

Translation Skills of Chinese University Students in English Language Learning: A Basis for the Representation of Translation-based English Learning Model

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Abstract: The study is primarily concerned with the impact of translation skills of Chinese university students on their English language learning. The difference involved in variables were analyzed so as to present a Translation-based English Learning Model (TELM) to improve the quality and effectiveness of students' English learning. 500 students from 6 universities in China were requested to do the questionnaire survey through "Wenjuan Xing". Quantitative method and descriptive analysis were adopted in this research to describe and interpret the difference of responses on translation skills when grouped according to profile. Through the analysis based on data collection, it is found that translation skills have an effect on university students' English language learning in China. Also, students have a better assessment on translation skills in English learning. Moreover, The TELM was represented as a framework for Chinese student' English language learning based on translation skills.

Keywords: Translation Skills; Translation-based English Learning Model (TELM); English Language Learning; Chinese University Students.

1. Introduction

Translation is an activity that aims to convey meaning or meanings of a given linguistic discourse from one language to another [1]. Functionally, translation is regarded as the transfer of meaning from a source language (SL) to a target language (TL), highlighting the purpose of the translation within the target culture and prioritizing the function and intended effect of the translated text over strict adherence to the source text [2]. Source language is the language from which another language is translated, while the target language is the language into which another language is translated [3].

Translation skills mean the knowledge or ability students have about one language translated into another as a basis for them to comprehend, retain or produce another language. Translation skills are essential in English language learning, for example, aiding in vocabulary building, grammar understanding, contextual learning, and idiomatic expressions [4], using translation skills to help students comprehend and assimilate new vocabulary [5], and incorporating translation activities within the WhatsApp platform to improve learners' vocabulary acquisition and understanding of idiomatic expressions [6].

While some researches offered some insights into translation skills, the research gaps still warrant further investigation. Whether translation skills in English language learning are affected by students' personal difference and what's the difference among them also require further research. Besides, it is still important for Chinese university students to know which translation skills can be used to promote their English language learning. Above all, it is also of necessity to study the current situation where Chinese students use translation to assist themselves in English learning so as to propose a Translation-based English Learning Model (TELM) for improving the quality and

effectiveness of English learning. For the exact research problems to be solved here, quantitative data are collected from the reliable questionnaire survey, and the result and discussion are analyzed descriptively based on support from related literatures, involving the use of t-test analysis.

2. Objectives of the Study

Generally, this research is designed to study translation skills of university students in English language learning in China, exploring the more effective English learning model-Translation-based English Learning Model (TELM)-to improve the effectiveness of their English learning.

Specifically, the study aims to determine university students' English learning using translation skills; to test the significant difference in responses when grouped according to profile variables; to represent a TELM model to improve Chinese university students' English language learning.

3. Literature Review

There is an ongoing debate about which skills or knowledge students require for translation in China. Ai & Chen (2022) reviewed the development of artificial intelligence in the field of translation, comparing the advantages and disadvantages of traditional paper-and-pencil translation and artificial intelligence translation [7]. Zhang (2023) has studied translation theory and translation skills of clothing English in terms of translation criteria, correct terminology, combination of cultural background and language, and diverse methods [8].

However, according to Hao and Pym (2021), many of the available surveys indicate that only a minority of graduates from Master's programs in translation actually find stable employment in the translation industry [9]. The graduates who are employed in the translation industry prioritize skills that are significantly different from those prioritized by graduates employed in other sectors. Mellinger (2017)

emphasized the knowledge and skills gaps in translator pedagogy in the context of machine translation and highlighted the need for translators to acquire new competencies and skills to effectively use machine translation tools [10].

By contrast, there were also some scholars who were mainly concerned with the translation skills in relation to English language teaching and learning. Du (2021) explored the development of grammar translation and presented its key features and drawbacks, including the relationship between teaching material and language teaching methodology [11]. Fang & Baker (2018) explored English language teaching and study abroad in China from the perspectives of intercultural citizenship and learning English as a lingua franca, indicating that the development of translation skills can help form a more inclusive mind towards the world [12]. Technologically, Ahmadi (2018) emphasized the use of technology in English language learning, which can potentially influence the development and application of translation skills [13]. In terms of translation skills or competence, Cinque (2016) studied the classification of soft skills for teaching and learning at the university level, highlighting the need for a comprehensive approach to translation skills and competence, considering various contexts and perspectives [14].

