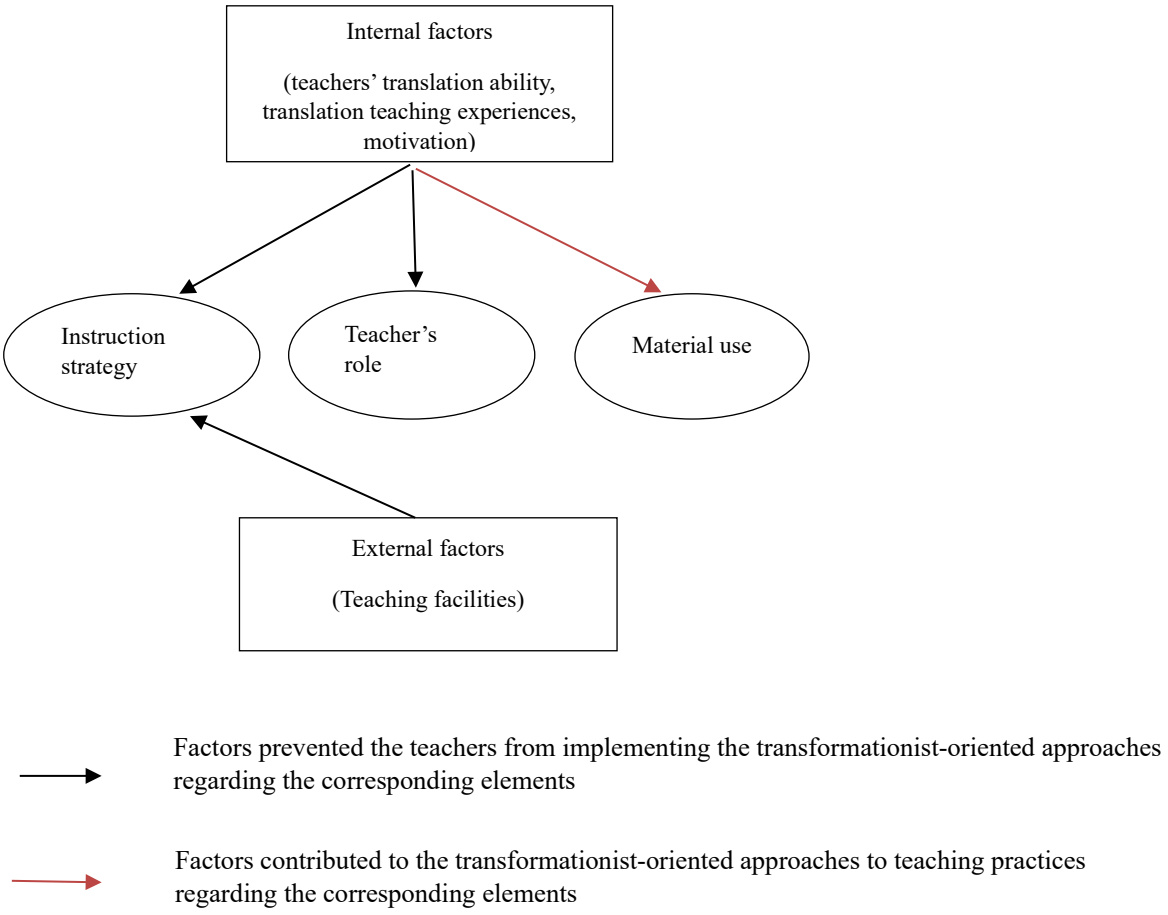


Figure 5.4 Factors that influence Chinese translation teachers' teaching practices

External factors

The influence of situational factors, such as teaching syllabus and education policy, on translation teachers' teaching practices has been reported in Section 5.2.3. This section will only report those that have not been addressed.

The external factor found in teachers' classroom observations was teaching facilities. It was identified to prevent teachers from applying the TFoA to translation teaching. Most teachers (T2, T4, T5, T7, T8, T9) claimed that they taught in the "traditionally set-up classrooms" (T9). Students' desks were fixed and lined up in rows. So, it "makes up the most space of the classroom" (T7), leaving a narrow stage for teachers to stand in front

of the students. They explained that this kind of classroom setting did not meet the need for group discussion or group work. As T5 said:

> *I adopted a translation-project-based approach to training students of the Translation Team (a faculty-organised translation agency that provided fee-paying translation services). Their training was run in Room XXX, with a large round table seating 12 students and a movable screen. We were sitting close to each other […] Such an environment was ideal for discussing problems in translation projects. It is disappointing that my classroom for the Business translation course is not like that […]*

T5 expressed her disappointment when she did not have suitable classroom facilities to implement project-based learning. However, she believed in the significance of this approach and implemented the approach to training a Translation Team; that is, traditional classroom settings prevented teachers from adopting project-based learning. Therefore, the external factor: teaching facilities, influenced the teachers' teaching practices and contributed to the discrepancies between the teachers' cognitions and teaching practices.

Internal factors

Firstly, the internal factors involved primarily the teacher's translation ability. It was found to influence teachers' choices of material use. It has been reported that all the teachers in this study used authentic materials in the observed teaching practices. When asked why they chose authentic materials, all 10 teachers claimed that they have the ability to translate authentic materials, especially the experienced translation teachers (T2, T3, T4, T7, and T8). For example, when asked why he used the excerpts from his own translation work for teaching, T2 claimed that "I was capable of translating and

publishing what I have translated. No one knew the material better than me". Similarly, T7 claimed that,

> *I used a textbook by Zhang Peiji when I started teaching translation, as I did not have my own translation materials. As time went by, I was getting experienced in teaching and translating. I have my own interpretations of the problems I encountered in real translation projects. For example, this recruitment form I used for your observed classes was commissioned by our university. They believed in my ability. Their recognition, in turn, gave me first-hand teaching material […]*

As can be seen from T7's explanations, his translation ability was recognised by the university. So, he won the opportunity to conduct a real translation project. This opportunity, in turn, provided first-hand authentic materials for the teacher to use in later translation teaching. Similar explanations also could be found in T3, T4, and T8.

Secondly, the internal factors also involved teachers' translation teaching experience. Five teachers (T1, T3, T5, T9, T10) explained the impacts of their translation teaching experiences on teaching practices. T1 and T3 were experienced teachers with over 20 years of translation teaching experience. They emphasised the significance of years of teaching experience in the teaching strategies. For example, T1 claimed he took a leading role in the instruction on translation strategies and concepts because he has "developed his own concepts and strategies over time" and thus can deliver this knowledge to his students.

Compared to T1 and T3, the other three teachers had limited translation teaching experience, especially T5 and T9. T5 had three years of translation teaching experience, and T9 had four years. Both claimed that limited translation teaching experience

prevented them from implementing the teaching approaches they believed in. For example, T5 organised various teaching activities in her teaching practices, such as students' free discussion and self-reflection, which aligns with the TFoA. However, she explained the reason for using the TFoA as follows:

> *I also wanted to be a role model, selecting materials I am familiar with so that I can directly point out their problems (problems in students' translation). That's very easy for me to teach this course. I can also be regarded as a superhero by the students, as they may think that our teachers know everything. However, the fact is this course is newly set up. I have barely any experience of teaching this course. So, I have to organise many interactive activities to engage them in teaching. I am learning together with them (T5)*

It can be seen that T5 taught a newly set-up translation course. She had very limited experience of teaching the course. She had no choice but to learn together with the students, although she wanted to be a role model for the students to convince them by knowing everything. In other words, if the teacher had ample translation teaching experience, she could teach based on the approaches she believed. However, since the teacher lacked such teaching experience, she could only learn collaboratively with the students. Therefore, it can be said that the limited translation teaching experience caused inconsistencies between teachers' cognitions and teaching practices.

Thirdly, internal factors involved teacher motivation. It influenced teachers' preferences for the TMoA, such as emphasis on the teacher's leading role, correcting grammar errors, and so forth. These teachers (T1, T2, T4, T6) insisted that they would not like to change to other approaches, as they lacked the motivation to make changes. For example, T6 explained the reasons he played a leading role in the class to directly

correct students' grammar errors in their translation assignments as follows:

> *I would also like to introduce something new to translation classrooms, especially the computer-aided collaboration translation platform, such as SDL Trados. It is an information era. Students need to know […] However, I did not have the motivation to learn. There was a training for using SDL Trados, and I gave this opportunity to one of the young teachers in our faculty. I was used to staying in a comfort zone and wouldn't like to make changes.*

T6's explanations were presentative of experienced teachers who lacked the motivation to make changes to the teaching approaches that have been kept for decades. Similarly, T1, who has more than 30 years of translation teaching experience, explained this question similarly. Years of teaching routines formed a comfort zone for these teachers, which means they were getting used to teaching in a way they were familiar with. This, in turn, led to a lack of motivation for these teachers to change the current teaching approaches.

In short, both internal and external factors were found to influence teachers' teaching practices. It is notable that both factors explained by teachers were related to their adoption of the transmissionist-oriented approaches, except for material use. This suggests that these factors acted as the source of causing inconsistencies between teachers' cognitions and teaching practices.

5.4 Qualitative findings of Chinese translation students' cognitions

5.4.1 In-depth examination of translation students' cognitions

The qualitative findings of this study revealed that the Chinese translation students' cognitions about approaches to translation teaching were a mixture of both the TMoA

and TFoA. Table 5.7 summarises the details of the students' cognitions. As can be seen, their cognitions covered eight learning elements: teacher's role, material use, instruction strategy, teaching objectives, ways to offer feedback, ways to assess translation quality, ways to choose teaching content, and ways to evaluate student learning. The following paragraphs will provide details of the students' cognitions about each element.

Table 5.7 Chinese translation students' cognitions about approaches to translation teaching in detail (n = 20)

Name	Teacher's role (20)		Material use (20)		Instruction strategy (20)		Teaching objectives (19)		Ways to offer feedback (16)		Translation assessment (14)		Teaching content (8)		Student evaluation (7)	
	TMoA 9*	TFoA 11*	TMoA	TFoA 20*	TMoA 8*	TFoA 13*	TMoA 4*	TFoA 15*	TMoA 6*	TFoA 11*	TMoA 6*	TFoA 8*	TMoA 7*	TFoA 1*	TMoA 2*	TFoA 5*
S1	√			√	√			√		√						
S2	√			√	√			√				√				
S3		√		√		√	√		√							
S4		√		√		√		√		√	√		√			
S5		√		√		√	√					√				
S6		√		√		√		√								
S7	√			√	√			√		√					√	
S8	√			√		√		√				√				√
S9		√		√		√		√		√		√	√			
S10		√		√		√		√		√						
S11	√			√		√		√	√	√		√				
S12	√			√	√		√		√		√					
S13	√			√	√		√		√					√		
S14	√			√	√			√	√		√		√		√	
S15		√		√		√		√		√		√				
S16	√			√	√				√		√		√			√
S17		√		√	√	√		√		√	√					√
S18		√		√		√		√		√	√		√			
S19		√		√		√		√		√		√	√			√
S20		√		√		√		√		√		√	√			√

Note: TMoA= Transmissionist-oriented approaches; TFoA= Transformationist-oriented approaches; the number in the bracket represents the total number of the student participants commenting on this element; * refers to the number of student participants using the concepts of TMoA/TFoA to comment on their ideas about the corresponding element.

Teacher's role

The main topics about the teacher's role involved leading, teacher authority, guidance, and guiding. In the interview, all 20 students addressed the element of the teacher's role when asking their ideas about approaches to translation teaching. Specifically, 11 believed teachers would act as learning facilitators or guides instead of controlling teaching and learning processes. These students' ideas about the teacher's role were much more transformationist-oriented. For example,

> *I think the teachers still need to play a guiding role […] providing guidance to us, and then we can continue to explore by ourselves (S3).*
>
> *For instance, we raised questions in classroom presentations, or there was a problem in our presentations, but we did not notice that question. At that moment, we hope the teacher can point out the problems for further discussion. So, I think the teacher needs to play a guiding role (S4).*
>
> *[…] The teacher needs to guide us throughout the process of self-reflection. If the teacher had only forced us to accept their ideas, we might have resisted (S6).*
>
> *I think the teacher was taking much more of a guiding role. They can provide their ideas as references for us to have discussions and then think about how to translate (S17).*

As can be seen from the four students' statements, they described a variety of learning contexts, including classroom presentations, group discussions, and self-reflection. However, regardless of the various learning contexts, their ideas about the roles the teacher played in the learning contexts were almost the same. They all believed that teachers needed to play a guiding role in their learning process.

In contrast, nine students' cognitions about the teacher's role aligned with the TMoA. These students believed teachers needed to "play a leading role" (S2) in their learning process. Otherwise, teachers would lose their "authority" (S7) if teachers and students became close. In the meantime, the students also emphasised that "teachers' leading in translation learning" (S8) might be the fastest way for them to learn a wide range of translation skills.

Material use

The topics of material use involved using authentic materials, simplified materials, and materials from the translation market. In interviews, all 20 student participants mentioned the type of teaching material they would like to use to learn translation when talking about ideas about approaches to translation teaching. Surprisingly, all the students' cognitions about material use aligned with the TFoA. They all believed that authentic materials need to be used in translation learning. For example,

> *Yes, I preferred the authentic ones (learning materials) […]. Those like formal contracts are difficult to translate. However, you would translate contracts if you worked in legal translation agencies after graduation. Therefore, it is better not to simplify the materials when learning to translate contracts (S11).*

> *I hope the teachers can share their translated materials in the translation market for practising. If the material from the translation markets is difficult, just keep it, as it should be as difficult as it should be in the translation market (S15).*

It can be seen from the two excerpts that the students not only believed that authentic materials need to come from translation professions, such as translation agencies and translation markets, but also need to be kept in their original form, which means the materials need not be simplified for teaching purposes.

Instruction strategy

The topics of the instruction strategy involved resistance to group work, flipped class, listening to the teachers, discussion, teacher-student interaction, and translation-project-based learning. Students' cognitions about approaches to translation teaching concerning instruction strategy refer to students' ideas about how they would like the translation class to be organised, such as teacher instruction, group discussion, and translation-project-based learning. All 20 student participants commented on this element. However, they commented on this element 21 times. This is because one student (S17) commented on this element twice (See Table 5.7). In other words, the student's ideas were a mixture of the TMoA and TFoA to the instruction strategy.

On the one hand, eight students believed in the effectiveness and value of the transmissionist-oriented ways to organise translation classes, such as teacher-controlled instruction. For example:

> *I felt like having a sort of resistance once I heard about group study or group discussion. I preferred listening to teachers' instructions on their translation experiences (S1).*
>
> *I personally preferred teacher instruction, as I think other students may not be attentive if the student was instructing on the stage. So, I wouldn't say I liked flipped classes. I think I learned nothing in the flipped class (S12).*
>
> *I prefer teacher instruction, and I would like teachers to speak faster. The faster the teacher spoke, the more knowledge I could learn from the teacher (S14).*

The above three students' ideas about the instruction strategy acknowledged the importance of teacher instruction. These students preferred listening to teachers'

instruction but refused student-centred teaching strategies, such as flipped classes. S14 even hoped the teachers could speak as fast as possible as she believed that the teacher's instruction was the source of her knowledge, which is a typical idea aligned with the TMoA.

In contrast, 13 students believed translation classes should be organised more interactively and collaboratively, such as group work and project-based learning, which aligns with the TFoA. For example,

> *I didn't want the teacher to keep talking or instructing, as I think the practice-based class can be interesting. Teachers were allowed to instruct but not to keep talking without teacher-student interactions. I also think the interactions not only occurred between teacher and student but also among students (S4).*
>
> *As for one translation problem, different students have different solutions […] That is to say. It is very important to discuss with your peers, whether in or out of the classroom (S8).*
>
> *I think the teacher could engage us in various learning contexts by creating learning activities, such as group discussions, presentations, and role play. I hoped the teacher did not just keep talking (S10).*
>
> *[…] similar to the simulation of authentic translation project […] they (teachers) handed over us a translation project. they (teachers) would be a client who needs translation service and then talked to us […] I think it is the best way (to learn translation) (S15).*

These students' statements about the teacher's instruction strategy shared the same idea: They did not hope teachers kept talking. Instead, they would like to engage in

interactive activities, such as discussion and collaboration. They believed knowledge could be learned from other students and constructed through discussion and collaboration.

Teaching objectives

The main topics about teaching objectives involved sentence conversion, word choice, mastering translation skills, translation industries, comprehensive abilities, and life-long learning. In student interviews, nearly all the student participants talked about teaching objectives when asked about their ideas about approaches to translation teaching. Among the students, four believed they would like to improve translation-related skills, such as translation skills, text-analysis ability, and so forth. These students' cognitions aligned with the TMoA. For example,

> *Yes, it is very important (to learn translation skills). Converting the source language to the target language, restructuring the sentence […] I hope the course can help me master the translation skills and knowledge (S3)*
>
> *I think the translation classes only focused on teaching how to translate well and not so much on other aspects (such as interpersonal skills)(S5).*

It can be seen that the students who held cognitions about the TMoA regarding the teaching objectives believed that translation classes were limited to "mastering translation skills" (S12), such as "new and idiomatic expressions and accurate word choice" (S13). In contrast, 15 students believed that the objectives of translation teaching need to focus on translation-related competence and competence other than translation, such as communication and public speaking. For example,

> *Given that learning is a life-long activity, I think cultivating the mindset of*

translation should be given top priority (S6).

I really hope to learn many things related to the translation industry. All the teaching goals should be closely linked to the translation industry. I majored in Legal Translation. Therefore, besides legal translation skills, I also need to know how to work in a law firm (S7).

In addition to translation-related things, others such as critical thinking […] attending more group discussions, interpersonal skills, and communications can be improved […] ability to be a leader might also be improved. So, except for translation-related competence, comprehensive competence also was needed (S18).

The above three excerpts revealed that these students believed that translation-related skills are not the sole competence needed to be included in translation teaching objectives. Comprehensive competence linked to the translation market and social demand, such as interpersonal skills, is also needed. These ideas aligned with the conceptions of TFoA.

Ways to offer feedback

The feedback here refers to the feedback on students' assignments offered by teachers in classrooms. Accordingly, ways to offer feedback means how teachers offer such feedback.

In the interviews, 16 students mentioned this element. The main topics of this element involved direct correction, teachers' solutions, group discussion, peer review, and self-reflection. Six of the 16 students held cognitions that aligned with the TMoA. These students generally believed that teachers needed to directly point out the problems in

students' assignments and then offer solutions. For instance, S12 said she would like the teacher to comment on her assignments instead of other students. She even thought the teacher needed to offer direct feedback, which means "directly telling me where the problems are and how to solve them" (S12).

In contrast, 11 students believed that feedback needed to be offered instead of teachers' comments in the way of group discussions, peer reviews, and face-to-face discussions. These approaches acknowledge the importance of collaboration and critical thinking, which align with the TFoA. For instance,

> *I cannot freely discuss my work with the teacher about my translations if the teacher just scored my assignments. So, I need to talk to the teacher individually […] Peer review is also a good way, and I would have enough time to discuss the problems with my classmates. This is pretty good, I think (S4).*
>
> *I would prefer not to let the teacher directly give answers to our translation problems but to leave some time for us to think about the problems (S11).*
>
> *I think I need to discuss with the teacher why I would make errors and then think about these errors alone. So, I think the process of self-reflection is much more important than the teacher's answers (S18).*

It can be seen that different from the TMoA to feedback, students who believed in the significance of the TFoA emphasised the way to have self-reflection and discussions. Students also claimed that the process of thinking outweighed the answer provided by the teacher. Therefore, these students regarded learning as a process of knowledge construction through interactions rather than information accumulation, which is the core concept of the TFoA.

Ways to assess translation quality

Ways to assess translation quality contains dual meanings. First, it refers to the ways to assess students' translation quality. Second, it refers to the ways to establish the assessment criteria. The main topics of this element involved teachers' jobs, preferences, standards, students' rights, multiple resources, professionals, and peer review. Fourteen students were talking about this element. The students' ideas about translation assessment were balanced by adopting the TMoA and TFoA. Of the 14 students, six held ideas that aligned with the TMoA. They believed that the assessment of students' translation quality was mainly "dependent on the teacher's preference" (S14) and "the teachers' standard" (S16), and therefore, the students "have no rights to assess the translation" (S17). Although some teachers may allow students to discuss the assessment criteria with them, they still believed that "the teacher needs to play a determined role in assessing our translation" (S12). The four students all held that it is the teacher's job to decide whether students' translation is good. Accordingly, students need not be engaged in the process of translation assessment. This indicates that these students' cognitions aligned with the TMoA to translation assessment.

On the other hand, the other eight students' cognitions aligned with the TFoA to translation assessment. They believed that assessing students' translation quality cannot depend only on teachers' judgement. Consequently, various approaches can be applied to translation assessment, such as peer review, teacher-student discussion, and external expertise review. For example,

> *I think multiple teachers can assess my translation. What I mean is the quality of my translation cannot be decided by only one teacher. There could be an assessment group of several teachers […] (S5).*

I prefer to find professional lawyers who would be employed as assessment consultants. Their judgement on my (legal) translation's quality might be more convincing (S8).

I think the quality (of my translation) is not a one-off score given by the teacher. Activities, such as peer review, can be organised. Some students are really good at finding problems than me, so […] (S20).

Those students' statements on translation assessment revealed that, for one thing, translation quality is not a score marked by the only teacher. So, experts with various professional backgrounds and translation teachers other than the teacher who taught the course can be involved in the process of translation assessment. In addition, peer assessment is another way the students believed can be applied. These ideas made translation assessment more student-centred and profession-oriented, which is in line with the concepts of the TFoA.

Other elements

Apart from the elements having been discussed, the students mentioned two more elements while discussing their ideas about approaches to translation teaching. They are: ways to evaluate student learning and ways to choose teaching content. Due to the limited length of this doctoral thesis, the details of students' cognitions regarding the two elements will not be described. However, a summary was provided.

Regarding ways to choose teaching content, most students (seven out of eight) believed that teachers "have the right to make decisions" (S4) on the materials to be used for translation teaching. Students believed in the "teachers' authority" (S19) in selecting appropriate materials for them. The ideas of depending on teachers' decisions and trusting teachers' authority made these students' cognitions align with the TMoA.

Concerning ways to evaluate student learning, five out of seven believed that scores from final exams cannot adequately evaluate the final learning performance. Meanwhile, the evaluation focus should not be solely on the quality of the final translation product. Instead, they believed that the evaluation should focus on "the learning process rather than the results" (S8). Accordingly, the quality of the final translation product cannot represent students' true learning performance but the "restructure of mindset related to translation" (S16).