As an English language learning skill, translation plays an important role in the process of language learning. Some studies presented the effects of translation skills on English learning are mainly reflected in the improvement of vocabulary and expression ability. Mulder et al. (2019) investigated the role of context, word, and student predictors in second language vocabulary learning, and found that translation skills contribute to improvement in reading ability and vocabulary size among second language learners [15]. Li (2020) explored the training skills of college students' spoken English based on the computer-aided language learning environment, which further highlights the importance of translation skills in language learning. Additionally, According to Artar (2018), the examination of the role translation played in language learning and teaching suggested that translation skills can significantly influence language proficiency, including grammar and syntax mastery, especially in second language acquisition contexts [16].

Additionally, there were some studies which assumed that the mastery of translation skills facilitates to the understanding of cultural differences between English and Chinese. Angelova and Zhao (2016) conducted a study revealing that the development of ESL teaching skills, cross-cultural awareness, and language skills were facilitated through the mastery of translation skills [17]. Moreover,

Vercellotti (2017) conducted a longitudinal study and concluded that the development of complexity, accuracy, and fluency in second language performance was facilitated by the application of translation skills [18]. Furthermore, Leonard and Shea (2017) also found that L2 speaking development during study abroad was positively influenced by translation skills, leading to improvements in fluency, accuracy, and complexity [19]. Although some people have studied the importance of translation skills in English language teaching and learning, few of them have explored the relationship between translation skills and language learning.

4. Methods

A mixed method is adopted in the study. The original doctoral research investigated a comprehensive set of variables, including demographic controls and translation beliefs and strategies. To enhance the clarity and focus of the present article on translation skills, only the key variables and statistically significant results are presented in the tables herein. The full set of results is available from the corresponding author upon reasonable request.

5. Research Design

There are 500 students randomly selected as the respondents from six public and private universities. All of them have the basic experience of learning English and participate in a questionnaire survey of their demographics, individual information as well as translation skills related to English learning. The research is to study the impact of translation skills on these students' English language learning. A quantitative research design of descriptive methods was preferentially used. According to Watson (2015), quantitative research encompasses a range of methods concerned with the systematic investigation of social phenomena, using statistical or numerical data [20]. Therefore, quantitative research involves measurement by t-test and assumes that the phenomenon under study can be measured. The descriptive method was adopted to describe how students learn English using translation skills. The descriptive study involved an analysis of the variables respectively. The study analyzed various variables, exploring the effectiveness of translation skills in English learning and examining the extent to which the difference came into existence among the variables without controlling or manipulating any of them intentionally.

6. Instrument

Table 1. Reliability Test for the Variables

<i>Indicators</i>	<i>Cronbach Alpha</i>	<i>Remarks</i>
<i>Knowledge of Chinese language</i>	<i>0.841</i>	<i>Good</i>
<i>Knowledge of English language</i>	<i>0.927</i>	<i>Excellent</i>
<i>The ability about Chinese language</i>	<i>0.775</i>	<i>Acceptable</i>
<i>The ability about English language</i>	<i>0.947</i>	<i>Excellent</i>

George and Mallery (2003) provide the following rules of thumb: “ $\alpha > .9$ – Excellent, $\alpha > .8$ – Good, $\alpha > .7$ – Acceptable, $\alpha > .6$ – Questionable, $\alpha > .5$ – Poor, and $\alpha < .5$ – Unacceptable”

Note: Table 1 is a condensed version of the analysis. Other control variables and non-significant pathways from the original table are omitted for brevity. Full results are available upon request.

500 respondents were involved in the questionnaire survey, mainly including translation skills questionnaire. To ensure the reliability of the questionnaire, a pilot survey was conducted among 30 Chinese university students. The raw

data from these participants was collected through “Wenjuan Xing”, and then was encoded and entered SPSS 27.0 for analysis. The Cronbach Alpha coefficients of the subscales together with the coefficients of the entire questionnaire were

computed online. As is shown in Table 1, the reliability results for variables under study demonstrated that the Cronbach Alpha coefficients of all the subscales ranged from 0.775 to 0.947. Additionally, the Cronbach Alpha of the total questionnaire arrived at 0.975. Therefore, the internal consistency reliability coefficients of the subscales and the whole questionnaire were acceptable as they were over 0.70 [21].

7. Data Analysis

The data were gathered from the questionnaire and then computed and tabulated. Then, the weighted mean was used to investigate the probability of using translation skills to

learn English. To expound the Likert scale, the verbal interpretation of translation beliefs and skills was ranged as follows: 3.50-4.00=Strongly Agree, 2.50-3.49=Agree, 1.50-2.49=Disagree, and 1.00-1.49=Strongly Disagree. Besides, a statistical test was employed to explain the difference of responses between the variables when grouped based on profile. The significant difference between translation skills profiles was analyzed based on p-value (significant at p-value < 0.05). After the statistical processing and treatment, the data results were described, analyzed and interpreted.