5.4.2 Sources of translation students' cognitions

Students were required to explain the causes that led to corresponding ideas about approaches to translation teaching in the interview. The explanations can be grouped into four categories, including prior experiences, translation teacher and student diversity, translation learning, and situational context. Table 5.8 presents the results of each student participant's explanations of the factors that influenced their cognitions.

Table 5.8 Factors influencing the student participant's cognitions about approaches to translation teaching (*n* = 20)

	Prior experiences	Translation learning		Teacher and student diversity			Situational context	
	Undergraduate learning	Translation learning experience	Translation practice experience	Teachers' teaching experience	Student ability	Student personality	Teaching time	Education concept
1	√	√				√		√
2	√							
3	√	√			√			√
4	√	√		√	√			
5	√	√			√			√
6	√		√					
7	√	√			√		√	√
8	√		√	√	√			
9	√	√			√		√	
10	√			√				
11	√	√	√		√			
12	√	√	√	√	√	√	√	√
13	√					√		
14	√	√	√	√	√		√	
15	√					√		
16	√		√	√	√			
17	√				√			
18	√	√			√			
19	√	√	√	√	√	√		
20	√	√		√	√			

Prior experiences

Students' prior experiences refer to students' past learning experiences, especially their undergraduate non-translation learning experiences. The experiences were found to contribute to students' cognitions about both the TMoA and TFoA in relation to a variety of learning elements, such as instruction strategy, material use, and teacher's role.

Students' undergraduate learning experiences contributed to their cognitions about the TMoA and TFoA regarding the instruction strategy and the teacher's role. For example,

> *I think there is a big gap between undergraduate and postgraduate studies. I majored in science during my undergraduate study, and the science students didn't need many discussions as we just needed to calculate the only final correct answer. So, I also hope this approach could continue to be used in postgraduate studies […] (S3).*
>
> *Yes, I did it (flipped class) in my undergraduate study. I also carefully listened to other students in the class. However, I didn't think I learned something from them. So, I preferred teacher instruction (S12).*
>
> *When I was in my undergraduate study, the teacher just kept taking and reading PowerPoints. So, sometimes I just skipped that teacher's class as I could copy the teacher's PowerPoint and learn by myself. So, I would prefer more interactive learning approaches in the postgraduate study (S9).*
>
> *I majored in Hospitality Management during my undergraduate study. We often visited hotels to experience how a hotel was managed and operated, as the teacher would move classroom teaching into an actual practice context. So, I*

would like the teacher in my current (translation) study to do what the teacher did in my undergraduate study (S15).

As can be seen from the four excerpts, the first two students claimed how their undergraduate learning experiences influenced their ideas about the TMoA regarding the instruction strategy and the teacher's role. For one thing, S3 was more familiar with the TMoA in undergraduate study. For another thing, S12 had an unsuccessful learning experience with the TFoA in undergraduate studies. These two situations, therefore, led to the students' resistance to the TFoA in postgraduate study and made the students acknowledge the teacher's leading role in teachers' instruction.

In contrast, S9 and S15 claimed how their undergraduate learning experiences facilitated their understanding of the TFoA to the instruction strategy and the teacher's role. It was found that S9's unsuccessful learning experience of the TMoA led to their preference for the TFoA in postgraduate translation study. Furthermore, S15 was more familiar with the contextualised approaches in his undergraduate study. Therefore, he would assume that this learning approach can continue to be applied to his postgraduate study, as he believed translation is also a practice-oriented subject.

Students' undergraduate learning experiences also influenced their ideas about using authentic materials to learn translation. Students' (S3, S7, S9, S18) successful learning experiences of using authentic material in undergraduate study became one of the sources that contributed to their ideas about using authentic materials in translation learning.

Translation learning

Translation learning includes two sub-factors: students' translation learning experience and translation practice experience. The two sub-factors contributed to students'

cognitions about the TMoA and TFoA regarding teaching objectives and ways to assess translation quality.

Firstly, most students claimed that their current translation learning influenced their ideas about the objectives of translation teaching. Students with diversified undergraduate learning backgrounds developed a new understanding of translation after learning translation for at least half a year. The new understanding of translation, in turn, caused changes to the student's ideas about translation learning objectives. For example,

> *I studied Finance during my undergraduate studies and never took translation courses, so I wasn't quite sure what the teaching objectives were for the translation courses. After attending translation and interpreting courses in the MTI programme for half a year, I found that translation courses focused more on bilingual conversion and cultural awareness, while interpreting courses required not only translation skills but also communication and public speaking skills. Therefore, I believe that translation courses aim to improve my translation skills and quality (S5).*

> *I think legal translation differed from literary translation after one year of study. Literary translation focused more on word choice and sentence structure. However, legal translation combines law and translation. That is to say, in addition to learning translation-specific knowledge, it's essential to learn about legal and lawyer-related knowledge, such as negotiation and crisis management. In other words, it requires comprehensive improvement. By expanding your knowledge beyond translation techniques, you will be better able to provide professional legal translation services to your clients (S7).*

It can be seen that the students' present experiences in translation learning led them to

realise that translation demands fewer interpersonal skills compared to interpreting, which aligns with the TMoA. Consequently, the students believed that the teaching objectives of the translation course were to acquire translation skills and enhance translation quality.

In contrast, the translation learning experiences also provided the students with a deeper understanding of legal translation. This underscored the importance of developing not only translation skills but also overall competence, which is crucial for becoming a competent legal translator in the workplace. These ideas align with the learning objectives of the TFoA.

In addition, students' translation practice experience made them believe that translation quality assessment is subjective. Thus, the assessment cannot rely on teachers' authority, which aligns with the TFoA. For example, S8 claimed that:

> *As I gained more translation experience, I realised that translation quality assessment was subjective. It's not like a math problem; only has one correct answer […]*

Similarly, S11 said that:

> *I used to think that as long as my teachers gave me their standard to assess my translation, it was good enough. But now, after doing translation practice for six months, I realise that language is a flexible tool. When it comes to translating pragmatic texts, I may only have two or three ways of expressing the information in my mind, and even then, the expressions may not be accurate. So, the teacher's standard may also have such problems […]*

It can be seen from the two students' claims that their translation experience played a

critical role in shaping their understanding of the ways to assess translation quality. As their translation experience grew, they started to realise the teacher's authority in translation assessment might be limited. That is to say, students' translation experience caused changes to the students' ideas about ways to assess translation quality, making them believe in the significance of the TFoA in assessing translation quality.

Teacher and student diversity

Teacher and student diversity consisted of three sub-factors, including teachers' teaching experiences, student ability, and student personality. These factors contributed to students' cognition about the TMoA and TFoA to the elements such as ways to choose teaching content, ways to offer feedback, teacher's role, and instruction strategy.

Teachers' translation teaching experiences frequently influenced students' cognitions about the transmissionist-oriented ways to choose teaching content. Students primarily claimed that the content needed to be chosen by teachers because of teachers' many years of teaching experience. For example,

> *I think the teacher should be the one to choose (the content). The texts selected by the teacher are likely based on their previous accumulation, so they have some degree of authority in this matter (S4).*
>
> *[...] but I think the prerequisite is that you have an experienced teacher. An experienced teacher knew the knowledge that the students lacked. So, if asking an inexperienced teacher to select teaching materials, it might not be a good thing (S19).*
>
> *Because the teacher has more experience, they may have a broader or different perspective than we can see. We might only see what's in front of us and what we*

personally like in a text, but many students tend to rely on their own limited experiences (to select the content). I believe it's better to have someone with more experience making these judgments (S20).

It can be seen that teachers' rich teaching experience played an important role in shaping students' ideas about how to select teaching content, as the students claimed that teachers' teaching experience allowed them to identify suitable texts for students. Therefore, students would like to rely on teachers' experiences to choose the content that could meet their learning needs.

Similarly, the students also claimed that their lack of abilities in various translation learning contexts prevented them from believing in the effectiveness of teaching content by themselves, which aligns with the TMoA for choosing teaching content. For example, the following three students all talked about ways to choose teaching content:

Sometimes, the materials selected by the students might be very short. The material might not contain the key knowledge that I want to learn. So, I cannot trust the materials they selected (students) (S9).

[…] Because my teachers knew it (knew how to select materials). We (students) did not own that ability. So, I cannot ask my teachers to use the materials recommended by me, which is inappropriate to do that, I think. So, materials were better to be selected by my teachers (S14).

[…] Students may not have that ability (to select materials). So, I think our opinions may not have much value. So, we have no idea about how to select materials other than literary materials. We hope the teacher can help(S18).

It can be seen that the students all claimed that it is better to ask the teacher to select

the teaching content, as they did have the ability to do so. That is to say, students believed that they have no right or authority to choose the teaching content due to their lack of ability to do so. Therefore, it can be said that student's limited abilities in translation learning became one source for them to believe in the importance of teachers' authority in choosing the teaching content.

Student ability also influenced their ideas about the teacher's role and ways to offer feedback. The students claimed that their preference for the teacher to take a leading role in translation teaching was primarily driven by their perception that their peers possess similar or lower levels of ability in translation. For example,

> *Even asking my teachers to lead students' discussions, I still didn't think we (students) would learn something from other students (as we were all at the same level). It's just a waste of time (S8).*
>
> *In fact, the reason that I agreed to ask the teacher to take a leading role in the translation class was because I didn't trust other students in group discussions […] Yes, if others were stronger than me, such as in searching and investigating information, I would accept group discussions. Otherwise, it's a bit of a waste of time (S11).*
>
> *[…] to have a peer review or discussion […] as we (students) were all at the same level. Some prefer to translate in this way, but others don't […] We still have to ask for the final answers from the teacher […] (S12).*

As evident, the students asserted that their peers were at a comparable level, leading them to perceive activities like peer review and group discussion as unproductive. In other words, students prefer interaction with peers of higher abilities. Consequently, the students' limited ability emerged as one of the factors influencing their preference for

the teacher's leading role in translation teaching.

Furthermore, student ability contributed to students' cognitions about the TMoA in offering feedback. Most students preferred receiving direct feedback from teachers but refused those from peers because of students' limited ability to do so. For instance, S3 claimed that as all students have "little experience in offering feedback on students' assignments", they reached no agreement after a three-hour discussion. So, they preferred to receive feedback from the teacher directly. Similarly, S16 claimed that their peers "did not yet have the ability" to identify errors in the translation. The students often shared what they perceived as the best parts of their translations in presentations, without realising that there might not be much for others to learn from. The fundamental reason behind this is "the students' lack of ability to offer feedback to others" (S14).

The third sub-factor that contributed to students' cognitions was student personality. Students of various personalities have different cognitions about approaches to translation teaching, especially regarding the instruction strategy. Students who saw themselves as passive receivers in the study would prefer teacher instruction. For instance, S12 claimed that she is an "introverted" person and, therefore, needed others to lead her learning. This sort of personality, consequently, made her believe in the importance of teacher instruction.

In contrast, students who perceived themselves as adults not requiring continuous guidance from the teacher tended to prefer a more transformationist-oriented instructional strategy. This might involve activities like group discussions and simulations of translation projects. For instance, S19 claimed that she has been entering an "adult-like age" and "did not need the teacher's leading all the time". Therefore, she has the willingness to develop autonomous learning.

Situational context

Situational context refers to the institutional and social contexts in which students are situated. It was found that institutional contexts such as limited classroom teaching time caused students to believe in the effectiveness of the teacher's instruction, which aligns with the TMoA. For instance, S7 claimed that she has "a very limited time of classroom learning" and thus preferred teacher instruction. S14 even claimed that she hoped the teacher could speak quickly. Then, she could learn as much as possible in "the short time of classroom learning". Another student also explained a similar reason. S12 believed it "took much longer" to do teamwork, but they "only have one semester" to learn the non-literary translation. So, she preferred teacher instruction rather than group work. While the students believed limited class time necessitated more teacher-led instruction, T9 explained that "the short class time" actually called for developing autonomous learning skills through teacher-guided group discussions and other interactive activities. This is because students cannot rely on the teacher after graduation.

Moreover, educational concepts contributed to students' ideas about teachers' leading role in translation teaching, which aligns with the TMoA. Traditional Chinese teaching and learning concepts emphasise teachers' responsibilities for students' learning and students' obligations to respect teachers' instruction. Chinese students have long been exposed to these concepts, which made them hold a traditional, transmissionist-oriented view of the teacher's role in translation teaching. For example,

> *I think teachers teach students, right and proper. […] Teachers can be students' good friends after class, but once teachers have too many interactions with students in class, they might lose authority in front of students, and students might*

not be afraid of the teachers. This would definitely affect the teacher's teaching quality (S7).

This student held a transmissionist-oriented view of the teacher's role. Teachers had authority over students. The reason for such a view is because of the influence of traditional Chinese education concepts. It is natural and logical for teachers to teach students. Therefore, students believed they must respect their teachers and not interact with them too much. Another student held a similar view about the teacher's role, and this student claimed the reason was not from a teacher's perspective but the student's perspective. She said,

[…] Yes, I wouldn't say I liked this (student-centred class). In fact, I always wouldn't say I liked this kind of class. I am a classic Chinese student (respect for the teacher's authority). I have been a very obedient student since I was young […] (S12).

This student emphasised her obedient role in the study and claimed that it is one of the typical characteristics of Chinese students. This statement reflected the influence of the traditional relationship between Chinese teachers and students on students' views about their roles in translation study.

Based on the above findings, relationships between each influencing factor and the specific teaching element are shown in Figure 5.5. It appears that students' cognitions about approaches to translation teaching were influenced by four factors, including their prior experiences, translation and student diversity, translation learning experiences, and situational contexts.

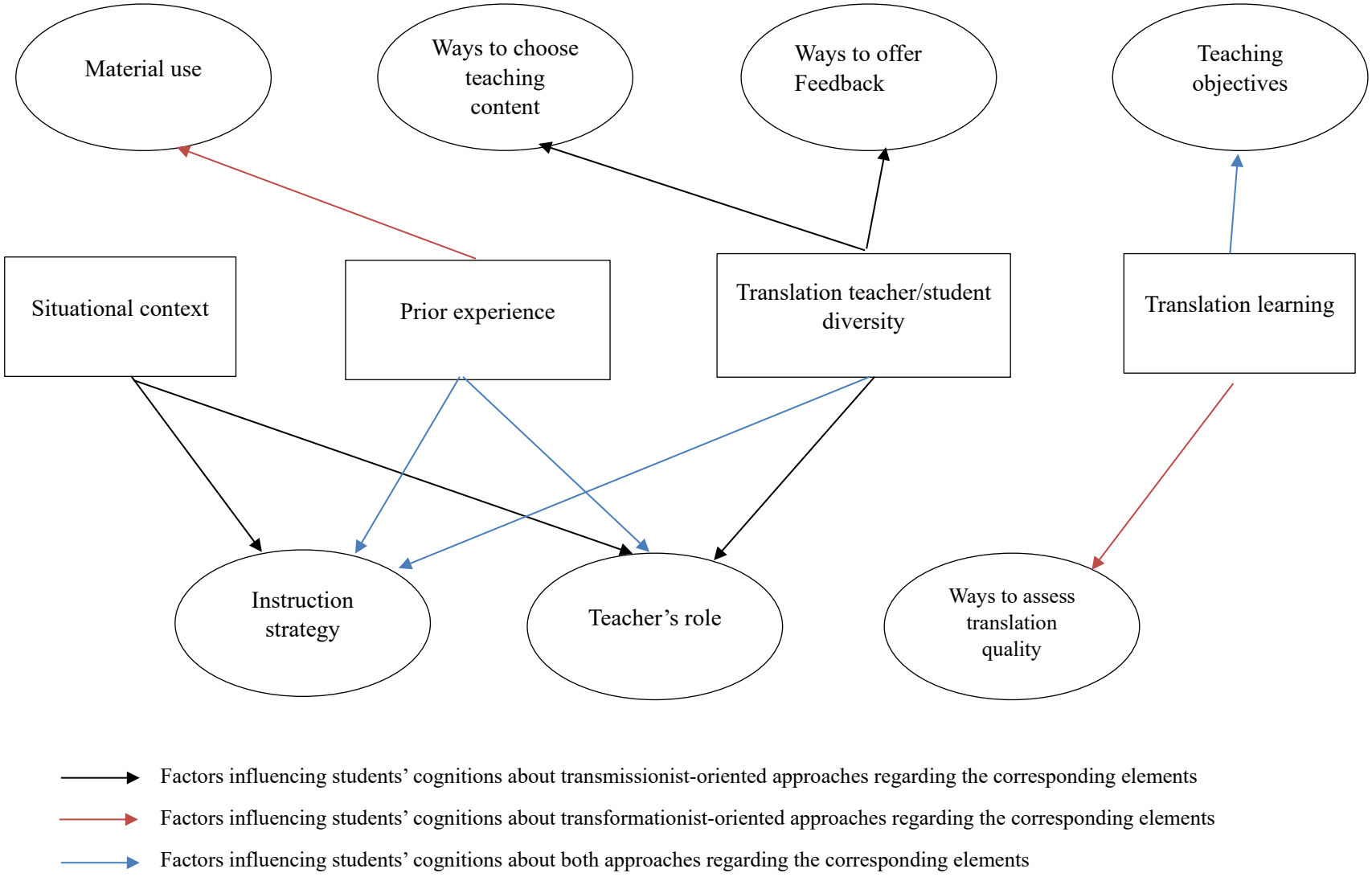


Figure 5.5 Factors that influence Chinese translation students' cognitions about approaches to translation teaching

5.5 Qualitative findings of teacher-student dynamics

This section presents the qualitative finings of two sets of relationships: the relationship between teachers' cognitions and corresponding teaching practices, and the relationship between teachers' and students' cognitions. The findings from Section 5.2.1 and Section 5.3.1 will be used to compare teachers' cognitions about approaches to translation teaching and the corresponding teaching practices. Similarly, the findings from Section 5.2.1 and Section 5.4.1 will be used to compare teachers' and students' cognitions.

5.5.1 Mapping teacher cognitions and teaching practices

The relationship between translation teachers' cognitions and teaching practices was understood by comparing qualitative findings presented in Section 5.2.1 and Section 5.3.1. Table 5.9 details the relationship between the 10 teacher participants' cognitions and teaching practices regarding the TMoA and TFoA. Furthermore, Table 5.10 summarises the relationship based on Table 5.9. It can be seen from the Tables that both consistency and inconsistency were identified.

Table 5.9 Comparisons of teacher participants' cognitions and their teaching practices regarding the TMoA and TFoA (n = 10)

Name	Teacher role		Teaching material		Teaching objectives		Instruction strategy		Feedback	
	Cognition	Practice	Cognition	Practice	Cognition	Practice	Cognition	Practice	Cognition	Practice
T1	TM	TM	TF	TF	TF	Mixed	TM	TM	TM	TM
T2	TM	TM	TF	TF	Mixed	Mixed	TM	TM	Mixed	TM
T3	TF	TF	TF	TF	Mixed	TM	TF	TF	Mixed	TM
T4	TM	TM	TF	TF	Mixed	Mixed	TM	TM	TF	TF
T5	TF	TF	TF	TF	TF	Mixed	TF	Mixed	TF	Mixed
T6	TM	TM	TF	TF	TF	TM	TM	TM	TF	TM
T7	TF	TM	TF	TF	TF	TM	TF	TM	Mixed	TM
T8	TF	TM	TF	TF	TF	Mixed	TF	TM	Mixed	Mixed
T9	TM	TM	TF	TF	Mixed	Mixed	TM	TM	TF	TM
T10	TF	TF	TF	TF	TF	TF	TF	TF	TF	TF

Note: TM= Transmissionist-oriented approaches; TF= Transformationist-oriented approaches; Mixed= a mixture of both TM and TF.

Table 5.10 Summary of consistencies and inconsistencies between teacher cognitions and teaching practices

Teaching element	Consistency	Inconsistency
Teacher role	8 (T1, T2, T3, T4, T5, T6, T9, T10)	2 (T7, T8)
Teaching material	10	/
Teaching objectives	4 (T2, T4, T9, T10)	6 (T1, T3, T5, T6, T7, T8)
Instruction strategy	7 (T1, T2, T3, T4, T6, T9, T10)	3 (T5, T7, T8)
Feedback	4 (T1, T4, T8, T10)	6 (T2, T3, T5, T6, T7, T9)

Consistencies between teacher cognitions and teaching practices

Due to the limitations of classroom observations, only five teaching elements can be compared with the corresponding cognitions held by the teacher participants. This comparison revealed both a greater and a somewhat degree of consistency. A greater degree of consistency is determined when more than five out of 10 teachers' cognitions align with their teaching practices, indicating a high level of consistency. Otherwise, it is considered somewhat consistent. It is necessary to note that the rule for identifying the degree of consistency involved a judgment call and, therefore, was arbitrary. It was used here to explain the results of the current study.

Firstly, a greater consistency between translation teachers' cognitions and teaching practices was identified regarding three elements: material use, the teacher's role, and the instruction strategy.

Regarding the material use, all 10 teacher participants in the interview stated that

authentic materials needed to be used for translation teaching. Correspondingly, it was observed that the 10 teachers used the textbooks written by themselves or the materials from the translation projects they participated in.

Following the material use, a higher degree of consistency was also identified regarding the teacher's role. In the interviews, eight out 10 teachers stated their ideas about their roles in translation teaching. Correspondingly, the amount of teaching time they allocated to the roles was observed in the classroom observations. For example, T3, T5, and T10 claimed that teachers needed to play a facilitating role in helping students develop the ability to find and solve translation problems. Accordingly, the three teachers were observed to spend a significant portion of class time on facilitating students' presentations and discussions. Similarly, T1, T2, T4, T6, and T9 were observed to spend a significant portion of class time on leading students' learning, which was consistent with these teachers' ideas about the roles teachers should play in translation teaching.

In addition, teachers' instruction strategy was the third element found to have a greater consistency (seven out of 10 teachers) between teacher cognitions and teaching practices. This element was closely linked to the roles teachers played in translation teaching. Therefore, similar relationships between teacher cognitions and teaching practices regarding the instruction strategy were also found.

Secondly, a somewhat consistency was identified regarding two elements: teaching objectives and ways to offer feedback. Regarding the teaching objectives, four out of 10 teachers' cognitions were consistent with their teaching practices. However, another reason also contributed to this relationship. Table 5.9 shows three (T2, T4, T9) teachers' cognitions and teaching practices were a mixture of the TMoA and TFoA. In other

words, their cognitions about the teaching objectives contained both the TMoA and TFoA, and their corresponding teaching practices also involved the TMoA and TFoA. This situation is called a somewhat consistent relationship in this study, because it is difficult, in the qualitative data, to determine which approaches held greater weight in teachers' cognitions and teaching practices (refer to Section 5.2.2 for detailed explanations).

Regarding ways to offer feedback, four out of 10 teachers' cognitions were consistent with their teaching practices. However, only one teacher's cognitions and teaching practices were a mixture of the TMoA and TFoA. The other three teacher's cognitions were consistent with their teaching practices (see Table 5.9)

Inconsistencies between teacher cognitions and teaching practices

Based on the rules for identifying the degree of consistency between teachers' cognitions and teaching practices, Table 5.10 shows a greater degree of inconsistency regarding the teaching objectives and ways to offer feedback and a somewhat degree of inconsistency regarding the teacher's role and the instruction strategy.

The inconsistency between these teachers' cognitions and teaching practices arises when the teachers' cognitions align with the TMoA, while the teaching practices align with the TFoA, or vice versa. Additionally, inconsistency may occur when the teachers' cognitions represent a mixture of the TMoA and TFoA, while only one of these approaches is observed in the teaching practices. Alternatively, only one of the approaches might be identified in the teachers' cognitions, while the observed teaching practices encompass both approaches.

First of all, greater inconsistencies were found in terms of the teaching objectives. First, some teachers (T1, T5, T8) believed that the objectives of translation teaching should

be transformationist-oriented, while the observed teaching practices focused on both approaches. For example, T1 believed that translation teaching, consistent with the TFoA, needed to develop students' translation mindset. However, a recurring teaching routine of asking students to recite translation theories was found in T1's observed teaching practices, which aligns with the TMoA. Second, T6 and T7 believed that the teaching objectives of translation should be transformationist-oriented, while the observed teaching practices were found to focus on the transmissionist-oriented objectives. For example, T7 believed that translation teaching needed to help students know how to make decisions when facing translation problems, explain why to make such decisions, and appreciate others' decision-making strategies. However, a recurring teaching routine of analysing source text at a grammatical level was observed in T7's teaching practices, which aligns with the TMoA.

A greater degree of inconsistencies also existed regarding ways to offer feedback. First, most teachers (T2, T3, T7) believed that ways to offer feedback in classroom teaching needed a combination of directly correcting students' translation errors and leaving time for self-reflection on these errors. However, these teachers were found to spend a significant proportion of class time correcting students' errors directly, leaving little time for them to self-reflect. Second, T6 and T9 believed that the feedback needed to be offered in a transformationist-oriented way. However, they were found to dedicate a substantial amount of class time to directly correcting students' translation errors. Third, T5 believed in the importance of transformationist-oriented ways to offer feedback. However, it was observed that she balanced using both approaches to offer feedback.

Lastly, somewhat inconsistencies were found regarding the teacher's role and instruction strategy. First, T7 and T8 believed that teachers needed to play a facilitating role in teaching practices, while they were found to spend a substantial amount of time

organising teacher-controlled activities. Second, T5 believed that project-based teaching, a transformationist-oriented approach, would be her first choice in translation teaching. However, she was observed to dedicate half of the class time to organising teacher-controlled learning activities, with the rest of the time for more transformationist-oriented approaches. Similarly, T7 and T8 believed that translation classes needed to be organised in a transformationist-oriented way, such as group work, while they spent a significant amount of class time organising transmissionist-oriented activities, including teacher instruction and teacher-controlled Questions and Answers.

5.5.2 Understanding teacher-student cognition relationships

Relationships between teacher and student cognitions were explored by comparing their cognitions about the TMoA and TFoA to translation teaching regarding eight teaching and learning elements. Details of the cognitions held by the teacher and student groups are presented in Table 5.3 (see Section 5.2.1 for the teacher group) and Table 5.7 (see Section 5.4.1 for the student group). In order to compare the two groups of participants' cognitions, Figure 5.6 is drawn to show the percentage of the conceptions of the TMoA and TFoA used by the teachers and the students to comment on the corresponding teaching and learning elements. Figure 5.6 can be read in the following way:

Taking ways to assess translation quality as an example, the 10 teacher participants commented on this element seven times (see Table 5.3 in Section 5.2.1). Specifically, they used the TMoA concepts to comment on this element five times (see Table 5.3 in Section 5.2.1), accounting for 71% of the total times (see Figure 5.6). They used the TFoA concepts to comment on this element two times (see Table 5.3 in Section 5.2.1), accounting for 29% of the total times (see Figure 5.6). In contrast, the 20 student participants commented on this element 14 times (see Table 5.7 in Section 5.4.1).

Specifically, they used the TMoA concepts to comment on the element six times (see Table 5.7 in Section 5.4.1), accounting for 43% of the total times (see Figure 5.6), and they used the TFoA concepts eight times, accounting for 57% of the total times (see Figure 5.6). Therefore, it can be observed in Figure 5.6 that the cognitions of this group of teachers regarding ways to assess translation quality differed from those of their students by comparing the percentages. However, it needs to be noted that the percentage only represented the quantity, not the degree of magnitude (refer to Section 5.2.2 for detailed explanations). It can only be said that, therefore, the students used the TFoA concepts to comment on ways to assess translation quality more frequently than their teachers.

Both similarities and dissimilarities were identified by comparing the teachers' and students' cognitions. The following sections describe them in detail.

Similarities between teacher cognitions and student cognitions

Some similarities were found between the teacher and student groups' cognitions about the TMoA and TFoA to translation teaching regarding the material use, teaching objectives, ways to offer feedback, the instruction strategy, and the teacher's role. These similarities have two general features. First, both the teacher and student groups believed that translation teaching should use authentic materials, aligning with the TFoA. These materials can be either from textbooks but have been translated by teachers prior to teaching or from real translation projects in which the teacher participated.

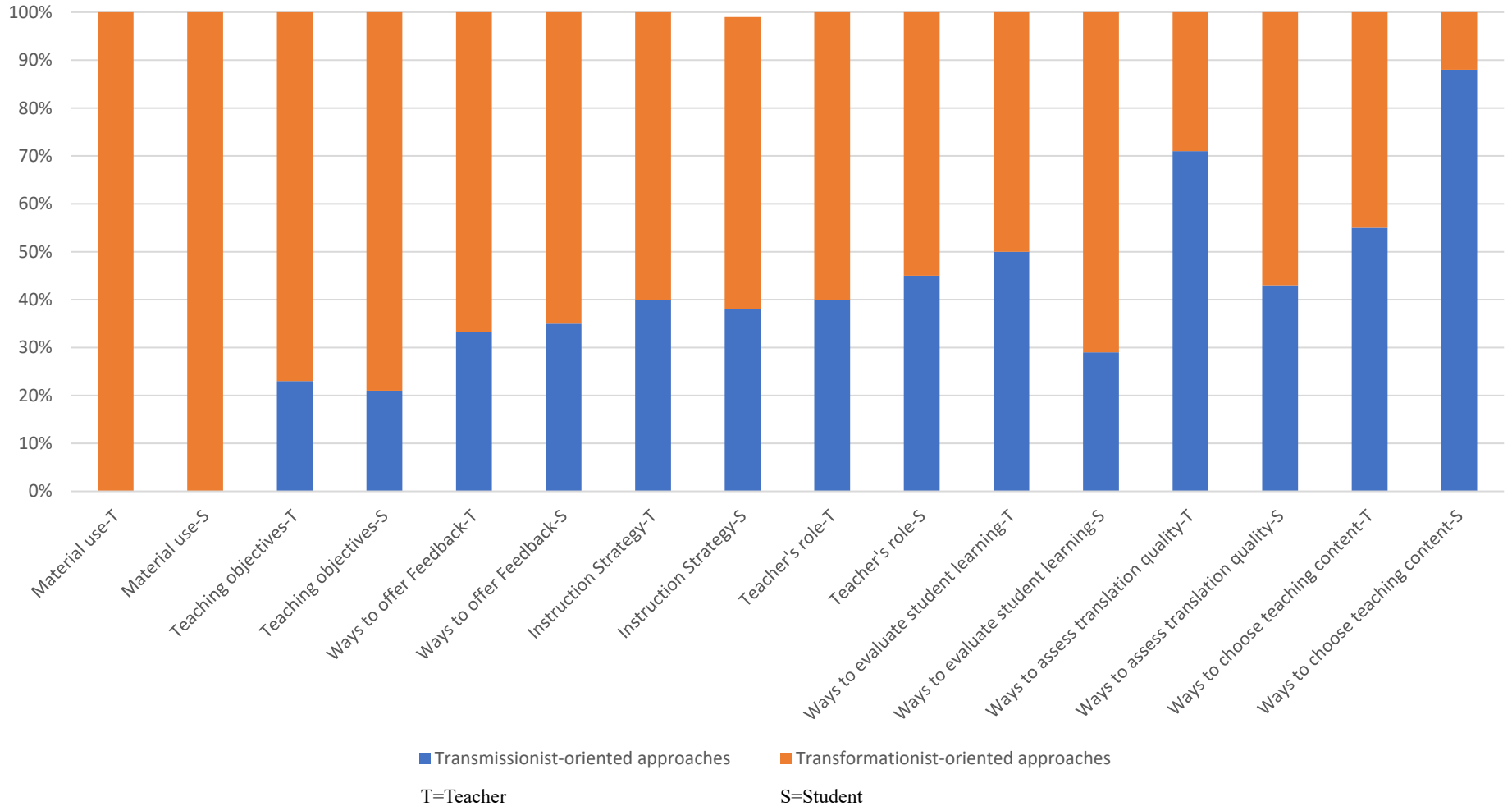


Figure 5.6 Comparisons of teachers' and students' cognitions regarding the eight elements

Second, both the teachers' and students' cognitions regarding the elements of teaching objectives, ways to offer feedback, the instruction strategy, and the teacher's role were a mixture of the TMoA and TFoA. However, despite that, the two groups of participants used the TFoA concepts to comment on four elements more frequently. In other words, both teachers and students believed that teaching objectives of translation courses needed to emphasise students' comprehensive abilities rather than translation skills. Moreover, both believed that instead of directly correcting errors in students' translation assignments, group discussions, peer reviews, and self-reflection should be used for student feedback. In addition, the teachers and students believed that the translation class needed to be organised in a transformationist-oriented way, including activities such as student presentations and teacher-student discussions. Finally, both groups believed that the teacher needed to play a facilitating role in the teaching processes rather than a controller.

Dissimilarities between teacher cognitions and student cognitions

The dissimilarities between teachers' and students' cognitions were in three main elements, including ways to evaluate student learning, ways to assess translation quality, and ways to choose teaching content.

Firstly, regarding ways to evaluate student learning, the teachers held fairly mixed cognitions (50% for TMoA and 50% for TFoA); that is, the teachers believed both the TMoA and TFoA needed to be used to evaluate students' learning performance. This may include evaluating both the learning process and the final translation product. Accordingly, students' regular learning performance and translation quality in final exams accounted for the same proportion in the evaluation. In contrast, the students (29% for TMoA and 71% for TFoA) believed that the learning process was more important

than the quality of final translations, aligning with the TFoA. Accordingly, they preferred not to sit in exams but to approaches such as writing reflective reports.

Secondly, regarding ways to assess translation quality, the teachers (71% for TMoA and 29% for TFoA) believed that the assessment needed to be carried out by teachers who taught the course based on the teacher's criteria, which aligns with the TMoA. However, the students (43% for TMoA and 57% for TFoA) held opposite ideas about this element. They believed that the assessment should involve a third party. Consequently, the teacher alone cannot determine the assessment criteria, aligning with the TFoA.

Finally, although teachers' and students' cognitions regarding ways to choose teaching content were transmissionist-oriented, students used the TMoA concepts more frequently (88%) than their teachers to comment on this element. However, teachers' cognitions regarding this element were relatively balanced (45% for TMoA and 55% for TFoA). This implies that teachers would like to listen to and accept students' suggestions about their teaching content. However, students believed that what to teach should be decided by teachers. Students may not have the right to decide the content taught by teachers.

In summary, the similarities between the teachers' and students' cognitions were that they both held cognitions aligning with the TFoA regarding the material use, teaching objectives, ways to offer feedback, the instruction strategy, and the teacher's role. In contrast, the dissimilarities between the two groups were found in their cognitions regarding ways to evaluate student learning, ways to access translation quality, and ways to choose teaching content. The teacher participants' cognitions were much more transmissionist-oriented and less transformationist-oriented than their students regarding ways to evaluate student learning and ways to assess translation quality.

However, the student participants' cognitions were much more transmissionist-oriented and less transformationist-oriented than their teachers' in terms of ways to choose teaching content.

To conclude, this chapter reports the qualitative findings for each research question. It presents the qualitative findings of translation teachers' cognitions, teaching practices, and translation students' cognitions. It also presents the relationship between teachers' cognitions and teaching practices, and the relationship between teachers' and students' cognitions. In the next chapter, these research findings will be merged with the quantitative findings reported in Chapter Four to discuss each research question in relation to prior literature comprehensively.

Chapter 6 Discussion

6.1 Chapter overview

As this study was designed to address each research question through both quantitative and qualitative methods, Chapter 4 reports the quantitative research findings, and Chapter 5 reports the qualitative research findings.

This chapter begins by synthesising the main findings from both quantitative and qualitative data types for each research question. It then discusses the research findings in relation to the literature previously reviewed to interpret the results and explore any differences or similarities. Finally, the chapter concludes with a brief summary of the entire chapter.

6.2 Chinese translation teachers' cognitions

6.2.1 Teachers' cognitions about approaches to translation teaching

Research Question 1: *What are Chinese university translation teachers' cognitions about approaches to translation teaching?*

The first research question in this study addresses the characteristics of Chinese translation teachers' cognitions about approaches to translation teaching. The results from the questionnaires and the interviews were to respond to this research question.

The results from the Chinese Translation Teacher Questionnaire (CTTQ) showed that, in general, Chinese translation teachers' cognitions about approaches to translation teaching contained elements of transmissionist-oriented approaches (TMoA) and transformationist-oriented approaches (TFoA). On the subscale of measuring teachers'

cognitions, mean scores were above or below the midpoint of three. The higher mean score indicates a strong inclination towards the transformationist-oriented conceptions of translation teaching and learning. In contrast, the lower mean score indicates a strong inclination towards the transmissionist-oriented conceptions of translation teaching and learning (see Figure 4.1 in Section 4.2.1).

Specifically, the teachers agreed that translation classes should be organised collaboratively. The teacher and students worked together on teaching and learning tasks in groups or teams, ensuring each student was involved (Kiraly, 2005). In contrast, they intended to decline the transmissionist-oriented views of teacher-controlled instructional strategies. Moreover, there was evidence of teachers taking a guiding and facilitating role, utilising authentic materials, and helping students understand the feedback provided, which are all salient characteristics of transformationist-oriented conceptions of translation teaching and learning. These characteristics were acknowledged by the teachers' rating response in CTTQ. Teachers' responses to the questionnaire also showed agreement when evaluating students' learning outcomes based on their performance in the translation markets. This implies a shift in translation teaching within a university translator training programme from being skills-oriented, as described by Tan (2008), to being profession-oriented, as described by Olohan (2007). To evaluate students' learning outcomes based on their performance in the translation markets, the first step is to allow students to develop "social transformative competence" (Neves, 2022, p. 473), the competence beyond translation competence, including teamwork, problem-solving, and planning. These competencies would be gained through collaborative approaches to translation teaching underpinned by the concepts of transformational teaching, which Kiraly (2000, 2005) advocated.

However, acknowledging the place of transformationist-oriented conceptions of

translation teaching does not imply that the teacher respondents denied the role for the transmissionist-oriented concepts. Results from the questionnaire also revealed that the mean ratings of these two teaching elements were below the midpoint, indicating teachers' inclination to accept the ideas that aligned with the transmissionist-oriented views of teaching (Kiraly, 2000; Miller & Seller, 1985). In accepting these views, it appears that teachers do not believe learning can be a collaborative process, but as claimed by Miller and Seller (1985), a teacher-controlled process, with learning outcomes achieved through students' individual efforts as later added by Kiraly (2000). Teachers might hold the transmissionist-oriented views of teaching and learning translation because, firstly, not every stage in a translation task needs to be done in pairs or collaborative groups, and secondly, the students can also benefit from the traditional teacher-controlled approaches to translation teaching. D. Li (2013) reporting on a project-based business translation class in Hong Kong, argued that students need self-reflection in the reporting and feedback reflection stages to develop translation knowledge competence, such as principles guiding translation.

In relation to the second reason, although the TFoA are conducive to the development of social constructivism aspects of competence, such as leadership, planning, and conflict mitigation (Kelly, 2014; Kiraly, 2000; Maruenda-Bataller & Santaemilia-Ruiz, 2016; Neves, 2022), the traditional teacher-controlled approaches, focusing on imparting knowledge to students and repetition of practising, are suitable to help students enhance a wide range of competence and knowledge, such as language proficiency, translation theories and principles, textual analysis, and use of the encyclopaedia (X. Li, 2018; Parvaresh et al., 2019; Prieto & Linres, 2010). Those competence and knowledge are regarded as critical factors that contribute to the foundation of a professional translator (Chesterman, 2000; Kelly, 2014; PACTE et al.,

2020). Moreover, the results of this study support Gile's (2009) statement that situating translator trainees in a teacher-centred classroom can help the trainees, especially in the initial training stage, acquire the basic knowledge and skills needed by the translation profession.

Teacher interviews provided evidence supporting the results from the questionnaires. The teacher participants claimed that approaches to translation teaching included elements of both transmissionist-oriented and transformationist-oriented concepts of teaching (See Table 5.3 in Section 5.2.1). They stated that, in teaching translation, teachers needed to play a facilitating role, use authentic material, and focus on collaborative learning, which are salient characteristics of the transformationist-oriented conceptions of teaching and learning (Kiraly, 2000; Miller, 1988; Miller & Seller, 1985). The teachers also discussed elements of the transmissionist-oriented conceptions of teaching. For example, although some teachers thought they needed to facilitate students' learning, others claimed that students' learning relied heavily on teachers' instruction on translation principles, decisions about translation problems, and corrections on translation errors.

There were, however, some discrepancies between the quantitative and qualitative findings. Firstly, the quantitative data identified eight teaching elements, whereas only seven were referred to in the qualitative data. Ways to complete translation assignments did not emerge in the qualitative data. This may be because the semi-structured interview had no specific questions related to this element. However, as the questionnaire items were generated based on the literature and brainstorming, the items could have included specific questions on how to complete translation assignments.

Secondly, discrepancies were found in specific elements identified by both data types.

Regarding ways to assess translation quality, the mean rating exceeded 3.5, indicating teachers' agreement, aligned with the TFoA, that translation assessment criteria should be established collaboratively. In contrast, the interview findings suggested that more teacher participants (seven out of 10 teachers) used the TMoA concepts when commenting on this element. They claimed that assessment criteria should be established based on the teacher's experience. The differences in the quantitative and qualitative results might be due to the limitations of self-reported data in which respondents may provide socially desirable responses (Dörnyei & Taguchi, 2009). Despite measures having been taken to minimise socially desirable responses in this study, such as the anonymity of the surveys and a pilot study to ensure concise and clear language for each item, it is hard to avoid social desirability bias as respondents "can have a fairly good guess about what the desirable/acceptable/expected answer is" (Dörnyei & Taguchi, 2009, p. 8). Different outcomes obtained from the two data types are further evidence for using a mixed-methods research design to investigate a research question using different methods comprehensively.

The advantages of using a mixed-methods research design were also evident in the current study. For example, the qualitative data supplemented the quantitative findings on the teachers' cognitions. In the interviews, teacher participants included teaching objectives which were excluded from the questionnaire. Most teachers believed that the teaching objectives of the translation course should include conceptualising translation expert-related knowledge, developing critical thinking abilities, and market-related competencies, which are features of the transformationist-oriented conceptions. The importance of these findings is to provide empirical support to scholars' advocacy for, and adoption of, the TFoA in translation teaching (Kiraly, 2000; Moghaddas & Khoshsaligheh, 2019; Risku, 2016; Tao, 2012; Zhong, 2008). These scholars provided

either various teaching models for translation or implemented the transformationist-oriented approaches to translation teaching; however, they might have ignored a critical element which is teachers' ideas about these approaches and models. Research literature in the field of teacher cognition has argued that teachers' teaching practices are influenced by their cognitions about teaching and learning or that teaching practices affect teacher cognitions (Basckin et al., 2021; Borg, 2015b; Buehl & Beck, 2014; Pajares, 1992; Sun et al., 2022). This suggests that if translation teachers believe that the objectives of translation teaching should focus on conceptualising translation expert-related knowledge and developing critical thinking skills, they would organise teaching practices to achieve these goals. Nevertheless, translation scholars may not consider this factor but advocate teaching informed by the transformationist-oriented concepts. Therefore, the findings of the current study lend empirical support to those scholars' claims or investigations.

In summary, a synthesis of the quantitative and qualitative findings in the current study provides further empirical support to Kiraly's (2006) claim that "a principled combination of transmissionist, transactional and transformational teaching approaches might be more effective than any one approach alone" (p. 68). Kiraly, thus, based on his personal experiences using collaborative activities in workshops and relevant literature, proposed a framework that sees "learning as a complex interplay of processes" (Kiraly, p. 84). The present study, which collected empirical data in a mixed methods design to understand translation teachers' cognitions about approaches to translation teaching, supports Kiraly's contention, as the current study found that Chinese translation teachers held competing cognitions about approaches to translation teaching, which can be seen in both quantitative and qualitative findings. X. Li (2018) reported similar research findings in a study of Chinese teachers' beliefs about teaching and

learning translation and interpreting. His study also found that Chinese teachers' beliefs contained elements of both behaviourist and constructivist concepts of teaching and learning. However, unlike the current study, the research in X. Li (2018) was a case study using questionnaires to collect data from five respondents, whereas the current study included more than 100 respondents and collected qualitative data from 10 teacher participants to support the quantitative findings. It can be claimed, therefore, that both Kiraly's (2006) and the current study's findings apply to the Chinese as well as educational contexts other than China.

6.2.2 Individual differences in teachers' cognitions

Research Question 1.1 *Are there any differences in cognitions about approaches to translation teaching held by Chinese university translation teachers with various backgrounds?*

The research question addressing teacher cognitions in the current study contains two sub-questions to understand Chinese translation teachers' cognitions about approaches to translation teaching. The first sub-question is to explore the individual differences in cognitions held by teachers with different backgrounds. The results from the questionnaires and the interviews were to respond to this sub-question.