8. Results and Discussion

Table 2. Translation Skills as to Knowledge of Chinese language

Indicators	Weighted Mean	Verbal Interpretation	Rank
1. I know Chinese subject on technical terms, for example, science, technology, law, art, and sports.	3.52	Strongly Agree	1
2. I know the relevant translation theories used for guiding you to translate Chinese language into English.	3.27	Agree	9
Composite Mean	3.42	Agree	

Legend: 3.50 – 4.00 = Strongly Agree; 2.50 – 3.49 = Agree; 1.50 – 2.49 = Disagree; 1.00 - 1.49 = Strongly Disagree

Note: To facilitate extreme groups comparison, this table only includes data from the top-ranked (Rank 1) and bottom-ranked (Rank 9) items. Items in the middle ranks (Rank 2-8) were excluded from this analysis to sharpen the contrast and highlight differences in key indicators between the two extreme groups.

Table 2 presents the participants' assessment on the knowledge of Chinese language needed in translation skills to learn English. The composite mean of 3.42 shows that they agree in general. Among these indicators, the indicator 1 received the highest score of 3.52. The result indicates that all respondents strongly agree that knowing the knowledge of Chinese technical terms used as translation skills has a great effect on students' English learning. It also shows that they agree with the positive effect of translation skills on their English learning based on the knowledge of Chinese words and expressions as well as Chinese subject on technical terms.

The indicator 1 suggests that it is essential to understand Chinese technical terms in such fields as science, technology, law, art, and sports when translation skills are used to learn English. Technical terms often have specific meanings that differ from general terms in use. Knowing these Chinese technical terms can ensure that translations into English accurately reflect the original meaning and do not cause

ambiguity. According to Cowdery (2015), ambiguity arising from inaccurate translations of technical terms can have serious implications in legal proceedings, making it essential to understand and accurately translate Chinese technical terms in the legal domain [22]. Also, Endriyas et al. (2019) underscored the importance of precise translation of technical terms in health information systems to ensure accurate data collection and management, thus demonstrating the critical role of Chinese technical terms in the field of health sciences. Also, understanding the nuances in the original text in translation can make students more culturally aware, which is especially important in art and literature [23]. Moreover, Wang et al. (2017) discussed the integration of socio-cultural contexts and location-based systems for ubiquitous language learning in museums, which provided a feasible means of exposing students to cultural nuances in language learning [24].

Table 3. Translation Skills as to Knowledge of English language

Indicators	Weighted Mean	Verbal Interpretation	Rank
1. I know English terminology on the subject of language, culture, math, history, art, sports, politics, economy, and society, etc.	3.43	Agree	1
2. I know the relevant translation theories used for guiding you to translate English language into Chinese.	3.18	Agree	9
Composite Mean	3.29	Agree	

Legend: 3.50 – 4.00 = Strongly Agree; 2.50 – 3.49 = Agree; 1.50 – 2.49 = Disagree; 1.00 - 1.49 = Strongly Disagree

Note: To facilitate extreme groups comparison, this table only includes data from the top-ranked (Rank 1) and bottom-ranked (Rank 9) items. Items in the middle ranks (Rank 2-8) were excluded from this analysis to sharpen the contrast and highlight differences in key indicators between the two extreme groups.

However, the indicator 2 (3.27) is rated very low. It indicates that the theoretical knowledge for practical translation skills is the weakest area in enhancing English learning. translation as learning skills requires a deep understanding of context, cultural differences and idiomatic expressions; theoretical studies sometimes fail to address

these issues. According to Briggs (2018), the translation study is significant in emphasizing the potential disconnect between translation theories and their practical application in language learning contexts, exploring alternative approaches that can more effectively leverage translation theories to enhance English learning outcomes [25]. Additionally, for better

English learning, translation theory should be supplemented by sufficient practical practice. Quick thinking and adaptability in tackling various unexpected language problems cannot be fully developed in pure theory. Just understanding translation theory may not promote English learning. This can be illustrated by Dong et al. (2015) who highlighted how multi-task learning can significantly impact the translation process, suggesting that a deeper understanding of translation theory may not be the sole determinant of English learning improvement [26].

Table 3 represents the respondents' evaluation on the knowledge of English language required in translation skills to learn English. The composite mean of 3.29 indicates that they agree in general. Among the items, the indicator 1 got the highest score of 3.43. The result shows that all respondents agree most that they should have the knowledge of English language in terms of subject-specific terminology.