The results from the questionnaires to answer the research question were obtained by performing independent samples *t*-tests and several one-way ANOVA. The results revealed that although several exceptions were identified, there were few individual differences in the teacher respondents' cognitions about the TMoA and TFoA to translation teaching.

The results obtained from the independent samples *t*-tests revealed that whether or not

the teachers had experiences of overseas study and working as language teachers, there were no significant differences ($p > 0.5$) between their different cognitive approaches to translation teaching (see Table 4.6 in Section 4.2.3). That is, the teachers with or without those experiences remained unchanged in their cognitions about different approaches to translation teaching, possibly because teacher cognitions are basically stable and "unchanging" (Pajares, 1992, p. 311). Any changes to teacher cognitions are not because of arguments or reasons but because of a significant shift in thinking (Borg, 2015b; Nespor, 1987). In the current study, teachers' different experiences, such as overseas learning and working as a language teacher, despite enriching teachers' backgrounds, did not significantly shift the way teachers think of translation teaching. This could be because the duration of these experiences was too short to exert significant changes in teachers' ways of thinking, or because these experiences brought only new content into teachers' cognitions. The new content can be viewed as newly gained beliefs, and according to Pajares (1992), "newly acquired beliefs are most vulnerable" (p. 317). In other words, the newly gained beliefs cannot be immediately incorporated into teachers' belief systems but become active and powerful with teachers' frequent use (Pajares, 1992). For example, one of the teacher participants in the current study claimed that although a teacher had overseas learning experiences, they were unlikely to apply them to translation teaching.

Findings obtained from one-way ANOVA, to measure individual differences in teachers' cognitions, revealed similar results to individual samples *t*-tests. There were no significant differences ($p > 0.5$) in teachers' cognitions about approaches to translation teaching concerning teachers' different backgrounds in academic ranking, yeas of teaching experiences, and degree qualifications (see analysis in Section 4.2.3 and Appendix F). This may be because of the lack of official degree training programmes

for translator trainers, which have long been ignored worldwide (Englund Dimitrova, 2002; Kelly & Way, 2007; Orlando, 2019; Tao et al., 2020). In China, professional translation teacher education and development opportunities are limited, and translation teacher can only improve their teaching skills by attending short-term training programmes (H. Luo & Bao, 2018). The lack of professional teacher education training may cause teachers to rely on traditional methods and beliefs. It is well-known that traditional Chinese teaching methods are greatly influenced by Confucianism (Y. Zhang & Henderson, 2018), which still impacts the teaching and learning styles of Chinese teachers and students, including Chinese translation teachers and students. Therefore, the teachers' cognitions about approaches to translation teaching, based on the independent sample *t*-tests and one-way ANOVA, were similar. These results are consistent with the previous studies (e.g., K. Chan, 2004 and D. Wu, 2020). For instance, D. Wu (2020), who investigated Chinese translation teachers' cognitions about translator competence, reported that they shared similar ideas about translator competence, regardless of their backgrounds.

While the teachers generally shared similar cognitions, some differences were identified in the quantitative data. Firstly, individual samples *t*-tests showed significant differences, with gender and professional translation working experience, in teacher respondents' cognitions about the TMoA. There was a significant difference between genders at $p < .001$ ($M = 2.53$ for males while $M = 2.88$ for females). With professional translator working experience, the statistical difference was significant at $p < 0.5$ ($M = 2.51$ for having professional translator working experience and $M = 2.78$ for having no such experience). Effect size returned Cohen's $d = .67$ for gender, indicating a medium effect size, and $d = .48$, a small effect size for years of professional translation working experience.

Whereas both male and female mean scores were still within the range of the TMoA, female translation teachers' cognitions about approaches to translation teaching seemed to be more transformationist-oriented, with their mean score (M = 2.88) larger than those of male teachers (M = 2.53). A medium effect size for gender difference indicated that, while the difference between male and female teachers' agreement on the value of the transmissionist-oriented concepts of translation teaching and learning was notable, it was not large. Male teachers rated the mean scores of both approaches lower than their female peers, suggesting male teachers had more authoritative teaching, which may account for the difference. Future research, however, is warranted.

A significant difference ($p < .05$) in teachers' cognitions about the TFoA was also found for the different universities in which the teachers worked: M = 3.45 for teachers who worked in 985-Project universities and M = 3.70 for teachers who worked in non-985 Project universities. A medium effect size of d = .60 for the difference was apparent. These results suggested that teachers who worked in non-985-Project universities were more likely to agree with the TFoA than those who worked in 985-Project universities; possibly the results of different teaching contexts between the two groups of universities. The top foreign language studies universities in China, which are not included in the 985-Project, were the first to establish institutes of translation studies at the graduate level. They are supposed to lead the postgraduate translator training in China (Tao, 2016). Accordingly, teachers in these universities might be more innovative in translation teaching approaches than those in 985-Projects universities.

The age of teachers and the type of programmes were two other factors linked to teachers' cognitions about approaches to translation through the one-way ANOVA test. In analysing the different age groups, A1 (20-29 years old) was found to have a difference in cognitions about the TFoA, compared with three age groups, A2 (30-39),

A3 (40-49), and A4 (50-59) (See Table 4.8 in Section 4.2.3). A1 gave lower ratings of the elements than A2, A3, and A4 for the TFoA, with a medium effect size of $\eta^2 = .08$. That is, younger teachers are more likely to agree with transmissionist-oriented concepts of translation teaching and learning, which may be because using the TFoA to teach translation is not easy. To implement the TFoA in translation teaching, teachers need to believe in the significance of the TFoA (Kiraly, 2000), have the ability to implement the approach (Neves, 2022), and be able to overcome contextual constraints, such as "socio-economic constraints, market conditions, institutional practices, budgetary issues and/or resource availability" (González-Davies & Enríquez-Raído, 2016, p. 3). These constraints could also be significant barriers for some experienced translation teachers, as well as young novice teachers.

The one-way ANOVA, in analysing the association between programmes and teachers' cognitions, revealed that the teachers who taught in the MTI programme gave higher ratings ($M = 3.73$), with a medium effect size $\eta^2 = .07$, to the element aligned with the TFoA concepts than the teachers in the MA programmes ($M = 3.19$). Thus, the difference between these two groups of teachers' cognitions was moderate. The different teaching objectives of the programmes may account for the difference as MA is a translation-research-oriented programme, emphasising students' academic research ability (Tao, 2016; W. Zhong, 2014), whereas MTI is a translation-practice-oriented programme. MTI aims to educate and prepare skilled and proficient translators and interpreters who are highly qualified, possess expertise in translation and/or interpretation techniques with a diverse range of knowledge, and have the ability to complete tasks across various domains (Tao, 2016; Xu & You, 2021). The core teaching activities advocated by the TFoA, such as learning through engaging in translation projects and using authentic translation materials, would be more likely to occur in the

classes of the MTI programme so as to meet the MTI programme teaching objectives of preparing high-quality translators and interpreters. Accordingly, the teachers in the MTI programme would have a greater possibility to use the TFoA.

In short, the findings of the independent samples *t*-tests and several one-way ANOVA indicated that, considering the differences in their backgrounds, there were few significant differences in the teachers' cognitions about approaches to translation teaching, with some exceptions. These results are compatible with Ng et al. (2010), which revealed limited significant differences in pre-service teachers' beliefs, considering their different backgrounds, such as overseas education. However, two factors, age and gender, were exceptions and were found to be linked to the changes in the teachers' beliefs.

The results from the interviews were similar to those from the questionnaire in revealing that there were few differences in teachers' cognitions about approaches to translation teaching regarding different teacher backgrounds. There were some exceptional cases; these included the teacher's role, the instruction strategy, and ways to offer feedback (see Table 5.5 in Section 5.2.2).

It is common to identify differences in teachers' cognitions through qualitative studies, especially in the case study, as evidenced by the research (e.g., Biesta et al., 2015; Gao & Zhang, 2020; Huang et al., 2021; Sun & Zhang, 2022). These variations are expected because every teacher has a unique set of beliefs and knowledge that affects their teaching approach. Despite these individual differences, the 10 teachers' ideas on approaches to translation teaching were broadly similar, suggesting a shared understanding and perspective within the group.

6.2.3 Influential factors on teachers' cognitions

Research Question 1.2: *What are the factors that influence Chinese university translation teachers' cognitions?*

The second sub-question that addresses the topic of Chinese translation teachers' cognitions about approaches to translation teaching investigates factors that influence translation teachers' cognitions identified in the first research question.

The questionnaire explored the influence of two factors, teachers' translation-related experiences, and teachers' personal learning and working experience, on teachers' cognitions. It was found that teachers' translation-related experiences, including translation practice, teaching translation courses, observing other translation teachers' classrooms, and reading translation literature, had a moderate correlation with translation teachers' cognitions about approaches to translation teaching ($r = .30, p < .01$) (see Table 4.12 in Section 4.2.4), and the regression equation revealed that these experiences predicted 9% of the variance in the data of the teachers' cognitions ($\beta = .30$, $p < .05$), indicating that the teachers' cognitions are subject to other factors. This could be because teachers' classroom teaching experiences and gaining a new understanding of translation teaching through academic research contributed to teachers' cognitions, as proposed in previous research on language teacher cognitions (Gatbonton, 2008; K. E. Johnson, 1996; Kennedy-Lewis, 2012; M. Liu et al., 2022; Yancovic-Allen, 2018).

Another factor, teachers' personal and working experiences, especially teachers' prior learning experiences as students in schools and working environments, was found to have no significant correlation with these teachers' cognitions. As formal teacher education programmes play a crucial role in shaping language teachers' cognitions (M. Baker, 2011; Buehl & Fives, 2009; Busch, 2010), this result may be due to the lack of

formal training and preparation programmes for translation teachers. These programmes provide language teachers with opportunities to improve language proficiency and learn language teaching theories and approaches. Language teachers, therefore, would have recalled these learning experiences in the programmes while being asked whether previous language learning experiences influenced their ideas about language teaching. However, as no official translation teacher education programmes offer systematic and comprehensive training for translation teachers in China or worldwide (Colina & Venuti, 2017; Wu et al., 2019), many translation teachers may not have formal training in translation teaching. They may have worked as language teachers, lawyers, or professionals in other fields prior to becoming translation teachers. A lack of formal training and preparation may result in translation teachers underestimating the influence of their prior learning experiences. There outcomes suggest that to improve the quality of translation teaching, it is crucial to explore this issue further and to develop strategies to enhance the professional training and development of translation teachers.

Nonetheless, this does not mean that translation teachers' personal and working experience is not associated with their cognitions. Wu (2020) found that translation teachers' personal learning experience of translation and translation practices shaped translation teachers' cognitions about translator competence. Although translation teachers underestimated the influence of their prior learning experiences of other subjects, their translation learning experience plays a role in forming their cognitions.

The qualitative results of this study provided evidence in this regard. Nine out of 10 teachers (see Table 5.6 in Section 5.2.3), in their interviews, reported that their translation learning experiences as a student had shaped their understanding of approaches to translation teaching. The qualitative findings also supported the

quantitative results concerning the impact of teachers' translation-related experience on translation teachers' cognitions. Eight out of 10 teachers claimed that as their translation teaching experiences and practice grew, their ideas about how to teach translation changed, too.

Moreover, the qualitative results provided complementary insights to the quantitative findings concerning the impact of other factors, such as translation teacher and student diversity and contextual factors, on the teachers' cognitions. Five out of 10 teachers acknowledged the influence of their own ability and personality on shaping their cognitions. The qualitative findings from the interviews revealed that teachers' ability to implement the TFoA influenced their ideas about the significance of applying the approach to their teaching. This finding lends empirical support to González-Davies and Enríquez-Raído's (2016) claim that "not all of these learning approaches (the transactional, transformational and student-centred learning approaches) have been readily and/or uncritically accepted by all Translator and /or Interpreter Trainers" (p. 6). In the current study, the translation teachers did not believe they could implement those approaches. It could be assumed that if the teachers believed they could implement the TFoA, they would probably apply the approaches to actual teaching.

Furthermore, situational context factors, such as the teaching syllabus and education policy, influenced teachers' cognitions about approaches to translation teaching. Six of 10 teachers reported the influence of situational contexts on shaping their cognitions. These contexts in which translation teachers were situated influenced their cognitions and may have contributed to the inconsistencies between their cognitions and associated teaching practices. These findings were similar to previous studies exploring teachers' cognitions and teaching practices (e.g., Bagheri & East, 2021; Basturkmen, 2012; Liviero, 2017; Zheng & Borg, 2014). The relationship between translation teachers'

cognitions and teaching practices, and how contextual factors influenced this relationship, in the current study, are discussed in Section 6.5.1.

In short, the similarities and differences between quantitative and qualitative findings regarding factors that influenced translation teachers' cognitions about approaches to translation teaching justify using a mixed-methods research design in a single study. Firstly, as Creswell and Plano Clark (2017) and Tashakkori and Teddlie (1998) described, the mixed-methods approach can enhance the validity of the findings through triangulation of the data (see Jogulu & Pansiri, 2011; Wu et al., 2019; Yunus et al., 2016, etc.). In the current study, the quantitative and qualitative findings confirmed the influence of teachers' translation-related experiences on teachers' cognitions. Secondly, quantitative and qualitative methods can complement each other in different ways (Stange & Gotler, 2006). In the current study, the qualitative findings complemented the quantitative results for the influence of factors of teacher/student diversity and situational contexts on translation teachers' cognitions.

6.3 Chinese translation teachers' teaching practices

6.3.1 Characterising teachers' teaching practices

Research Question 2: *How can Chinese university translation teachers' teaching practices be characterised?*

The second research question of this study examines translation teachers' teaching practices by collecting respondents' ratings in the questionnaire and observing teachers' classrooms. The findings generated by the questionnaire and classroom observations showed that translation teachers' general teaching practices contained mixed elements from the TMoA and TFoA.

The responses elicited by the Teaching Practice Questionnaire (TPQ) showed that Chinese translation teachers' teaching practices generally contained elements from both the TMoA and TFoA. The midpoint of the TPQ scale was three. A higher mean score beyond three indicated a strong inclination towards the TFoA, whereas a lower mean score below three indicated a strong inclination towards the TMoA (see Figure 4.2 in Section 4.3.1).

The TPQ includes eight translation teaching and learning elements to examine the teachers' approaches to teaching practices. Results from the TPQ showed that mean scores of three elements were within the range of the TMoA; they were ways to choose teaching content, ways to complete translation assignments, and ways to evaluate student learning. However, the mean score of the element of ways to evaluate student learning was very close to the midpoint three, suggesting that the teachers intended to combine exams and students' performance in the translation market to evaluate their learning outcomes.

Results of TPQ for the other five elements showed that they aligned with the TFoA. The five elements were instruction strategy, ways to offer feedback, teacher's role, ways to assess translation quality, and material use. These results revealed that translation teachers provided a collaborative learning environment, promoted students' self-reflections, played a facilitating role, created translation assessment criteria collaboratively, and used authentic materials in teaching practices. These are typical characteristics of the TFoA associated with translation teaching. However, the overall mean ratings of the five elements did not exceed 3.5, which indicates a potential gap between the teachers' cognitions and their teaching practices. As seen in Figure 4.1 in Section 4.2.1, the overall mean scores of six elements in the TCTTQ were above 3.5 and even close to four. Therefore, it can be said that there was a potential gap between

the teachers' cognitions and teaching practices.

The results from the classroom observations, overall, support the results found in the questionnaire, suggesting that the teaching practices of the translation teachers contained elements from both the TMoA and TFoA. The observation was of three elements: teaching material, the teaching focus, and teaching organisations. The limitations of classroom observations meant that not all elements in the TPQ could be observed.

From the observation, it was apparent that all 10 teacher participants used authentic materials in their teaching practices. These materials were either textbooks written by the translation teachers based on their own experiences of translation practice or the materials from real translation projects in which the teachers participated. The observation also revealed that translation teachers' teaching focus was constrained by the students' bilingual competence and their learning of fundamental translation theories and principles. The translation teachers also paid attention to the application of translation theories and principles to translation practices and acknowledged the importance of the translators' profession-related knowledge. However, these accounted for a small proportion of teachers' teaching practices. These results were similar to the findings of D. Wu, Zhang, et al. (2019) and D. Wu (2020), who found that translation teachers acknowledged students' bilingual competence and translation knowledge-related competence in their teaching practices.

The third element observed in classroom observations was teaching organisation, which comprises various teaching activities used in teaching practices to organise their classes, such as teacher-controlled Q&A and students' free discussions; these activities were observed by calculating the time allocated by the teachers to each activity. The

observations identified that, although teachers allocated the teaching time to various activities, the total time allocated to the transmissionist-oriented activities, such as teacher instruction, was more than the time allocated to the transformationist-oriented activities, such as students' free discussions. This appears to be inconsistent with the quantitative data, which indicated that most elements in the TPQ received a mean score that represented the TFoA. This inconsistency may be because survey respondents tend to give positive responses rather than answering survey questions straightforwardly or neutrally. This can create a common response bias in a questionnaire (Creswell & Guetterman, 2019). That is, respondents might deliberately provide socially desirable responses, rating high scores to indicate that they tended to use teaching activities that were transformationist-oriented.

In short, observations revealed that translation teachers' teaching practices comprised elements from both the TMoA and TFoA. Although the teachers rated five out of eight elements belonging to the TFoA, the mean ratings of these elements were not very high, indicating their teaching approaches were moving away from the transmissionist approaches and towards the transformationist approaches. Despite using authentic material in teaching practices, the teachers' teaching focus and teaching activities organised in classrooms were much more transmissionist-oriented. The qualitative results lend support to the quantitative results.

6.3.2 Individual differences in teaching practices

Research Question 2.1 *Are there any differences in the teaching practices of Chinese university translation teachers with various backgrounds?*

This sub-question, focused on translation teachers' teaching practices, explores whether translation teachers with different backgrounds have varied approaches to their teaching

practices. Quantitative results were obtained from the questionnaire, and qualitative results were obtained from the classroom observations.

The quantitative results showed that, overall, there were few differences in teachers' teaching practices associated with the two general approaches. Independent samples *t*-tests were completed to examine differences associated with teachers' teaching practices according to their years of overseas learning experience, work experience as professional translators, and language teachers. The results suggested that no statistically significant differences were found between these factors and teachers' teaching practices of the two general approaches. In addition to independent samples *t*-tests, several one-way ANOVA were also performed to explore differences in teaching practices of teachers in different age groups, in different programmes, of different academic rankings, years of translation teaching experiences, and levels of translation practice experiences. Similar to the results obtained in independent *t*-tests, results from several one-way ANOVA also suggested no statistically significant differences between these factors and teachers' teaching practices of the two general approaches.

However, there were a few exceptions. Results from independent samples *t*-tests suggested that there were differences in male and female teachers' teaching practices concerning the TMoA, t (122) = -2.94, p <.01 (See Table 4.17 in Section 4.3.3). Furthermore, there were differences in teachers who worked in 985-Project and non-985-Project universities in regard to the TFoA, t (122) = 2.55, p < .05 (see Table 4.17 in Section 4.3.3). The effect size Cohen's *d* indicated a medium effect size with d = .55 for genders and d = .62 for types of working institutions. As discussed in Section 6.2.2, a medium effect size indicates the differences were not trivial but also not large enough to be considered significant. The difference between male and female teachers' teaching practice might be because of the male teachers' lower mean scores for both approaches,

suggesting male teachers have more authoritarian teaching, but further research is warranted to explore gender impacts on teaching approaches. Moreover, possibly because of the difference in their working contexts, teachers who worked in non-985-Project universities tended to adopt more of the TFoA than teachers who worked in 985-Project universities. These outcomes have been reported and discussed in Section 6.2.2.

The difference in teachers' qualifications was another factor, identified in one-way ANOVA, that was an exception. Although the results suggested both groups of teachers were using teaching elements from the two approaches, it was evident that the teachers holding a master's degree (M = 2.75, SD = .43) were using more teaching elements from the TFoA than the teachers holding a bachelor's degree (M = 2.17, SD = .83). The effect size, however, indicated η^2 = .05, only a small effect size.

The results from classroom observations generally, for one thing, supported the results from the questionnaire. There were no significant differences in teachers' teaching practices, with most teachers using teaching elements from both approaches. The only noticeable difference was between T10 and the other nine teacher participants. T10's approaches, as apparent in the observations, were more transformationist-oriented, except for using authentic material, than the other teacher participants. While other teachers' teaching focus contained both transmissionist-oriented objectives (e.g., improving students' grammar accuracy and teaching translation principles) and transformationist-oriented objectives (e.g., learning translator career-related knowledge), T10's focus was entirely on elements from the TFoA, employed to help the students find and solve translation problems. Furthermore, T10 spent more classroom time organising transformationist-oriented teaching activities, compared with the other translation teachers. As discussed in Section 6.2.2, this may be because

qualitative analysis can more readily identify individual differences. Overall, however, the qualitative results suggested no significant difference in teachers' teaching practices.

For another thing, the qualitative results seemed partially in line with the quantitative results. The quantitative data showed that five teaching elements went to the range of the TFoA, as the mean ratings of the elements fell into three to five (See Figure 4.2 in Section 4.3.1). In contrast, Figure 5.2 in Section 5.3.1.4 showed that the teacher participants allocated more classroom time to organise the transmissionist-oriented teaching activities. These discrepancies, between the quantitative and qualitative results, may be due to the response bias possible in the questionnaire. In Figure 4.2, the mean ratings of the five elements, oriented to the transformationist-oriented range of activities, were all below 3.5, suggesting that the respondents leaned more towards the TFoA. The low level of frequency suggests that while the respondents generally support the TFoA for translation teaching, they are not fully convinced or committed, and feel that some aspects of the TMoA are valuable and helpful. Considering these reasons, the quantitative and qualitative results were not significantly different.

6.4 Translation students' cognitions

6.4.1 Students' cognitions about approaches to translation teaching

Research Question 3 *What are Chinese university translation students' cognitions about approaches to translation teaching?*

The third research question in the present study is to probe translation students' cognitions about approaches to translation teaching. The results from the questionnaire and interview suggested that translation students were receptive and had an understanding of teaching and learning elements from both the TMoA and TFoA.

The results generated from the Translation Student Cognition Questionnaire (SCTTQ) suggested that higher mean scores indicated a strong inclination towards the TFoA, whereas lower mean scores indicated a strong inclination towards the TMoA (see Figure 4.3 in Section 4.4.1).

It can be seen from Figure 4.3 that the mean ratings of seven translation learning elements were associated with the TFoA, while one was associated with the TMoA. The element associated with the TMoA suggested that the students agreed translation assignments need to be individually completed. This question was similar to that raised by Kiraly (2000) on whether translation "learning is individual or social" (p. 22).

Of seven elements associated with the TFoA, three mean scores were above four, indicating students strongly agreed that teachers should adopt collaborative teaching strategies, evaluate students' learning based not only on their exam scores but also on their comprehensive competence, and allow the students to participate in the process of establishing criteria for accessing their translation quality. Another three mean scores were between 3.5 and four, indicating students' moderate agreement with the importance of self-reflection on teachers' feedback, teachers' facilitating roles in the learning process, and the use of authentic materials for learning. The mean score of one element in the SCTTQ was between three and 3.5 but very close to three, suggesting that although the students believed they should have opportunities to make decisions on the learning content, they were not fully convinced, and still believed in the value of teachers' control and decisions on the learning content.

To summarise, students' overall understanding of approaches to translation teaching aligned with the TFoA concepts of learning. This result contrasts with the results obtained by Klimkowski and Klimkowska (2012), who found that the postgraduate

translation students' cognitions about approaches to translation teaching were predominated by the TMoA concepts of teaching and learning. For example, students expect teachers to provide "ready-made" knowledge (Klimkowski & Klimkowska, 2012, p. 186) and lead the teaching process.

The different education objectives of the two postgraduate programmes may explain the conflicting results of the two studies on students' cognitions about approaches to translation teaching. Klimkowski and Klimkowska's study (2012) recruited student respondents from the MA programme for senior translator researchers, which focused on theoretical knowledge (Tao, 2016). The students in their study may have a stronger inclination towards the TMoA, and accordingly, the students may need more instruction on analysing translation theories. In contrast, most student respondents of the current study were from the MTI programme (see Table 4.2 in Section 4.1.2), which focused on students' practical skills to prepare them to become professional translators, and the students may believe in the value of collaboration rather than teachers' instruction and have a stronger inclination towards the TFoA. It is, therefore, essential to consider the objectives of different translation programmes and the nature of the students in these programmes when interpreting results in the research field of translator education. Further research is needed to understand these differences and their implications for effective teaching and learning in translator education.

The outcomes of student interviews supported the results from the questionnaire, indicating that the student participants thought approaches to translation teaching should contain elements of both the TMoA and TFoA concepts of learning (see Table 5.7 in Section 5.4.1). On the one hand, the students stated that they believed in the value of the TFoA concepts of learning in translation learning. For example, they stated that teachers should play a guiding role, use authentic materials, and use collaborative

teaching strategies. On the other hand, the students acknowledged the necessity of the TMoA concepts of learning. For example, students stated that they relied on the teachers exercising control and making decisions about teaching content because of their own lack of ability to do so. These findings were similar to those generated from the questionnaire.

Similarities and differences were identified, regarding the specific learning elements, between the quantitative and qualitative results. The similarities were that the students' cognitions aligned with the TFoA concepts of learning in regard to seven elements identified in both data types. In the questionnaire, the mean ratings of the seven learning elements were above the midpoint of three, indicating that the students' cognitions regarding these elements aligned with the TFoA (as discussed in Section 6.4.1). Similar results were found in the qualitative results. Table 5.7 in Section 5.4.1 shows that the student participants identified the TFoA concepts more often than those of the TMoA concepts; they commented on six of the seven elements.

The differences were that eight learning elements were examined by the quantitative method, whereas only seven were identified in the qualitative results, as the element referring to completing translation assignments was not included. The reason for this could be because there were specific items related to this question in the questionnaire, whereas the semi-structured interviews had no questions directly associated with this question. The students, therefore, did not mention this element during their interviews, although some questions were prepared beforehand to guide the interview.

6.4.2 Influential factors on students' cognitions

Research Question 3.1 *What are the factors that influence Chinese university translation students' cognitions?*

This sub-question, focusing on students' cognitions about approaches to translation teaching, explores factors influencing students' cognitions. Results were obtained from the questionnaire and the interview.

The results from the questionnaire results suggest that students' prior learning experience was the major source of influence, followed by the influence of the socio-cultural contexts, on the students' cognitions about approaches to translation teaching. Teacher and student diversity seemed to have little influence on the students' cognitions. The Pearson correlation results (See Table 4.27 in Section 4.4.3) showed that students' prior learning experience and the socio-cultural contexts significantly correlated to students' cognitions with the correlation r = .44 and .34, respectively. However, there was no significant correlation between the personalities of teachers and students and the students' cognitions, r = .17.

Multiple regression was performed to explore the extent to which the two factors influenced the students' cognitions about approaches to translation teaching. Results showed a significant regression equation (F = 15.28, R^2 = .23, p < .01), indicating that these two factors predicted 23% of the variance in students' cognitions about approaches to translation teaching. A large effect size (Cohen's f^2 = .29) regression equation was obtained (see Table 4.28 in Section 4.4.3).

The regression coefficients results (Table 4.29 in Section 4.4.3) suggest that students' prior learning experiences have a powerful influence on translation students' cognitions about approaches to translation teaching (β = .27, p < .01). The impact of the prior learning experience was expected, as it is considered to play an essential role in shaping an individual's cognitions (Borg, 2006, 2015b). Achili (2020) also reported that EFL students' prior learning experiences, such as constantly attending exams and having a

good teacher, powerfully impacted their understanding of successful EFL learning.

The socio-cultural context is another factor that shapes translation students' cognitions ($\beta = .14$, $p < .05$). One possible explanation is that students are learning in social and cultural environments, not in a vacuum. Therefore, social norms and cultural traditions, such as students showing respect to teachers, shape students' understanding of teaching and learning, and translation students have no exception. Similarly, scholars of language have explained that beliefs about language learning can be affected by socio-political contexts, and that beliefs are the result of social, historical, and political factors (X. Gao, 2010; Negueruela-Azarola, 2011). As beliefs about language learning cannot be separated from political and historical contexts, learners' perspectives will inevitably be influenced by these factors (Barcelos, 2003a, 2003b).

In contrast, the factor: teacher and student diversity, seemed to have a limited impact on the students' cognitions about approaches to translation teaching; no significant correlation between this factor and the students' cognitions was identified. This might be due to the limitations of a decontextualised questionnaire. Student respondents had limited contextual information on what abilities or personalities may influence their cognitions about approaches to translation teaching, as no contexts or examples of teacher ability and student personality were provided in the questionnaire. The students might have responded differently if they had been provided with specific descriptions of teachers' and students' abilities and personalities. This, however, does not mean that teacher and student ability and personality do not influence the students' cognitions, as apparent in the qualitative results.

Firstly, the interview results provide complementary evidence to the quantitative results for this factor, suggesting that teacher and student ability and personality influence

students' cognitions. Of the 20 student participants, 15 reported that their own ability and personality, as well as the teachers' ability, affected their cognitions about approaches to translation teaching (See Table 5.8 in Section 5.4.2). The students reported that their lack of ability to find learning materials and provide comments on other students' translations resulted in their valuing the teachers' leadership in the process of translation learning. As teachers have many years of translation teaching and practice experience, students prefer to rely on teachers' answers or decisions related to translation problems. This, in turn, influenced students' cognitions about preference for teacher-led transmissionist-oriented approaches.

These results appeared inconsistent with the quantitative results, which did not reveal a significant correlation between the teacher and student ability and personality and the students' cognitions. The different backgrounds of the student respondents and participants may account for the inconsistencies between the two outcomes. In the questionnaire, only a small portion (10%) of student respondents have no translation or English learning backgrounds in their undergraduate study (See Table 4.2 in Section 4.1.2), while a significant portion (40%) of the interview participants did so (See Table 5.2 in Section 5.1.2). Therefore, the student participants with less English or translation learning experiences may have placed a greater emphasis on the teacher-centred and transmissionist-oriented approaches, such as ready-made feedback, due to their lack of confidence in their own or peers' abilities. This may, in turn, have influenced their understanding of the approaches to translation teaching. Future research is needed to explore the importance of students' backgrounds and learning experiences in interpreting their cognitions about approaches to translation teaching.

In addition, the qualitative results lend further support to the quantitative results. It is evident in the qualitative results that students' learning experiences and contextual

factors influenced students' cognitions about approaches to translation teaching. All 20 student participants (see Table 5.8 in Section 5.4.2) reported that their undergraduate learning experience shaped their understanding of the approaches to translation teaching. For example, many students reported unsatisfactory group discussion experiences because some group members shared group outcomes but did not contribute to group assignments; consequently, they felt group discussions were an ineffective and unfair way to learn translation. Furthermore, the qualitative results corresponded to the quantitative results in that the socio-cultural factors contributed to the students' cognitions. Seven students reported that the limited classroom teaching time and the traditional relationship between teachers and students strongly influenced their cognitions about approaches to translation teaching. Compared with other influential factors, such as undergraduate learning experiences, contextual factors were addressed by a relatively small portion of students. The powerful influence of the prior learning experiences and teacher/student ability and personality on the students' cognitions may have led to contextual factors not being identified by many of the students. Another reason may be because of the limited time for the student interviews, around 30 minutes for each student participant in this study. Excluding the time talking about their understanding of the approaches to translation teaching, they spent the most time explaining how the two powerful factors influenced their cognitions, with little time left for explaining the contextual factors. Therefore, if students were interviewed longer, more factors may be identified from their interpretations.

6.5 Complex relationships

The last set of research questions in the current study addressed two pairs of relationships. The first pair is the relationship between translation teachers' cognitions

and teaching practices. The second pair is the relationship between translation teachers' and students' cognitions.

6.5.1 Relationships between teachers' cognitions and teaching practices

Research Question 4 *Are there any relationships between Chinese university translation teachers' cognitions and their teaching practices? If so, do any factors contribute to these?*

The results showed a complex relationship between Chinese translation teachers' cognitions about approaches to translation teaching and corresponding teaching practices. Both consistencies and inconsistencies were identified.

6.5.1.1 A general understanding of the relationship through the two data types

The quantitative results, overall, showed that the teacher respondents' cognitions about approaches to translation teaching contained mixed elements from both the TMoA and TFoA. Their teaching practices, similarly, reflected the mixed approaches, containing elements from both the TMoA and TFoA. Therefore, translation teachers' cognitions about approaches to translation teaching, from the questionnaires, generally corresponded to their teaching practices with supportive evidence in the qualitative results.

6.5.1.2 A detailed understanding of the relationship through the two data types

More complex relationships were found by analysing the specific translation teaching and learning elements. In the quantitative results, the evidence from the paired samples *t*-tests (See Table 4.32 in Section 4.5.1.2) reveals statistically significant differences between the teachers' cognitions and teaching practices regarding seven of the eight teaching and learning elements. Three of the seven elements, the teacher's role, the

instruction strategy, and ways to evaluate student learning, showed a large effect size, with Cohen's *d* exceeding .90. Another three elements showed a medium to relatively large effect size with Cohen's *d* = .78: ways to offer feedback, *d* = .52: ways to choose teaching content, and *d* = .49: ways to assess translation quality. However, the element: material use, had a small effect size (*d* = .43). In addition, no statistically significant difference was found regarding the element: ways to complete translation assignments. These results suggested that although the teacher respondents believed that the TFoA should apply to translation teaching, they did not comply with their understanding of the approaches regarding these elements in the teaching practices. In other words, the translation teachers' cognitions about approaches to translation teaching were more transformationist-oriented and less transmissionist-oriented. However, their teaching practices were much more transmissionist-oriented and less transformationist-oriented.

The qualitative data identified more complex relationships than the quantitative data. It is necessary to note that while the questionnaire included eight elements to explore the relationship, the qualitative data, due to the limitations of classroom observations, allowed for only five elements to be used to explore the relationship. The five elements were: teacher's role, material use, instruction strategy, teaching objectives, and ways to offer feedback (See Table 5.9 in Section 5.5.1). Notably, four out of the five elements overlapped with the eight elements used in the quantitative analysis; the exception was the teaching objectives.

With the four overlapping elements, the qualitative results suggested that the 10 teachers' cognitions and teaching practices were consistent in terms of material use. With the remaining three overlapping elements, the relationships were complicated. While consistencies were identified with some teacher participants, inconsistencies were also found. For example, consistencies were found in eight teacher participants

with regard to the teacher's role, while inconsistencies were found in the remaining two. Apart from the four overlapping elements, the qualitative results added one more element: teaching objectives, to compare the teachers' cognitions and teaching practices. Both consistencies and inconsistencies between the teachers' cognitions and teaching practices were identified, providing supporting evidence for the complex relationships between them.

6.5.1.3 Reasons for the divergences between the quantitative and qualitative results

Several reasons may explain the differences between the quantitative and qualitative results for the relationship between translation teachers' cognitions and their corresponding teaching practices.

Firstly, the quantitative results might be over or under-generalised due to the "halo effect" (Dörnyei & Taguchi, 2009, p. 9); that is, "if our overall impression of a person or a topic is positive, we may be disinclined to say anything less than positive about them even if it comes to specific details" (Dörnyei & Taguchi, 2009, p. 9). In the current study, the respondents may have a positive impression of the statements describing the TFoA. Accordingly, they may agree strongly with the statement, "In translation class, students work on a translation project in a group with peers.", although they may not have thought so. Therefore, the respondents' answers to the statements about approaches to translation teaching in the current study may not be their genuine ideas but their positive impressions. The same is true for the teacher's teaching practices. While teachers may have over-generalised their cognitions about approaches to translation teaching, they may have underestimated their teaching practices; it may be that the elements to be rated in the questionnaires were pre-established. The current study required the teacher respondents to self-report their teaching frequencies for eight

predetermined teaching elements. If some teachers do not include these predetermined elements in their actual teaching practices, they cannot accurately self-evaluate their teaching frequencies, and consequently, underestimate their teaching frequency. Scholars, such as Borg (2015), have criticised self-reported questionnaires in researching teacher cognitions, saying that using questionnaires to describe teachers' cognitions may make it possible to identify their ideals but not their actual thinking. Questionnaires, similarly, may not provide an exact representation of teachers' real teaching practices. However, these inherent disadvantages of using a questionnaire seem hard to avoid.

In contrast, the qualitative results of this study were generated from different sources. The teacher participants' cognitions about approaches to translation teaching were based on the teacher interviews. Each participant had one hour to talk about their ideas about the approaches to translation teaching. I had the time to discuss each element in detail to explore the teachers' actual thinking of the TMoA and TFoA to translation teaching. Moreover, the teacher participants' teaching practices were also based on classroom observations. I was able to see whether the teachers used authentic materials in the translation classes, analyse the actual teaching focus by observing the whole teaching procedure, and calculate the time the teachers allocated to different teaching and learning activities to have an accurate description of how the classes were organised. Therefore, the data from the in-depth discussions and detailed observations may provide more comprehensive results of the teachers' cognitions about approaches to translation teaching as well as describe exactly what approaches translation teachers implemented in their teaching practices. The classroom observations in the current study, however, had limitations. Some elements identified in the teacher interviews cannot be observed in the classroom observations. Therefore, in future research, extra

instruments might be used to comprehensively understand teachers' teaching practices. For example, teaching documents, such as teaching plans or dairies, can be collected to provide supporting evidence.

6.5.1.4 Factors causing the inconsistencies between teachers' cognitions and teaching practices

As seen in the above discussion, the quantitative and qualitative data led to different results regarding the relationship between the teachers' cognitions and teaching practices. Despite that, both the quantitative and qualitative results revealed limited consistencies between the teachers' cognitions about approaches to translation teaching and their practices. Many scholars claimed that contextual factors play a role in mediating the relationship between teachers' cognitions and practices and may prevent teachers from putting their cognitions into practice (Basturkmen, 2012; Borg, 2015a, 2019; Bruzzano, 2018; Buehl & Beck, 2014; L. X. Gao & Zhang, 2020; H. Zhao & Zhang, 2022). Supporting evidence can be found in this study's quantitative and qualitative results.

Results from the questionnaire suggested that classroom environment was identified as a strong factor to cause inconsistencies between translation teachers' cognitions about approaches to translation teaching and teaching practices. The Pearson correlation analysis (See Table 4.21 in Section 4.3.4) showed that the classroom environment, including teacher experience and student needs, moderately correlated to teachers' teaching practices ($r = .26$, $p < .01$). The regression coefficients showed that the classroom context had a large effect on the teacher respondents' teaching practices ($\beta = .30$, $p < .05$) (See Table 4.23 in Section 4.3.4).

This finding is consistent with the literature in the broader research field of teacher

cognition, which claims the influence of contextual factors, such as teacher experience and student performance, on teachers' practices (Abdelhalim, 2023; Cao et al., 2022; Kochem, 2022; Sanchez & Borg, 2014; Shu-wen Lin, 2022; Wei & Cao, 2020). However, the classroom environment in the present predicted only 7% of the variance in the data observed for the teaching practices, implying that the teachers' practices may be subject to other factors.

Another pre-established factor in the questionnaire: curriculum and facility, was found to have a limited correlation to the teachers' teaching practices (r = .06). This could be due to the items provided to the respondents in the questionnaire being decontextualised. As discussed in Section 6.4.2, no specific contexts were given to the respondents to explain teacher and student personalities, which may account for the limited correlation between this factor and the students' cognitions. The teacher respondents were required to elicit how influential curriculum and facility are on their enacted practices by asking general questions unrelated to specific teaching curricula and facilities. In this situation, the respondents may provide answers based on theories, ideals or what is socially acceptable rather than what they actually think (Borg, 2015a, 2017). In other words, these answers may not be a valid representation of their thinking. However, this did not mean curricula and facilities have no influence on the teachers' teaching practices, as suggested by the qualitative results.

Firstly, the results from the interview provided complementary insights, suggesting that situational contexts, such as the teaching syllabus and the classroom time, influenced the teachers' teaching practices (see Table 5.6 in Section 5.2.3). Nearly half the teacher participants reported that the intensive teaching syllabus and limited classroom teaching time prevented them from implementing more transformationist-oriented approaches to translation teaching, such as providing individual face-to-face feedback. These

findings are consistent with many other studies which also identified the curriculum and limited classroom teaching time as key factors impacting the relationship between teachers' cognitions and teaching practices (Drew et al., 2017; Graus & Coppen, 2018; Lo, 2014; Nishimuro & Borg, 2013; Taherkhani, 2019)

The qualitative findings also reveal additional situational factors contributing to the inconsistent relationship between the teachers' cognitions and teaching practices, including class size, education policy, and social resource accessibility. The class size, for example, seems to be an influential factor that made translation teachers' teaching practices diverge from their cognitions, as nearly all the 10 teacher participants addressed this factor.

Firstly, in this study, the teacher participants claimed that a large class prevented them from focusing on individual needs, such as group discussions and project-based translation learning. Large class sizes are hard to avoid because Chinese professional translator education programmes, especially the MTI programme, enrol at least 15 to 20 students yearly (Q. Jiang & Tao, 2018; Mu, 2021). Therefore, it appears to be an urgent matter for policy makers to think about how to enable translation teachers, especially those in the MTI programme, to work with large class sizes to implement multiple approaches to translation teaching. The findings in this study are compatible with many other studies, which have also identified class size as a factor that influences the relationship between teacher cognitions and teaching practices (Cross, 2009; Garcia-Ponce & Tagg, 2020; Walsh & Wyatt, 2014; Zheng & Borg, 2014)

Secondly, education policy was reported by three teachers to prevent them from carrying out some aspects of their cognitions about the TFoA. For example, two teachers claimed the CATTI test, a nationwide translator certificate test, influenced their

approaches to translation teaching. They said that the Chinese Graduate Translator Education Committee linked the quality assessment of the MTI programme to the pass rate of the CATTI test taken by students. The CATTI test focuses primarily on translation quality. Therefore, CATTI was a primary teaching focus for teachers who then emphasised approaches associated more with the TMoA, even though some teachers' teaching objectives aligned with the TFoA. These results are consistent with many other studies, which have also identified the influence of educational and social policies on the inconsistencies between teachers' cognitions and teaching practices (Farrell & Kun, 2008; Pahissa & Tragant, 2009; Taherkhani, 2019; Yuan & Stapleton, 2020)

The qualitative results also support the quantitative outcomes in that classroom environment, such as student ability and personality, was claimed to influence the relationship between the teachers' cognitions and teaching practices. Nearly half the teacher participants reported that, due to students' low English proficiency, they have to focus on improving students' language accuracy, although they also would like to focus on other competencies, such as using the encyclopaedia.

Lastly, the qualitative results revealed two internal factors, teachers' teaching experiences and motivation, might explain the incongruency (see Figure 5.4 in Section 5.3.3). For example, teachers with years of translation teaching experience lacked the motivation to change their teaching approaches, and did not want to move away from the traditional TMoA. They had their own set of beliefs about approaches to translation teaching, which would be hard to change (Borg, 2011; Krulatz et al., 2022). Therefore, their cognitions about approaches to translation teaching may not align with newer approaches, such as project-based translation teaching (Corrius et al., 2016; González Davies, 2004; Moghaddas & Khoshsaligheh, 2019; Zhong, 2008) and the

comprehensive model of translation teaching (Tan, 2008; Tao, 2012).

In short, the current study's quantitative and qualitative results revealed the importance of contextual factors in influencing the relationships between translation teachers' cognitions and teaching practices; this influence may account for the limited correspondence between teachers' cognitions and teaching practices at times. As Borg (2017) argued, "situational constraints often prevent teachers from putting their beliefs into practice" (p. 81).

6.5.2 Relationships between teachers' and students' cognitions

Research Question 5 *Are there any relationships between Chinese university translation teachers' cognitions and students' cognition about translation teaching? If so, do any factors contribute to these?*

The last research question in the current study explores the relationships between Chinese translation teachers' and students' cognitions about approaches to translation teaching. These relationships, established through the questionnaires and the interviews, were complex, showing both consistency and inconsistency in their cognitions.

Consistency between teachers' and students' cognitions

The results obtained from the questionnaire revealed that, in general, the translation teachers' cognitions about approaches to translation teaching were consistent with those of their students, as both teachers' and students' cognitions went in the same direction (See Figure 4.5 in Section 4.5.2). However, it is hard to observe the direction of teachers' and students' cognitions through the qualitative data. Figure 5.6 presents the percentages of frequency with which the translation teachers and students used the TMoA and TFoA to comment on teaching and learning elements, but not the direction

in which they are moving.

The consistency between the teachers' and students' cognitions was also evident in the results from the questionnaire, as both the teachers' and students' cognitions were more transformationist-oriented and less transmissionist-oriented, as presented in Figure 4.5. The qualitative data tend to support the data from the questionnaires. As shown in Figure 5.6, both teachers and students used the TFoA concepts more frequently than the TMoA concepts to comment on the same five elements, except for three elements.