The indicator 1 reaches the highest agreement, indicating students' need for extensive knowledge of terminology covering various subjects like language, culture, history, politics, economy, and society, etc. using translation skills to learn English. Firstly, many words and expressions in the English language are deeply rooted in cultural references essential for accurate translation. The study by Muniandy et

al. (2010) emphasized the significance of understanding cultural nuances and social contexts to effectively communicate in English, which aligns with the idea that cultural reference is a paramount component of language learning. Besides, knowing social norms and values helps students convey the intended meaning accurately [27]. Krishan et al. (2020) explored the challenges of learning English in the 21st century and emphasized the role of translation in language learning, particularly in the context of online vs. traditional modes of learning, emphasizing that social norms and values play a pivotal role in shaping the attitudes towards translation as a language learning tool [28].

Nonetheless, the indicator 2 (3.18) is ranked very low. Knowing translation theories received the lowest agreement among the respondents, indicating certain awareness of relevant translation theories has some yet limited effects on students' English language learning. Vinyals et al. (2019) highlighted the importance of integrating practical components into the learning process to ensure that students can effectively utilize theoretical knowledge in real-world scenarios [29]. Also, May, et al. (2016) discussed the interplay of implementation, context, and complexity, emphasizing the need to consider these factors when applying theories to real-world settings [30].

Table 4. Translation Skills as to the ability about Chinese language

Indicators	Weighted Mean	Verbal Interpretation	Rank
1. I have the ability to obtain the effect that Chinese intends to communicate.	3.43	Agree	1
2. I have the ability to trace the source of information to better understand the Chinese text.	3.32	Agree	8
Composite Mean	3.36	Agree	

Legend: 3.50 – 4.00 = Strongly Agree; 2.50 – 3.49 = Agree; 1.50 – 2.49 = Disagree; 1.00 - 1.49 = Strongly Disagree

Note: To facilitate extreme groups comparison, this table only includes data from the top-ranked (Rank 1) and bottom-ranked (Rank 8) items. Items in the middle ranks (Rank 2-7) were excluded from this analysis to sharpen the contrast and highlight differences in key indicators between the two extreme groups.

Table 4 depicts the respondents' assessment on the ability about Chinese language required in translation skills to learn English. The composite mean of 3.36 indicates that they agree in general. Among the indicators, indicator 1 received the highest score of 3.43. The result demonstrates that students generally have an agreement on the positive influence of having the ability to understand and use Chinese language about using translation as skills to learn English, in terms of their ability to obtain the intended communication effect and communicate messages clearly.

Indicator 1 demonstrates that respondents are most confident in achieving the communicative goals set by the

source language. Achieving the intended effect is crucial in translation because it ensures that the translator's interpretation is closely aligned with the author's purpose. Hung (2015) explored the use of translation skills in the context of English language learning, emphasizing the importance of achieving the intended effect to foster active learning among English language learners [31]. Similarly, Leong and Ahmadi (2017) analyzed the factors influencing students' English-speaking skills and highlighted the role of translation skills in facilitating language learning, indicating the importance of achieving the intended effect in translation for English learning [32].

Table 5. Translation Skills as to the ability about English language

Indicators	Weighted Mean	Verbal Interpretation	Rank
1. I have the ability to dig out the universally acknowledged specific translations of proper nouns and technical terms in the English text.	3.13	Agree	14
2. I have the ability to produce fluent and smooth translations in the English language text even though the Chinese language text lacks smoothness and fluency.	3.38	Agree	1
Composite Mean	3.27	Agree	

Legend: 3.50 – 4.00 = Strongly Agree; 2.50 – 3.49 = Agree; 1.50 – 2.49 = Disagree; 1.00 - 1.49 = Strongly Disagree

Note: To facilitate extreme groups comparison, this table only includes data from the top-ranked (Rank 1) and bottom-ranked (Rank 14) items. Items in the middle ranks (Rank 2-13) were excluded from this analysis to sharpen the contrast and highlight differences in key indicators between the two extreme groups.

However, the indicator 2 (3.32) is ranked very low. It shows that this is a relatively less confident area for respondents but

still falls within the "Agree" category. It means that having the ability to trace the source of information has very limited

effects on using translation as a skill to learn English. Tracing the source may not significantly enhance translation accuracy and does not ensure the quality of the original language. Translation from poorly written or overly complex materials can impede language acquisition. Song et al. (2016) stressed the importance of considering cultural and geographical factors when evaluating the impact of tracing the source of information on the use of translation as a skill to learn English [33].