The consistent relationship between teachers' and students' cognitions suggests that both teachers' and students' cognitions about approaches to translation teaching tended to be more transformationist-oriented and less transmissionist-oriented. That is, both teachers and students believed that the TFoA should be used more frequently than the TMoA in most aspects of translation teaching and learning. These results are congruent with studies conducted by scholars who claimed that the TFoA were more effective in developing students' comprehensive competence than traditional, teacher-centred, and transmissionist-oriented approaches (Al-Shehari, 2017; Gile, 2004; González Davies, 2017; Kiraly, 2005; D. Li, 2013; D. Li et al., 2015; Neves, 2022; Tan, 2008; Tao, 2012; Wallace, 2015). Tao (2012), for example, proposed and implemented constructive approaches involving task-based, skill-based, and project-based learning in the MTI programme. She concluded that the approaches trained translators effectively to achieve higher professional performance. However, it is important to note that Tao's (2012) study was a case study conducted at a specific university, and so, it remains unclear whether the approaches are also effective in other Chinese universities offering translator education programmes. More importantly, her study did not collect data from teachers and students to explore their ideas about constructive approaches. The results of the current study, however, supported Tao's (2012) findings in that translation

teachers and students believed that teaching activities underpinned by the TFoA concepts should be applied to most aspects of translation teaching and learning.

Inconsistency between teachers' and students' cognitions

The results obtained from the questionnaire revealed that, firstly, the translation teachers' cognitions about approaches to translation teaching did not correspond to their students, as no overlapping points were observed (see Figure 4.5 in Section 4.5.2). Supporting evidence can be seen in the qualitative results, as the percentages of the teachers and students using the TMoA and TFoA concepts to comment on the same teaching and learning element differed in all but for two elements (see Figure 5.6 in Section 5.5.2).

Secondly, as shown in Figure 4.5, despite both teachers' and students' cognitions containing elements from the TMoA and TFoA concepts, the students' cognitions were generally more transformationist-oriented and less transmissionist-oriented than their teachers' cognitions, with most mean scores for the students' cognitions larger than their teachers' scores, except for one element. However, with qualitative results, it is impossible to assess the magnitude of cognitions, and so, it is hard to evaluate and compare the extent of student participants' cognitions about the TFoA with the teachers. Refer to Section 5.2.2. for further explanations.

Thirdly, the quantitative data, analysed further using independent samples *t*-tests, showed statistically significant differences between translation teachers' and students' cognitions (t = -10.36, $p < .01$), with a large effect size d = 1.36, indicating large differences. These results are compatible with the previous findings reporting discrepancies between translation teachers' cognitions and students' cognitions regarding teaching approaches (Klimkowski & Klimkowska, 2012; X. Li, 2018) and

translator competence (D. Wu, 2020). However, the current study's findings differed from Klimkowski and Klimkowska's and X. Li's findings. While the current study revealed that the translation students' cognitions about approaches to translation teaching were more transformationist-oriented and less transmissionist-oriented than their teachers, Klimkowski and Klimkowska and X. Li found that the students' cognitions were much more transmissionist-oriented and less transformationist-oriented.

The reasons for the students' cognitions being more transformationist-oriented and less transmissionist-oriented than their teachers in the current study can be explained as follows. Teachers' cognitions were, as discussed in Section 6.2.3, sourced from their prior learning experiences (Berg & Smith, 2018; J. Huang et al., 2021; L. Li, 2013; Ng et al., 2010; H. Zhao & Zhang, 2022), which may be resistant to change, even though they encountered challenges (Borg, 2015b; Pajares, 1992). The translation teachers in this study have been exposed to a behaviourist education system for a long time. Accordingly, their cognitions contained transmissionist-oriented teaching elements that were hard to change. They were resistant to change even though they may have understood that new teaching approaches could be used for teaching translation, such as project-based learning (Kiraly, 2005; D. Li et al., 2020; Neves, 2022), situated learning (Chouc & Conde, 2016; Risku, 2002), and collaborative learning (González Davies, 2017; Kiraly, 2000). Therefore, their cognitions about approaches to translation teaching could be more transmissionist-oriented and less transformationist-oriented. On the other hand, the student respondents in the current study were mainly raised and educated in an environment surrounded by advanced information technology, and thus, better able to understand the socially contextualised working environment of professional translators (Prieto-Velasco & Fuentes-Luque, 2016). Consequently, they

are more likely to realise the importance of transformationist-oriented teaching activities favouring collaborative learning (Kiraly, 2000, 2003, 2017). Moreover, the student respondents in this study were advanced learners who had experienced four years of undergraduate study, and who may have bad teacher-centred, exam-dominated, and transmissionist-oriented learning experiences. Their undergraduate learning experiences may have changed their understanding of the approaches to learning translation in postgraduate study, making them believe in the role of the transformationist-oriented approaches, so that their cognitions became more transformationist-oriented and less transmissionist-oriented than their teachers.

From Figure 4.5 in Section 4.5.2, it is evident that at several points, the teachers' cognitions and the students' cognitions about specific elements significantly diverged. A closer examination of these differences was conducted by performing additional independent samples *t*-tests. The results showed that there were significant differences between the teachers' and students' cognitions in six elements. However, there were no significant differences in the other two elements (see Table 4.34 in Section 4.5.2).

The two elements identified as having no significant differences indicate that the teachers' cognitions aligned with their students' cognitions. Specifically, both the teachers and students believed, consistent with the TFoA, that the teachers' role in translation teaching should be as a facilitator because translation involves complex cognitive processes (Albir & Alves, 2009; Z. Hu et al., 2021; Mellinger, 2019). Therefore, student translators have to be capable of making decisions and selecting strategies to deal with translation problems on their own, and accordingly, teachers would provide a necessary guide when needed. The qualitative results provided similar evidence to this finding. The percentages of frequencies that the teachers and the students used the TFoA concepts to comment on the teacher's role were very similar.

Furthermore, both teachers and students believed that translation assignments should be completed through individual efforts. Their views align with the TMoA, which sees translation learning as individually but not socially constructed. Learning is individually or socially constructed is one of the dilemmas with which teachers and students are faced (Miller & Seller, 1985). To solve this problem, it is better for teachers to reflect on their own teaching epistemology and then, answer this question before classroom teaching (Kiraly, 2000). However, Kiraly (2000) did not address students' actions regarding this dilemma. The findings of this study supplement Kiraly's claim by exploring students' understanding of this dilemma.

In contrast, six elements were found to have significant differences with a large effect size for two elements. The large effect size, $d = 1.07$ for ways to choose teaching content, suggests that the students believed, consistent with the TFoA, that the teaching content should be determined through a collaborative approach, whereas the teachers believed that the teaching content, consistent with the TMoA, needed to be chosen by the teachers themselves. The difference may be the result of students' strong self-awareness of learning autonomy. Kiraly (2000) and others have claimed that one of the ways to empower students is to achieve autonomy through socio-constructivist approaches (e.g., González Davies, 2017; D. Li et al., 2020; Tao, 2012; Washbourne, 2014; Y. Zhong, 2008). As teachers cannot make life-long decisions for students, allowing students to suggest learning content may increase a sense of self-control over their learning to develop critical thinking competence.

However, the qualitative results contrasted with these results. Nearly 90% of the students used the TMoA concepts to comment on ways to choose teaching content, and 10% used the TFoA. In contrast, the number of teachers using the TMoA and TFoA to comment on this element was quite balanced (55% for TMoA and 45% for TFoA). In

other words, the student participants may believe in the value of teachers' control in choosing the teaching content, which aligns with the TMoA.

The differences between the quantitative and qualitative data may be due to the students' backgrounds. The proportion of the student participants without a linguistic or translation background in the interview is greater than that in the questionnaire. Therefore, the student participants completing the questionnaire might be more dependent on teachers' authority when starting to learn translation. Nevertheless, the qualitative findings of the current study support X. Li's (2018) quantitative findings, which showed that translation teachers' beliefs about choosing teaching content were relatively balanced compared to their students' beliefs, which were more behaviourist-oriented and less constructivist-oriented.

Another large effect size, d = .88 for ways to evaluate student learning, showed that although the teachers and students both believed, consistent with the TFoA, that student learning outcomes should be evaluated through their performance in the translation workplace, students' cognitions were more transformationist-oriented and less transmissionist-oriented than their teachers. The difference may be caused by the influence of some contextual factors on teachers' cognitions. As described by González-Davies and Enríquez-Raído (2016), resource accessibility acted as one of the constraints for translation teachers to implement the situated learning approaches in teaching translation. The teachers in this study may not be able to find translation internship opportunities for their students due to limited resources, and consequently, it may not be possible to evaluate students' learning outcomes based on their performance during the internship.

The qualitative findings partly corresponded to the quantitative findings. Firstly, the

qualitative findings were consistent with the quantitative results regarding ways to evaluate student learning because both the teacher and student participants were found to use the TFoA to comment on this element. They supported statements, such as focusing on the learning process rather than the final translation, and the percentage of the students using the TFoA (71%) to comment on this was larger than that of the teachers (50%) (see Figure 5.6 in Section 5.5.2). The consistency of the teachers' and students' cognitions might be because both the teachers and students have recent knowledge about the employment requirements of the translation markets, which indicates the necessity to balance the gap between institutional training and social demand (Hao & Pym, 2021; Horbačauskienė, 2017; Int, 2005; Orlando, 2019). It appears that graduate employability has emerged as a significant concern, not only within the field of translator and interpreter education (Cuminatto et al., 2017; Hao & Pym, 2022; Rodríguez de Céspedes, 2017) but also across higher education more broadly. This concern is evident not only among Chinese translation teachers (D. Li, 2004, 2007) but also among their counterparts in other social contexts (e.g., Al-Batineh & Bilali, 2017; Álvarez-Álvarez & Arnáiz-Uzquiza, 2017). Therefore, as both the Chinese translation teachers and students believe in the importance of graduate employability in the translation industry, applying the TFoA in evaluating students' learning outcomes could increase the students' employment-related competence.

Secondly, the quantitative results were inconsistent with the qualitative results regarding ways to evaluate student learning because the teacher and student respondents in the questionnaire did not acknowledge the value of the TMoA concepts for this element. However, both the teacher and student participants in the interviews used the TMoA concepts to comment on this element (50% for the teachers and 21% for the students). This difference may be that while the teachers and students acknowledged

the importance of graduate employability, their cognitions about student evaluation might be influenced by contextual factors such as teaching syllabus, which required teachers to have students sit exams. As a result, both the teachers and students may have to acknowledge the value of the TMoA for student evaluation. However, further research is warranted to investigate the influence of contextual factors.

In addition to the two elements with large effect sizes, another two received medium effect sizes. A medium effect size, d = .66 for ways to assess translation quality, suggests that although both the translation teachers and students believed, consistent with the TFoA, that the criteria for assessing translation quality were collaboratively established, there was a moderate difference between teachers' and students' cognitions, with the students showing a moderately stronger inclination to the TFoA.

On the contrary, the qualitative results seemed inconsistent with the questionnaire data. The teachers, in the interviews, used the TMoA concepts more frequently (71%) than their students (43% for TMoA), to comment on the ways to assess translation quality; that is, teachers' cognitions about assessing translation quality were consistent with the TMoA. The differences in the qualitative results between the teachers' and students' cognitions might be because the students disliked having to accept the teachers' assessment criteria.

Furthermore, the inconsistency between the quantitative and qualitative results for this element might be that the teacher respondents in the questionnaire may have provided socially desirable answers. Moreover, in the interviews, they were provided with the contexts to answer the questions so that they could give a more extensive and reliable account of the ways to assess translation quality.

The second medium effect size, d = .45, for material use suggests that both the teachers

and students valued the importance of authentic materials for teaching translation, aligning with the TFoA and with scholars' call for using authentic materials for translation teaching (Corrius et al., 2016; Kiraly, 2000; Prieto-Velasco & Fuentes-Luque, 2016), although there is a lack of studies to examine material use for translation teaching from teacher and student cognitions' perspectives. However, in the current study, the students' cognitions were more transformationist-oriented than the teachers. The differences might be caused by, as discussed in Section 6.4.3, the halo effect in responding to questionnaires. The student respondents might have a positive impression of the statement of authentic materials, causing them to overestimate the items and, thus, give a higher score than the teachers. In fact, the translation teachers also acknowledged the value of using authentic materials, supporting evidence of which can be found in the qualitative results. All 10 teacher participants generated topics that aligned with the TFoA regarding material use, such as keeping the original level of the material's difficulty and using materials from real projects.

Lastly, two elements received a small effect size among the six elements with statistically significant difference (d = .42 for ways to offer feedback, and d = .40 for the instruction strategy), indicating minor differences between the teachers' and students' cognitions regarding these elements, and not being practically significant. Similar results were found in the qualitative results with the percentages of frequencies that the teachers used the TMoA and TFoA concepts to comment on the two elements, which were almost the same as those of the students.

The qualitative results also provided a complementary element: teaching objectives, to investigate the relationship between teachers' and students' cognitions. The teachers' cognitions were consistent with their students for this element. The percentages of frequencies that the teachers used the TMoA and TFoA concepts to comment on this

element were almost the same as those of the students. It appears they both believed that while the teaching objectives should focus on developing students' cognitive and profession-related abilities, language proficiency could not be ignored.

These findings provide empirical support to Fernández Prieto and Sempere Linares's (2010) contention that although "it [traditional teacher-centred approach] does not encourage collaboration and reinforces the myth of the translator as an individual working in isolation… there are also positive aspects in them. There are some translation competences that are acquired through these programmes, such as language, textual, subject…" (p. 135). As can be seen, Fernández Prieto and Sempere Linares acknowledged the importance of traditional approaches in developing students' fundamental translation skills, while also recognising the necessity for using the TFoA to develop students' comprehensive competence through collaboration in translation teaching.

Chapter 7 Conclusion

7.1 Chapter overview

This chapter starts with a concise summary of the study's major findings. These findings are then discussed in terms of their contributions and implications for the research field of teacher cognition and translation studies, taking account of the interdisciplinary nature of the current study. In addition, the limitations of the study are acknowledged, and potential recommendations for future research are proposed. Overall, this chapter offers a comprehensive overview of the current study, highlighting its key contributions and providing implications for translator education.

7.2 Summary of main findings

This study explored translation teachers' and students' cognitions about approaches to translation teaching and the teachers' teaching practices in the context of Chinese universities. Four general research questions were raised to describe the teachers' cognitions, the enacted practices, the students' cognitions, and two pairs of relationships: the teachers' cognitions and teaching practices and the teachers' and students' cognitions. A mixed-methods research approach was adopted to collect both the quantitative and qualitative data to answer these research questions.

7.2.1 Translation teachers' mixed cognitions

Both the quantitative and qualitative findings suggested that Chinese university translation teachers' cognitions about approaches to translation teaching, examined from eight aspects, were a mixture of both the transmissionist-oriented and transformationist-oriented approaches. The results implied that while acknowledging

the importance of the transformationist-oriented approaches to translation teaching, translation teachers also accepted the transmissionist-oriented approaches. These results provide empirical support to Kiraly's (2006) contention that translation teaching is more effective when combining transmissionist, transactionist, and transformationist approaches than using one approach alone. However, more evidence is needed as the quantitative and qualitative results differed regarding the specific teaching and learning elements in some aspects.

The results obtained from the quantitative and qualitative data suggested that overall, there were no significant differences in the translation teachers' cognitions about approaches to translation teaching, regardless of their various backgrounds, including age, gender, degree qualification, academic ranking, institutional type, overseas learning experience, translation teaching experience, professional translator experience, and language teaching experience.

The results, both quantitative and qualitative, suggested that translation teachers' cognition developed from different sources: teachers' prior experiences, especially their translation learning experience; the teacher and student diversity; and the situational factors. It appears that, based on the available evidence, situational factors, such as classroom context, teaching syllabus, and resource accessibility, contributed to the divergence in translation teachers' cognitions about approaches to translation teaching and their corresponding practices. However, the extent to which the situational factors would predict translation teachers' cognitions is unclear.

7.2.2 Translation teachers' mixed teaching practices

There are similarities and dissimilarities between the quantitative and qualitative results for translation teachers' teaching practices. Similarities are that translation teachers'

teaching practices included both the transmissionist-oriented and transformationist-oriented approaches. Dissimilarities are that the qualitative results showed more elements from the transmissionist-oriented approaches than those identified by the quantitative results. More empirical evidence is needed to explore these dissimilarities.

The translation teachers shared similar teaching practices, although their backgrounds differed in gender, age, academic ranking, institutional type, overseas learning experience, professional translator experience, and language teaching experience.

As concluded in Section 7.2.1, situational factors contributing to the teachers' cognitions affected the teachers' implementation of teaching practices. Internal factors, such as teachers' translation ability and teacher motivation, and external factors, such as student ability, were also found to influence the teachers' teaching practices.

7.2.3 Translation students' mixed cognitions

The quantitative and qualitative data on the translation students' cognitions about approaches to translation teaching showed similar results. Both quantitative and qualitative data showed that the translation students' cognitions contained elements from both the transmissionist-oriented and transformationist-oriented concepts of teaching and learning.

Students' prior learning experiences and the socio-cultural contexts were the major factors influencing their cognitions about approaches to translation teaching. The extent to which the teachers' and students' diversity, such as their personality and ability, would affect the students' cognitions was unclear, although this factor was identified by the qualitative data to influence their cognitions. Therefore, more evidence is needed to explore this.

7.2.4 Complex interactions

The findings suggested a complex relationship between the translation teachers' cognitions and teaching practices, as both consistencies and inconsistencies were found. Situational factors have been identified as the major cause to such inconsistencies, particularly the classroom contexts, such as teachers' experiences and students' needs, which were found to be a powerful factor in the incongruences between the teachers' cognitions and teaching practices. Teacher motivation and teachers' translation ability were also factors that may explain the inconsistencies.

The findings also revealed complex interactions between translation teachers' and students' cognitions. In general, the teachers and students shared similar cognitions, as they acknowledged the importance of the transformationist-oriented approaches to translation teaching but did not neglect the transmissionist-oriented approaches. However, the quantitative and qualitative data results showed that, regarding specific elements, translation teachers' and students' cognitions about the transmissionist-oriented and the transformationist-oriented approaches appeared to differ. Therefore, future studies could explore teachers' and students' cognitions regarding specific elements of translation teaching and learning.

7.3 Contributions

7.3.1 Theoretical contribution

As one of the few exploratory studies to empirically investigate teacher cognitions and teaching practices in the context of translator training in China, this study offers multiple theoretical insights into the field of teacher cognition and educational research, particularly in relation to translator education.

Firstly, this study contributes to the literature on translation teacher cognition by drawing on and applying research from the field of language teacher cognition. Research into the language teacher cognition has revealed several strands: 1) understanding the complexity of the concept of teacher cognition as an umbrella term to describe a group of mental characteristics, such as teacher beliefs, knowledge, theories, and attitudes (Borg, 2003b, 2015b; L. X. Gao & Zhang, 2020); 2) factors contributing to teacher cognition; 3) relationships between teacher cognition and teaching practice; 4) factors influencing the relationship between teacher cognition and teaching practice, especially factors that constrain the relationship. The insights that emerged in these strands served as the theoretical framework to guide the current study. The results of the current study support that these insights can be applied to the research into translation teacher cognition. Therefore, the current study not only brings knowledge from teacher cognition and education research into translation studies but also contributes to the research into teacher cognition from the context of translator education.

Secondly, this study not only investigated translation teacher cognitions but also incorporated student cognition into the exploration of teacher cognition. This follows research on language teacher cognition, which links the teachers' cognitions to the students' cognitions in a single study in order to gain a more comprehensive picture of how language teaching should incorporate the learner's individual needs (Kubanyiova & Feryok, 2015; Schulz, 2001; Tsui, 2013). Drawing on Kiraly's (2000) socio-constructivism of translation teaching and learning, translation learning is a social process that occurs through learners' interaction with teachers and peers. Thus, by examining both the translation teachers' and students' cognitions and the interplay between them has allowed for a more comprehensive understanding of the dynamics in

translation classrooms. The study drawing on the literature on the interplay between teacher cognition and student cognition in the language teacher research field identified that a mismatch between them would cause problems, such as ineffectiveness of teaching and de-motivation of learning (Schulz, 2001; Truong, 2021; T. Wang, 2019; T. Wang et al., 2015). Therefore, the mismatch between translation teachers' and students' cognitions may inform future research on translation teacher and student cognitions to bridge the gaps between and promote quality translation teaching and learning.

Thirdly, the current study revealed that internal factors were active in causing the mismatch between translation teachers' cognitions and enacted teaching practices. Previous literature on the relationship between teacher cognition and teaching practice identified the role of situational factors in causing inconsistent relationships (Borg, 2019; G. Hu, 2005; D. Wu, Zhang, et al., 2019; Yuan & Stapleton, 2020). The current study contributed further internal factors, such as translation teachers' translation ability and teachers' motivation; teachers' translation ability emerged as a unique influencing factor in the context of translator education. This confirmed that research on teacher cognition needs to consider the context of the research, as teachers' cognitions may be influenced by the social and institutional contexts in which teachers work (Borg, 2003b, 2015b; L. X. Gao & Zhang, 2020; Sanchez & Borg, 2014; C. Sun et al., 2022).

7.3.2 Methodological contribution

Firstly, the current study provided direct evidence for Borg's (2019) claim that mixed methods research is well-established in the field of education research, and there are great opportunities to combine quantitative and qualitative measures to further explore language teacher cognition. Using only a quantitative or qualitative method in a single study might have limitations (Creswell, 2018; Creswell & Plano Clark, 2017). For

instance, with research on language teacher cognition, using the qualitative methods alone may not be suitable for studying teacher cognition on a large scale and identifying trends (Borg, 2019), while using the quantitative methods alone may be difficult to find personal differences as beliefs are personal and differ from context to context (Alhamami, 2019; Borg, 2017; Pajares, 1992; H. Zhao & Zhang, 2022). Thus, the current study used a mixed-methods design, integrating both the quantitative and qualitative data to investigate translation teachers' cognitions and teaching practices to enable a comprehensive understanding of the research foci. The results of this study are in accordance with researchers who recommended the use of a mixed-methods research design to examine teacher cognition (e.g., J. Brown et al., 2014; L. Jiang et al., 2019; D. Wu, 2020; D. Wu, Zhang et al., 2019; W. Zhang & Zhang, 2022).

Secondly, the results obtained from both the data sources in the current study were partially different due to a convergent mixed-methods design adopted in this study. The inconsistencies between the quantitative and qualitative data results offer an opportunity to explore the causes of such inconsistencies to inform future research on related topics. In this study, each research question was answered by using the quantitative and qualitative methods simultaneously. As the results from the two databases were slightly divergent, the reasons for these discrepancies suggested that there are opportunities for future studies to explore these issues. Therefore, this study provides further evidence of the importance of utilising multiple instruments when studying translation teachers' cognitions and teaching practices.

7.4 Pedagogical implications

7.4.1 Implications for policy-making in translator education

This study has implications for the policy-makers in translation education. Firstly, the

Chinese Ministry of Education (MoE) should consider the opinions of teachers regarding the guidelines for academic promotion. As mentioned in Chapter 1, a current problem in translation teaching in China is the lack of motivation among novice translation teachers to engage in translation practice, as the emphasis is on academic publications for promotion. Therefore, it may be necessary for the MoE to include translation practice achievements, such as conducting official translation projects and publishing translation works, in the guidelines for academic promotion. This would likely address translation teachers' concerns and provide them with more time to gain more translation experience, contributing to more effective teaching.

Secondly, the qualitative findings revealed that large class sizes were a contextual factor hindering the implementation of the TFoA by translation teachers. To address this issue, institutional policy-makers could reduce class size to enable teachers to engage in more transformationist-oriented teaching activities, especially by providing individualised feedback. Many teachers interviewed emphasised the importance of offering and discussing specific feedback with students individually. By reducing class sizes, teachers would have the necessary time and energy to do so.

7.4.2 Implications for translation teacher training

As discussed in Section 2.2.2.1, teacher education programmes have been found to influence teachers' cognitions. However, such programmes are currently lacking in translator education. Therefore, it is crucial to address this gap by establishing pre-service translation teacher education programmes.

Research in the field of language teacher cognition suggested that pre-service language teachers' learning experiences and practicum experiences in pre-service teachers' training programmes are the main sources of their cognitions (Borg, 2003b; J. Huang

et al., 2021; Mohammadabadi et al., 2019; Yüksel & Başaran, 2019). These training programmes are crucial for pre-service teachers to acquire knowledge about language teaching, develop practical teaching approaches, gain confidence in their teaching abilities, and prepare for ongoing professional growth (Berg & Smith, 2016; Farrell, 2020). However, translation teachers often lack resources and experiences due to the absence of translator trainers' programmes (Pym, 2011; Tao, 2016; D. Wu, Wei, et al., 2019).

Providing training for translation teachers before they enter the teaching profession can help them develop well-structured and informed cognitions about translation teaching. Accordingly, they would have opportunities and abilities to adjust their cognitions by an awareness that their cognitions do not align with teaching practices. Fortunately, Chinese policy-makers have taken a step forward by approving the establishment of the Doctor of Translation and Interpreting (DTI) (Ministry of Education of People's Republic of China, 2022), which aims to develop expert translators with practical skills. This initiative to train translator trainers partially meets the needs of tertiary translation teachers through learning translation subject knowledge and participating in an internship in various industries that require professional translators, such as politics, economy, foreign affairs, and medicine (Feng & Zhong, 2023; Y. Huang, 2022; Mu, 2022). With the establishment of DTI, it is hoped that translator trainers will be well-prepared, have a new understanding of translation teaching, and carry out more effective teaching practices.

7.4.3 Implications for curriculum design

The current study has implications for translation curriculum design. Based on the outcomes of this study, it is necessary to incorporate both the TMoA and TFoA

approaches into curriculum design, with an emphasis on balancing both approaches.

The current study presents evidence that most teachers and students believed that the TMoA play a critical role in translator education because such approaches assist students in developing their translation competence, such as a strong foundation of language that can be applied to contexts across different industries. Many studies have also recognised the significance of traditional teacher-controlled approaches to translation teaching (Prieto & Linres, 2010; Yan et al., 2018), especially in the initial training phase (Gile, 2009; Kraeva & Krasnopeyeva, 2017).

The teachers and students also believed in the influential role of the TFoA in shaping traditional translation classrooms with educational concepts rooted in constructivism and socio-constructivism. They considered the TFoA to develop students' socially situated competence, including communication, emergency response, and planning. These ideas have been widely supported by the translator education community (Abdallah, 2011; González-Davies & Enríquez-Raído, 2016; Kiraly, 2000; Neves, 2022).

It is important, however, to recognise that both approaches have drawbacks. The findings of this study suggested that in the TMoA, teachers may exert too much control over the teaching and learning process, thus preventing autonomous learning. In contrast, in the TFoA, the students may feel that they learned nothing due to their peers' lower learning abilities and a lack of necessary support from teachers.

The results of the current study advocate that both the TMoA and TFoA should be incorporated into translator education curricula to create a balanced learning environment. This may help students develop a solid language foundation, the fundamental skill required by professional translators, and also achieve the competence

needed in the workplace. Kiraly (2006) claimed that a combination of multiple approaches to translation teaching, including transmissionist and transformationist approaches, would maximise learning outcomes.

7.4.4 Implications for translation teaching

The research findings and the discussions in the previous chapters also provide implications for translation teaching. Firstly, it is crucial to address the discrepancies between translation teachers' cognitions and teaching practices. The current study revealed that the translation teachers' cognitions about approaches to translation teachers were not always consistent with their teaching practices. However, many scholars have claimed that teachers' cognitions impact the way they teach and the choices they make during classroom instruction (Borg, 2015a; Pajares, 1992; Richardson et al., 1991; Q. Sun & Zhang, 2021; H. Zhao & Zhang, 2022). This suggests that a mismatch between teachers' cognitions and their teaching practices may cause ineffective teaching, and consequently, affect students' learning outcomes. Therefore, it is important for translation teachers to reflect regularly on their ideas about approaches to translation teaching in real teaching contexts. They need to make adjustments to ensure consistency between their cognitions and teaching practices to ensure their teaching is more effective.

Secondly, it is necessary to address the discrepancies between translation teachers' and students' cognitions about approaches to translation teaching in the classroom. Scholars who linked teachers' cognitions to their students in a single study have suggested that the inconsistencies between teachers' and students' cognitions can cause unfavourable teaching outcomes, reduced student motivation and satisfaction, and even discontinuation of learning (X. Li, 2018; Truong, 2021; D. Wu, 2020). In this study, the

translation teachers' cognitions about approaches to translation teaching have differed in some ways from their students. Therefore, it is crucial for translation teachers to achieve a balance between their own cognitions and those of their students. Two methods can be employed to bridge this gap. First, as suggested by Li (2018) and Wu (2020), teachers can reflect on their own cognitions and then discuss them with students to help them better understand teachers' cognitions. Second, teachers could use technology to encourage student collaboration and thus bridge the gap between their cognitions.

7.5 Limitations and recommendations for future research

7.5.1 Limitations

Every study has limitations because it is practically impossible to design a study that considers all variables, and this study is no exception. Firstly, the self-developed questionnaires adopted in this study could become more standardised by undergoing more rigorous validation procedures, such as using exploratory factor analysis (EFA) and confirmatory factor analysis (CFA) to test the construct of the questionnaires (Dörnyei & Taguchi, 2009; Field, 2018). According to Dörnyei and Taguchi (2009), self-developed questionnaires designed specifically to answer particular research questions may not be able to provide detailed measures for every aspect of validity and reliability. However, it is essential for the questionnaires to have appropriate reliability in at least internal consistency. In the current study, the indices of internal consistency were provided for each sub-questionnaire. Therefore, conducting EFA and CFA for different populations can further enhance the validity of the questionnaires and make the questionnaires more standardised.

Secondly, the questionnaires may not adequately reflect respondents' ideas due to the impact of COVID-19. As discussed in the previous Chapters, research into teacher cognition is, to a great extent, influenced by the research context. The original research design of this study aimed to conduct the investigation in the pre-COVID pandemic era in which all teaching scenarios would occur in person. However, the outbreak of COVID-19 changed physical teaching activities to an online mode. However, the most recent studies have suggested that teachers' cognitions and teaching practices would be challenged in online teaching scenarios (L. X. Gao & Zhang, 2020; Y. Gao & Cui, 2022; MacIntyre et al., 2020). This applied to the questionnaire respondents in this study; it was planned to collect questionnaire data before the pandemic, but data collection started after the pandemic outbreak.

Thirdly, interviews and classroom observations may inadequately collect participants' ideas or observe biased teaching practices. The reasons for such limitations are as follows: First, interviews might inadequately reveal the teachers' and students' cognitions due to the pandemic, as discussed above; second, both the teacher and student participants were able to be interviewed only once due to the teachers' heavy workload and my limited capacity to conduct multiple interviews for 20 student participants; third, the teacher participants may unconsciously tailor teaching for my observation, even they have signed the Consent Form (CF), agreeing that they would teach as usual; fourth, I had no opportunities to observe the students' learning activities outside classrooms, as all classroom observations were online due to the data collection regulations of the University of Auckland during the COVID pandemic. Therefore, the students' after-class learning activities, such as group discussions and teachers' feedback, could not be observed. Conducting more observations inside and outside classrooms would have led to more authentic observations of the teachers' teaching

practices.

Furthermore, I could not collect the teaching documents for data triangulation due to the remote collection of the qualitative data. Teaching documents serve as essential components for data triangulation for researchers to comprehensively understand the teacher participant's teaching practices (Borg, 2015b; L. Li, 2013; D. Wu et al., 2021); however, most teaching documents are confidential and cannot be sent via email. Therefore, I could only collect the data through interviews and classroom observations. If I had been able to review these documents in person, the qualitative data would have been more reliable by collecting multiple forms of data for triangulation.

Lastly, I have not observed how translation teachers and students used translation technology in translation practice and translation teaching. Given the rapid development of technology, particularly the prevalence of artificial intelligence, such as Chat-GPT and machine learning technology, translation and translation teaching are experiencing challenges. These technologies have brought new opportunities for the translation field due to their high quality of automatically generated translations (Venkatesan, 2023). It is, therefore, essential for translator teachers and students to be fully prepared to use these technologies in translation practice. However, the current study did not collect relevant data to understand technology use in translation teaching and learning due to the limitations of the research design. If there were possibilities to observe translation teachers' and students' usage of translation technology, the current study would better accommodate the need to integrate translation technology into translation curricula and provide implications to translator education.

7.5.2 Recommendations for future research

Based on the insights from this study, there are several directions for future research on

translator education. Firstly, extending the research context to a larger population, including all academic levels of translation teachers and students. As discussed in Section 7.4.4, China has recently approved a new professional translator training programme at the doctoral level, Doctor of Translation and Interpreting, establishing a complete translator education system that would be taking place in China. Therefore, future research could include translation teachers and students from each academic training level to have a deeper and more comprehensive understanding of translation teachers' and students' cognitions, as well as the teaching practices of translation teachers from different training levels.

Secondly, a comparison of Chinese translation teachers' cognitions and teaching practices with teachers from other countries would be of great importance to broaden our understanding of translation teacher cognition. As the research field of translation studies in China, including translation theories and translator education, has borrowed many experiences from the West (Mu & Zou, 2015; G. Wu, 2023), the collection of data from China and Europe to investigate similarities and differences in translation teachers' cognitions about translator training could provide further insights into the development of translation teaching and learning.

Thirdly, as the ultimate goal of education is to enhance students' learning outcomes, research into the relationship between translation teachers' cognitions and their students' learning outcomes is recommended. With the advancement of translator education, a focus on translation teacher cognition should be prevalent in translation studies. Moreover, translation students' learning outcomes are relevant to their employability, which is already a research focus in translator education. Therefore, it is advised that future research links translation teachers' cognitions to students' employability to improve approaches to translation teaching and enhance teaching quality and learning

outcomes.

Lastly, considering the immense impact of artificial intelligence on translation, investigations into translation teachers' and students' cognitions about technology use or their cognitions about technology in translation teaching approaches are recommended. With the pivotal role played by AI-driven language models, translation teachers' and students' cognitions about these models may reveal their preparedness, willingness, and awareness of using these technologies. Therefore, it would be of great importance for future research to focus on these topics to improve translation programmes as required by the technology-oriented era.

Appendices

Appendix A Chinese Translation Teacher Questionnaire

Kia ora!

This is a survey for Chinese university translation teachers who teach C-E/E-C translation in postgraduate programmes. It aims to investigate teachers' opinions on approaches to translation teaching and their teaching practices. This is an anonymous survey, and your personal information will be confidentially maintained. All the data collected from this survey will only be used to support my PhD study.

I would like to invite you to complete this survey. It may take you about 10 minutes to fill in it. There are no right or wrong answers. Please feel free to answer these questions based on your actual feelings. You will be rewarded with a chance to win online cash credit for your contributions.

Thank you！

Jia Jia

Faculty of Education and Social Work, University of Auckland

j.jia@auckland.ac.nz

1.Teacher Demographic Questionnaire

Please provide the following information by ticking √ in the box or writing your response in the space.

1.Gender: □ Male □ Female
2.Age: □20-29 □ 30-39 □40-49 □ 50-59 □ 60 and above
3. Qualification : □ Bachelor □ Master □ PhD
4.Major or research subject while acquiring the above qualification: □Translation studies □Linguistics □Applied linguistics □Education □Others
5.Academic rank: □ Assistant lecturer □ Lecturer □ Associate professor □ Professor
6. Translation teaching experience: □ Less than 5 years □ 5-10 years □ 11-15 years □ 16-20 years □ 21-25 years □ 26-30 years □ 31 years or above
7. Translation practice experience: □ None □ Barely □Limited □Experienced
8. Overseas study experience: □ None □ Yes， year month(s) in total
9. University level：□ 985 Project □ 211 Project □ Other
10. Translation programmes (You may choose more than one): □ MTI □M.A.
11. Other working experience（you may choose more than one）: □ None □ Professor translator □ Language teacher □ Other （Please specify）

2.Teacher cognitions about translation teaching questionnaire-TCTTQ

To what extent, do you agree with the following statements?

1= Disagree 2= Somewhat agree 3= Moderately agree 4= Strongly agree 5= Extremely agree

I think while teaching translation:

1.The teacher should use a textbook to teach.	1	2	3	4	5
2. The teacher should guide students to figure out translation errors with self-reflections.	1	2	3	4	5
3. The teacher acts as a knowledge distributor in the students' learning process.	1	2	3	4	5
4. The teacher requests students to complete translation assignments through group work.	1	2	3	4	5
5. The teacher and students collaboratively work out a set of criteria to assess students' translation.	1	2	3	4	5
6. The students decide what they want to learn.	1	2	3	4	5
7. The teacher acts as a learning facilitator in students' learning process.	1	2	3	4	5
8. In translation class, students work on a translation project in a group with peers.	1	2	3	4	5
9. The quality of students' translation should be evaluated by the teacher, based on his/her own criteria.	1	2	3	4	5
10. The teacher should immediately correct students' translation errors in the class.	1	2	3	4	5
11. The teacher requests students to complete translation assignments through individual efforts.	1	2	3	4	5
12. Students' learning performances are evaluated through their performances in the translation industry.	1	2	3	4	5
13. In translation class, the teacher delivers translation knowledge and skills, while students are taking notes.	1	2	3	4	5

14. The teacher should use authentic materials from real commissioned tasks to teach.	1	2	3	4	5
15. The teacher decides what content to teach in translation class.	1	2	3	4	5
16. Students' learning performances are evaluated by exams.	1	2	3	4	5

3.Factors that influence teacher cognitions questionnaire-FITCQ

How influential are the following factors on the formation of the above ideas about translation teaching?

1= Insignificant 2= Minor 3= Moderate 4= Major 5= Severe

1.My learning experience as a student in schools.	1	2	3	4	5
2.My academic communication with teachers from other universities.	1	2	3	4	5
3. My translation practice experience.	1	2	3	4	5
4. My understanding of Chinese education concepts.	1	2	3	4	5
5. My working environment.	1	2	3	4	5
6. The translation literature that I have read.	1	2	3	4	5
7. My understanding of the needs of the translation industry.	1	2	3	4	5
8. My translation teaching experience in the classroom.	1	2	3	4	5
9. My experience of observing other translation teachers' classes.	1	2	3	4	5

4. Teaching practice questionnaire-TPQ

How often do you include the following activities in your translation courses?

1= Never 2 = Rarely 3 = Sometimes 4 = Frequently 5 = Very frequently

1.I use a textbook to teach.	1	2	3	4	5
2. I guide students to figure out translation errors with self-reflections.	1	2	3	4	5
3. I pass on translation sub-skills to the students.	1	2	3	4	5
4. I organise students into groups to complete translation assignments.	1	2	3	4	5
5. Students and I work collaboratively out a set of criteria to assess students' translation.	1	2	3	4	5
6. Students decide what content they would like to learn in translation classes.	1	2	3	4	5
7. I act as a learning facilitator for the students.	1	2	3	4	5
8. Students work on a translation project in a group with peers.	1	2	3	4	5
9. I evaluate students' translation quality based on my own criteria.	1	2	3	4	5
10. I immediately correct students' translation errors in the class.	1	2	3	4	5
11. I require students to individually complete translation assignments.	1	2	3	4	5
12. I evaluate students' learning through their performance in the translation industry.	1	2	3	4	5
13. I am delivering the translation knowledge, while students are taking notes.	1	2	3	4	5
14. I use authentic materials from real commissioned tasks to teach.	1	2	3	4	5

15. I decide on the teaching content in translation classes.	1	2	3	4	5
16. I ask students to take exams to evaluate their learning performance.	1	2	3	4	5

5.Factors that influence teaching practices questionnaire-FITPQ

How influential are the following factors on the inclusion of the above activities in your classroom?

1= Insignificant 2= Minor 3= Moderate 4= Major 5= Severe

1.My experiences in the translation industry	1	2	3	4	5
2. My teaching experiences in the translation classroom	1	2	3	4	5
3. Teaching objectives of the programmes	1	2	3	4	5
4.Requirements of the final exams	1	2	3	4	5
5. Facilities and resources offered by my working institutions	1	2	3	4	5
6. The limited time of classroom teaching	1	2	3	4	5
7. Students' needs	1	2	3	4	5
8. The requirements of the faculty syllabus	1	2	3	4	5

Appendix B Chinese Translation Student Questionnaire

Kia ora!

This is a survey for Chinese university translation students who learn C-E/E-C translation in postgraduate programmes. It aims to investigate students' opinions on approaches to translation teaching. This is an anonymous survey, and your personal information will be confidentially maintained. All the data collected from this survey will only be used to support my PhD study.

I would like to invite you to complete this survey. It may take you about 5-10 minutes to fill in it. There are no right or wrong answers. Please feel free to answer these questions based on your actual feels. You will be rewarded with a chance to win online cash credit for your contributions.

Thank you！

Jia Jia

Faculty of Education and Social Work, University of Auckland

j.jia@auckland.ac.nz

1.Student demographic questionnaire-SDQ

Please provide the following information by ticking √ in the box or writing your response in the space.

1.Gender: □ Male □ Female
2.Your current programme: □MTI □M.A.
3. Grade: □ First year □Second year □ Third year
4. Bachelor's degree: □ Translation □ English □ Others
5. Translation practice experience: □ None □ barely □ limited □ some □plentiful
6.Translation certificates: □ CATTI-1 □ CATTI-2 □ CATTI-3 □ None □ Others (Please specify)
7. University level：□ 985 Project □ 211 Project □ Other

2.Student cognitions about translation teaching questionnaire-SCTTQ

To what extent, do you agree with the following statements?

1= Disagree 2= Somewhat agree 3= Moderately agree 4= Strongly agree 5= Extremely agree

I think while learning translation:

1.The teacher should use a textbook to teach.	1	2	3	4	5
2. The teacher should guide students to figure out translation errors with self-reflections.	1	2	3	4	5
3. The teacher acts as a knowledge distributor in the students' learning process.	1	2	3	4	5
4. The teacher requests students to complete translation assignments through group work.	1	2	3	4	5
5. The teacher and students collaboratively work out a set of criteria to assess students' translation.	1	2	3	4	5
6. The students decide what they want to learn.	1	2	3	4	5
7. The teacher acts as a learning facilitator in students' learning process.	1	2	3	4	5
8. In translation class, students work on a translation project in a group with peers.	1	2	3	4	5
9. The quality of students' translation should be evaluated by the teacher, based on his/her own criteria.	1	2	3	4	5
10. The teacher should immediately correct students' translation errors in the class.	1	2	3	4	5
11. The teacher requests students to complete translation assignments through individual efforts.	1	2	3	4	5
12. Students' learning performances are evaluated through their performances in the translation industry.	1	2	3	4	5
13. In translation class, the teacher delivers translation knowledge and skills, while students are taking notes.	1	2	3	4	5
14. The teacher should use authentic materials from real commissioned tasks to teach.	1	2	3	4	5
15. The teacher decides what content to teach in translation class.	1	2	3	4	5

16. Students' learning performances are evaluated by exams.	1	2	3	4	5

2.Factors that influence student cognitions questionnaire-FISCQ

How influential are the following factors on the formation of the above ideas about translation teaching?

1= Insignificant 2= Minor 3= Moderate 4= Major 5= Severe

1.The way your teacher taught in the undergraduate programme	1	2	3	4	5
2.Your experiences of group learning	1	2	3	4	5
3. Your own learning ability	1	2	3	4	5
4. Your experiences of preparing for various exams and tests	1	2	3	4	5
5. Your teacher's personality	1	2	3	4	5
6. Your own personality	1	2	3	4	5
7. Chinese education concepts	1	2	3	4	5
8. Learning environment of your university	1	2	3	4	5
9. Your understanding of your teachers' teaching ability	1	2	3	4	5
10. Your learning experiences prior to doing your master's degree	1	2	3	4	5
11. Your communication with peers from other universities	1	2	3	4	5
12. Employment needs	1	2	3	4	5

Appendix C Teacher Interview Guide

Greetings to the teachers for their participation. Making a brief introduction to the teacher participants of the aim of this interview, the right to refuse to answer the questions being asked, the right to withdraw the data they contributed, and the measures I will take to assure confidentiality.

1. Can you generally talk about yourself? (age, academic ranking, teaching experience, educational background, any training received)
2. Can you describe your learning experiences as learners in undergraduate and graduate studies? Especially teaching methods your teachers used to teach?
3. What is your understanding of translation teaching?
4. What teaching and learning elements are included in your translation teaching class?
5. Can you describe the approaches or methods you use to address the elements mentioned above in your translation class?
6. What are the key features or principles of the approaches or methods you described above?
7. Why do you use these approaches or methods in your translation teaching?
8. What are the challenges you think in implementing these approaches or methods?
9. When I observed your classes, I found that [describe the problems or issues I am interested in]. Can you explain why you taught in this way?
10. Do you have any questions about our conversations?

Thank you for your time and participation. If you have any questions, please feel free to contact me.

Appendix D Student Interview Guide

Greetings to the students for their participation. Making a brief introduction to the student participants of the aim of this interview, the right to refuse to answer the questions being asked, the right to withdraw the data they contributed, and the measures I will take to assure confidentiality.

1. Can you generally talk about yourself? (age, teaching experience, educational background, any training received, translation experience)
2. What is your understanding of translation teaching?
3. What are teaching and learning elements included in your translation learning?
4. How do you understand the approaches or methods to address the above teaching and learning elements in your translation learning?
5. What are the key features or principles of the approaches or methods you described above?
6. Why do you think so?

Thank you for your time and participation. If you have any questions, please feel free to contact me.

Appendix E Classroom Observation Scheme

Teacher:

Course name:

Date:

Times of observation:

Teaching element	Time allocated	Note

Appendix F ANOVA Test Results for Cognition and Practice Factors

Table F1 ANOVA results of teachers' cognitions by academic rankings

Source		*df*	*F*	*p*
Transmissionist-oriented approaches				
	Between	3	.288	.834
	Within	11		
Transformationist-oriented approaches				
	Between	3	1.597	.194
	Within	118		

Table F2 ANOVA results of teachers' cognitions by years of translation teaching experience

Source		*df*	*F*	*p*
Transmissionist-oriented approaches				
	Between	6	1.528	.175
	Within	115		
Transformationist-oriented approaches				
	Between	6	.479	.823
	Within	115		

Table F3 ANOVA results of teachers' cognitions by levels of translation practice experience

Source		*df*	*F*	*p*
Transmissionist-oriented approaches				
	Between	3	.703	.552
	Within	118		
Transformationist-oriented approaches				
	Between	3	.754	.522
	Within	118		

Table F4 ANOVA results of cognitions by qualifications

Source		*df*	*F*	*p*
Transmissionist-oriented approaches				
	Between	2	1.571	.168
	Within	119		
Transformationist-oriented approaches				
	Between	2	.403	.669
	Within	119		

Table F5 ANOVA results of teachers' teaching practices by age

Source		*df*	*F*	*p*
Transmissionist-oriented approaches				
	Between	4	1.435	.227
	Within	117		
Transformationist-oriented approaches				
	Between	4	.473	.755
	Within	117		

Table F6 ANOVA results of teachers' teaching practices by academic rankings

Source		*df*	*F*	*p*
Transmissionist-oriented approaches				
	Between	3	.331	.803
	Within	118		
Transformationist-oriented approaches				
	Between	3	.953	.417
	Within	118		

Table F7 ANOVA results of teachers' teaching practices by years of translation teaching experience

Source		*df*	*F*	*p*
Transmissionist-oriented approaches				
	Between	6	.332	.919
	Within	115		
Transformationist-oriented approaches				
	Between	6	.802	.570
	Within	115		

Table F8 ANOVA results of teachers' teaching practices by level of translation practice experience

Source		*df*	*F*	*p*
Transmissionist-oriented approaches				
	Between	3	.004	1.000
	Within	118		
Transformationist-oriented approaches				
	Between	3	.639	.591
	Within	118		

Table F9 ANOVA results of teachers' teaching practices by programmes

Source		*df*	*F*	*p*
Transmissionist-oriented approaches				
	Between	2	.446	.641
	Within	119		
Transformationist-oriented approaches				
	Between	2	1.234	.255
	Within	119		

Appendix G Participant Information Sheet for Teachers

PARTICIPANT INFORMATION SHEET
(TEACHER)

Project title: Approaches to Translation Teaching: An exploratory Study of Translation Teacher Cognitions, Teaching Practices and Student Cognitions

Researcher: Jia Jia

Introduction

My name is Jia Jia, and I am a PhD student at the Faculty of Education, University of Auckland, under the supervision of Professor Lawrence Jun Zhang and Dr. Aaron J. Wilson.

Project Description

My research is guided by the questions: "How do translation teachers' cognitions interact with their teaching practices? and what are the relationships between translation teachers' and students' cognitions?" Participants of this research will consist of teachers who taught translation practice-related courses in MTI and MA programmes and students who studied translation in the two programs. I would like to gather the views of teachers and students working and learning in such contexts and invite you to participate in this research.

This study includes two stages. In stage one, teachers and students will be invited to complete a web-based survey which will include two questionnaires: Chinese Translation Teacher Questionnaire (CTTQ) and Chinese Translation Student Questionnaire (CTSQ). Stage two involves teachers' and students' interviews and classroom observations.

Teacher Involvement

Your participation in this study is voluntary. You are welcome to participate in both stage one and two or just one stage, and you are also free to choose not to participate.

Stage one

In stage one, you will be invited to complete the CTTQ. If you consent to participate in the survey, you can use the link (Link address: _____) to get access to the web-based questionnaire. If this link is unavailable, please feel free to contact me, and I will send you an available link.

Stage Two

If you agree to participate in the second stage, I will first conduce two times of classroom observations. The time will last 180 minutes in total. I will put an audio-recorder on the teaching desk. In the meantime, I will take field notes to record my observations, but I will not write down your personal information in the notes. During the observations, my role is a non-participant observer in order to make you teach in a natural setting without designing special

events for this research. My observation is a way to describe your teaching practices but not to evaluate your class. The audio-recording of the classroom observations will be transcribed. The transcriptions, together with the field notes, will only be reached by myself and my supervisors. After the classroom observations, you will be interviewed with a total time of 90-120 minutes. The interviews will be audio-recorded and transcribed. The transcriptions of your interviews will only be reached by myself and my supervisors. The interview will be conducted in a place assigned by you to make you feel comfortable.

Your Rights and Options

Participation is completely voluntary. You can opt to participate in both stages of the research or only in one. Your Dean has given a written assurance that your participation will not affect your career. You may indicate your intended participation on the consent form. If you wish to withdraw from the research, you may do so at any time without giving a reason. You may also withdraw all data that you have contributed within three weeks after data collection. However, the web-based questionnaire is anonymous, and therefore, you cannot withdraw the data once you have submitted the questionnaire.

You have the right to keep copies of your interview recordings and observation recordings. You will also be given the right to review the transcripts of your interviews and observations and return your feedback within a week.

Benefits and Risks

First, you will have an opportunity to have a lucky draw of a $20 gift voucher for completing the questionnaire, and you will receive a $40 gift voucher for participating in the case study.

Second, the literature reveals that video recording may make the teacher feel uncomfortable. Therefore, I will replace it with audio recording to minimize the pressure on you when you are teaching. In addition, this recording is for my description of your teaching activities and for you to reflect on your teaching practices, but not for evaluating your teaching.

Data management

The data collected and your signed Consent Form will be kept at the University of Auckland. In detail, paper data and the sighed Consent Forms will be separately locked in the cabinets in my supervisor's office at the University of Auckland, and the digital data will be saved and backed up to the University's portal with a PIN only known by myself. Any type of data will be kept for up to six years, after which they will be destroyed.

Data will be used as the foundation of my doctoral thesis and for further academic purposes, such as publications and conference presentations. Moreover, I will not identify you or your university by name. If you would like to have the research findings, please indicate it on the Consent Form, and I will be glad to share with you the summarized results.

Anonymity and confidentiality

This research is confidential. Consequently, I will not discuss the questionnaire responses, the interviews and observations with you. More importantly, you will also be asked to keep your participation confidential.

The web-based questionnaire is anonymous. I will publish it onto an open portal with configuring not to collect your IP address. You will only be asked to provide basic information that would not be traceable for identifying your identity. Once submitted, you cannot withdraw your responses.

Excerpts from the interviews and observations will be analysed and discussed in my doctoral thesis and will be used for academic publications or conference presentations in the future. When analysing and reporting the data collected from you, pseudonyms will be used to protect your identity from being identified by traceable information.

Contact details

Thank you for taking the time to read this information sheet. If you have any inquiries or questions, please feel free to contact anyone in the following contact list.

Researcher	Main supervisor	Co-supervisor
Jia Jia UOA contact details School of Curriculum and Pedagogy, Faculty of Education and Social Work, The University of Auckland, Gate 3, 74 Epsom Ave, Auckland j.jia@auckland.ac.nz Local contact details 2 Baiyun Dadaobei, Baiyun District, Guangzhou 510420, China jiajiawk@foxmail.com	Professor Lawrence Jun Zhang School of Curriculum and Pedagogy, Faculty of Education and Social Work, The University of Auckland, Gate 3, 74 Epsom Ave, Auckland 1023, New Zealand lj.zhang@auckland.ac.nz Ph: +64 9 373 7999 ext 48750	Dr. Aaron J. Wilson School of Curriculum and Pedagogy, Faculty of Education and Social Work, The University of Auckland, Gate 3, 74 Epsom Ave, Auckland 1023, New Zealand aj.wilson@auckland.ac.nz Ph: +64 9 373 7999 Ext 48574

You may also contact the head of the School of Curriculum and Pedagogy, Associate Professor Katie Fitzpatrick at k.fitzpatrick@auckland.ac.nz or +64 9 373 7999 ext 48652.

For any queries regarding ethical concerns, you may contact the Chair, The University of Auckland Human Participants Ethics Committee, The University of Auckland, Research Office, Private Bag 92019, Auckland 1142, New Zealand. Telephone 09 373-7999 ext. 83711. Email: ro-ethics@auckland.ac.nz.

APPROVED BY THE UNIVERSITY OF AUCKLAND HUMAN PARTICPANTS ETHICS COMMITTEE ON 21 NOVEMBER, 2019 FOR A PERIOD OF THREE YEARS.
REFERENCE NUMBER 023496

Appendix H Participant Information Sheet for Students

PARTICIPANT INFORMATION SHEET
(STUDENT)

Project title: Approaches to Translation Teaching: An exploratory Study of Translation Teacher Cognitions, Teaching Practices and Student Cognitions

Researcher: Jia Jia

Introduction
My name is Jia Jia, and I am a PhD student at the Faculty of Education, University of Auckland, under the supervision of Professor Lawrence Jun Zhang and Dr. Aaron J. Wilson.

Project Description
My research is guided by the questions: "How do translation teachers' cognitions interact with their teaching practices? and what are the relationships between translation teachers' and students' cognitions?" Participants of this research will consist of teachers who taught translation practice-related courses in MTI and MA programmes and students who studied translation in the two programs. I would like to gather the views of teachers and students working and learning in such contexts and invite you to participate in this research.
This study includes two stages. In stage one, teachers and students will be invited to complete a web-based survey which will include two questionnaires: Chinese Translation Teacher Questionnaire (CTTQ) and Chinese Translation Student Questionnaire (CTSQ). Stage two involves teachers' and students' interviews and classroom observations.

Student Involvement
Your participation in this study is voluntary. You are welcome to participate in both stage one and two or just one stage, and you are also free to choose not to participate.

Stage one
In stage one, you will be invited to complete the CTSQ. If you consent to participate in the survey, you can use the link (Link address: _____) to get access to the web-based questionnaire. If this link is unavailable, please feel free to contact me, and I will send you an available link.

Stage two

You will be interviewed once, with a total time of 60-90 minutes. The interviews will be audio-recorded and transcribed. The transcriptions of your interview will only be reached by myself and my supervisors. The interviews will be conducted in a place assigned by you to make you feel comfortable.

In addition to individual interviews, I will be observing your class twice. Each observation includes two consecutive sessions. Although the focus of classroom observations is teachers, teacher-student interactions will be observed by using audio-recording to help me explore teachers' cognition and practices. Consequently, your voice and interactions with your teacher may be recorded by the audio-recorder. During the observation, I will not take part in or interrupt the teaching process. I will take field notes in my notebook to record the teaching activities.
If you agree to participate, please indicate it on the Consent Form. Your participation is voluntary, and I have obtained assurance from your Dean and teacher that your decision to participate or not will not affect your grades and results evaluation. The data collected will be

used for my PhD thesis and for future academic publications or conference presentations.

Your Rights and Options

Participation is completely voluntary. You can opt to participate in both stages of the research or only in one, and you are also free to choose not to participate. Your Dean has given a written assurance that your participation will not affect your grades and evaluation. You may indicate your intended participation in the Consent Form. If you do not consent to the classroom observations, there will be a make-up lesson for you. If you wish to withdraw from the research, you may do so at any time without giving a reason. You may also withdraw all data that you have contributed within three weeks after data collection. However, the web-based questionnaire is anonymous, and therefore, you cannot withdraw the data once submitted. You have the right to keep a copy of your interview recordings. You will also be given the right to review the transcripts and return your feedback within a week.

Benefits and Risks

You will have an opportunity to have a lucky draw of a $20 gift voucher for completing the questionnaire and will receive a $10 gift voucher for participating in the case study.

Literature reveals that video recording may lead to unnatural teaching and learning behaviours. Therefore, I will replace it with audio recording to minimize the risks in observation. In addition, this recording is for my description of the teacher's teaching activity without eliciting your identity.

Data management

The data collected and your signed Consent Form will be kept at the University of Auckland. In detail, paper data and the sighed Consent Forms will be separately locked in the cabinets in my supervisor's office at the University of Auckland, and the digital data will be saved and backed up to the University's portal. All data will be kept for up to six years, after which they will be destroyed.

Data will be used as the foundation of my doctoral thesis and for further academic purposes, such as publications and conference presentations. Moreover, I will not identify you or your university by name. If you would like to have the research findings, please indicate in the Consent Form, and I will be glad to share with you the summarized results.

Anonymity and confidentiality

This research is confidential. Consequently, I will not discuss the questionnaire responses and the interviews with you. More importantly, you will also be asked to keep your participation confidential.

The web-based questionnaire is anonymous. I will publish it onto an open portal with configuring not to collect your IP address. You will only be asked to provide basic information that is not traceable to identify your identity (see the attached questionnaires). Once submitted, you cannot withdraw your responses.

Excerpts from the interviews will be analysed and discussed in my doctoral thesis and subsequent academic publications or conference presentations. When analysing and reporting the data collected from you, pseudonyms will be used to protect your identity from being identified. Although I have tried to manage confidentiality, there is always a slight chance that someone may be able to identify either the participants or the university.

Contact details

Thank you for taking the time to read this information sheet. If you have any inquiries or questions, please feel free to contact anyone in the following contact list.

Researcher	Main supervisor	Co-supervisor
Jia Jia UOA contact details School of Curriculum and Pedagogy, Faculty of Education and Social Work, The University of Auckland, Gate 3, 74 Epsom Ave, Auckland j.jia@auckland.ac.nz Local contact details 2 Baiyun Dadaobei, Baiyun District, Guangzhou 510420, China jiajiawk@foxmail.com	Professor Lawrence Jun Zhang School of Curriculum and Pedagogy, Faculty of Education and Social Work, The University of Auckland, Gate 3, 74 Epsom Ave, Auckland 1023, New Zealand lj.zhang@auckland.ac.nz Ph: +64 9 373 7999 ext 48750	Dr. Aaron J. Wilson School of Curriculum and Pedagogy, Faculty of Education and Social Work, The University of Auckland, Gate 3, 74 Epsom Ave, Auckland 1023, New Zealand aj.wilson@auckland.ac.nz Ph: +64 9 373 7999 Ext 48574

You may also contact the head of the School of Curriculum and Pedagogy, Associate Professor Katie Fitzpatrick at k.fitzpatrick@auckland.ac.nz or +64 9 373 7999 ext 48652.
For any queries regarding ethical concerns, you may contact the Chair, The University of Auckland Human Participants Ethics Committee, The University of Auckland, Research Office, Private Bag 92019, Auckland 1142, New Zealand. Telephone 09 373-7999 ext. 83711. Email: ro-ethics@auckland.ac.nz.

APPROVED BY THE UNIVERSITY OF AUCKLAND HUMAN PARTICIPANTS ETHICS COMMITTEE ON NOVEMBER 21, 2019 FOR A PERIOD OF THREE YEARS.
REFERENCE NUMBER 023496

Appendix I Consent Form for Deans

CONSENT FORM

(DEAN/HEAD OF DEPARTMENT)

THIS FORM WILL BE HELD FOR A PERIOD OF SIX YEARS

Project title: Approaches to Translation Teaching: An exploratory Study of Translation Teacher Cognitions, Teaching Practices and Student Cognitions

Researcher: Jia Jia

I have read the Participant Information Sheet and understood the nature of the research and why I have been invited to participate. I have had the opportunity to ask questions and have them answered to my satisfaction.

I agree that the Faculty/School may participate in this research.

YES/NO

I agree that: (Please indicate YES or NO)

- This research may be conducted in our faculty/school.
- Our teaching staff and students may be invited to participate in this study.
- The faculty secretary will facilitate the recruitment process of participants.
- Teachers' decision on whether to participate or not to participate will not affect their employment evaluation.
- Students' decision on whether to participate or not to participate will not affect their grades and assessment results.

I understand that: (Please tick)

- ☐ I could withdraw the faculty at any time up to three weeks after data collection without giving any reasons but cannot withdraw any information already provided by the teachers and students.
- ☐ The university will not be identified by name, and the researcher will make efforts to conceal the identity of the university and of the individual participants.
- ☐ Teachers and students will be involved in survey research, individual interviews and classroom observations.
- ☐ The responses to questionnaires and information from interviews and classroom observations will not be discussed with me.

- ☐ The researcher will not take part in the teaching practice during classroom observations.
- ☐ Research activities will be suspended should any safety issues become apparent.
- ☐ Data collected during this study will be securely stored for a period of six years, after which they will be destroyed.
- ☐ Data collected for this study will be used in a PhD thesis and to support future publications and conference presentations.

Email Address for receiving a copy of the summarized findings (if applicable)
My email address is _____

Name: _____
Signature: _____
Date: _____

APPROVED BY THE UNIVERSITY OF AUCKLAND HUMAN PARTICIPANTS ETHICSCOMMITTEE ON NOVEMBER 21, 2019 FOR A PERIOD OF THREE YEARS. REFERENCE NUMBER 023496

Appendix J Consent Form for Teachers

CONSENT FORM
(TEACHER)

THIS FORM WILL BE HELD FOR A PERIOD OF SIX YEARS

Project title: Approaches to Translation Teaching: An exploratory Study of Translation Teacher Cognitions, Teaching Practices and Student Cognitions

Researcher: Jia Jia

I have read the Participant Information Sheet and understood the nature of this research and the reason for being invited to participate. I have had opportunities to ask questions and have the responses to my satisfaction. I agree to assist with this study and understand that my participation is voluntary.

I agree to participate in the questionnaire survey.
YES/NO

I agree to participate in the interviews and classroom observations.
YES/NO

I agree that: (Please indicate YES or NO)

- The researcher may have a one-on-one interview with me.
- The researcher may observe my classroom.
- I will help the researcher to inform the student of the nature of the classroom observations.
- Students' decision on whether to participate or not to participate will not affect their grades or any assessment results.

I understand that: (Please tick)

- ☐ The researcher will use audio-tape to record my interviews and classroom observations.
- ☐ The Faculty Dean has assured me that my participation or non-participation will have no effect on my employment.

- ☐ I can withdraw myself, and any data contributed within three weeks after the data collection without giving a reason.
- ☐ I have the right to keep copies of my interview and observation recordings.
- ☐ I have the right to review the transcripts and give feedback within one week.
- ☐ The researcher will make efforts to protect the identity of myself, my students and the university from being identified.
- ☐ Contents of questionnaire responses, interviews, and classroom observations, except mine, will not be elicited to me.
- ☐ The involvement of myself and my students in interviews and observations is not for evaluating my teaching and my students' achievements.
- ☐ The researcher will not take part in the teaching processes.
- ☐ Data collected for this study will be securely stored and saved for six years, after which they will be destroyed.
- ☐ Research findings of this study will be used in a PhD thesis and to support future publications and conference presentations.

Email Address for receiving a copy of the summarized findings (if applicable)
My email address is _____

Name: _____
Signature: _____
Date: _____

APPROVED BY THE UNIVERSITY OF AUCKLAND HUMAN PARTICPANTS ETHICS
COMMITTEE ON NOVEMBER 21, 2019 FOR A PERIOD OF THREE YEARS.
REFERENCE NUMBER 023496

Appendix K Consent Form for Students

CONSENT FORM

(STUDENT)

THIS FORM WILL BE HELD FOR A PERIOD OF SIX YEARS

Project title: Approaches to Translation Teaching: An exploratory Study of Translation Teacher Cognitions, Teaching Practices and Student Cognitions

Researcher: Jia Jia

I have read the Participant Information Sheet and understood the nature of this research and the reason for being invited to participate. I have had opportunities to ask questions and have the responses to my satisfaction. I agree to assist with this study and understand that my participation is voluntary.

I agree to participate in the questionnaire survey.
YES/NO
I agree to participate in the interview.
YES/NO
I understand that the observations are focused on the teacher and I agree
YES/NO
that the researcher may observe the interactions between the teacher and myself.
I understand that: (please tick)

- ☐ The researcher may be observing the class.
- ☐ The researcher may use an audio-tape to record my interview.
- ☐ The researcher may use an audio-tape to record the classroom observations.
- ☐ The Faculty Dean and my teacher have assured me that my participation or non-participation will not affect my grades and evaluation.
- ☐ I can withdraw myself, and any data contributed within three weeks after the data collection without giving a reason.
- ☐ The observations are to describe the teachers' teaching activities.
- ☐ The contents of the observations will not be disclosed to me.

- ☐ The contents of questionnaire responses and interviews, except mine, will not be elicited to me.
- ☐ The involvement of myself in interviews and observations is not for evaluating my achievements.
- ☐ I have the right to keep copies of my interview recordings.
- ☐ I have the right to review the transcripts of my interview and give my feedback within one week.
- ☐ The researcher will make efforts to protect the identity of myself, my teachers and the university from being identified.
- ☐ The researcher will not be involved in the teaching process.
- ☐ A make-up lesson will be available for me if I do not consent to participate in the observations.
- ☐ Data collected for this study will be securely stored and saved for six years, after which they will be destroyed.
- ☐ Research findings of this study will be used in a PhD thesis and to support future publications and conference presentations.

Email Address for receiving a copy of the summarized findings (if applicable)
My email address is _____

Name: _____
Signature: _____
Date: _____

APPROVED BY THE UNIVERSITY OF AUCKLAND HUMAN PARTICPANTS ETHICS
COMMITTEE ON NOVEMBER 21, 2019 FOR A PERIOD OF THREE YEARS.
REFERENCE NUMBER 023496

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