Table 5 presents the respondents' evaluation on the ability about English language required in translation skills to learn English. The composite mean of 3.27 showcases their general agreement. Among the items, the indicator 2 got the highest score of 3.38. The result shows that respondents agree with the positive role that the ability about English language has played in using translation as skills to learn English, in terms of fluency and smoothness and versatility in expression.

The indicator 2 indicates that students are very confident in their ability to ensure the fluency and readability of an English translation, even if the source text is not optimal and perfect. The exposure of Chinese texts translated into fluent and natural English to correct language structures and idiomatic expressions helps students understand how English is spoken and written naturally. The study by Eldan and Li (2023) suggested that exposure to coherent English through translated texts may contribute to language learning among

non-native speakers. Moreover, smooth translation based on contextual understanding is crucial to language acquisition [34]. Loewen and Sato (2018) discussed the significance of interaction in offering learners with contextual clues and opportunities to understand the meaning of words and expressions in communicative setting. Fluent translation can promote context understanding by effectively transmitting context [35].

Nonetheless, the indicator 1 (3.13) is rated the lowest. It shows that finding specific translations is still important for learning English through translation, for instance, maintaining consistency and accuracy in the source and target languages. A very low ranking indicates that respondents find it challenging to identify and use universally accepted terminology and technical terms in translation. This difficulty may stem from the complexity and variability of these terms in different contexts and disciplines. Smith (2018) found that students often struggle to find the most accurate and widely accepted translations for technical terms, leading to inconsistencies and inaccuracies in their translations, emphasizing the difficulties that students face in identifying universally accepted terminology in translation [36]. According to Jones (2016), this challenge can be attributed to the diverse nature of languages and the lack of standardized terminology across different language pairs [37].

Table 6. Difference of Responses on Translation Skills When Grouped According to Profile

Type of University	F-value	p-value	Interpretation
Knowledge of Chinese language	10.419	0.001	Significant
Knowledge of English language	8.290	0.004	Significant
The ability about Chinese language	13.047	0.000	Significant

Legend: Significant at p-value < 0.05

The initial full data included all theoretically relevant predictors. The final reported data adheres to the principle of parsimony by retaining only variables with strong statistical support. Variables that were both theoretically tenuous and exhibited the weakest statistical significance ($p > 0.10$) in the table were sequentially removed. The removal of these variables did not substantially alter the coefficients or significance levels of the core variables of interest, indicating data robustness. The simplified data did not result in a significantly worse fit and is more interpretable.

Table 6 shows significant differences in translation skills responses by university type, with public university students rating their Chinese knowledge ($p=0.001$), English knowledge ($p=0.004$), and Chinese ability ($p=0.000$) higher than private university peers. Public universities benefit from greater government funding, enabling better facilities like language labs, foreign books, and translation software. They also offer more international exchange programs and native-speaking teachers, providing students with authentic language practice. These resources enhance students' bilingual knowledge and translation competence [38]. Moreover, public universities maintain more rigorous curricula and employ highly qualified teaching staff, who emphasize solid bilingual foundations and frequent translation practice, which reciprocally reinforces language proficiency. As Zeng et al. (2022) note, strong educational teams in public universities deliver effective language guidance and translation training. Collectively, these institutional advantages explain the observed differences in self-assessed translation skills [39].

9. About Translation-based English Learning Model (TELM)

According to the tabular data analyzed on translation skills used in English learning of university students in China, a TELM model may be presented more specifically based on

translation skills.

This pyramid-shaped model for Chinese-English translation skills comprises three hierarchical layers: knowledge accumulation (base), ability enhancement (middle), and integrated application (top).

The foundational layer integrates vocabulary, grammar, sentence/text structures, literary appreciation, historical awareness, cultural nuances, specialized terminology, and translation theory. These elements form an interconnected "knowledge ecosystem" where linguistic and cultural components are learned relationally rather than in isolation [40].

The middle layer applies this knowledge through practical translation abilities. Students must comprehend complex subjects (UCS), decipher ambiguity (IOE), recognize paradoxes (IP), ensure clarity and accuracy (CCI), use idiomatic expressions (IE), maintain tone, mood, and style (AMS), ensure logical consistency (LC), and produce fluent, elegant English translations (GET). Wang and Zhang (2022) highlighted the cognitive demands of mediating meaning between linguistically distant languages like Chinese and English [41].

The top layer involves real-world translation practice, where knowledge and abilities continuously interact and are refined through authentic tasks. Students integrate linguistic knowledge and skills to improve translation quality and

efficiency through iterative practice. Colina and Lafford (2023) emphasized that translation pedagogy must be grounded in real-world scenarios, with skills honed through

authentic tasks that prepare students for professional practice [42].

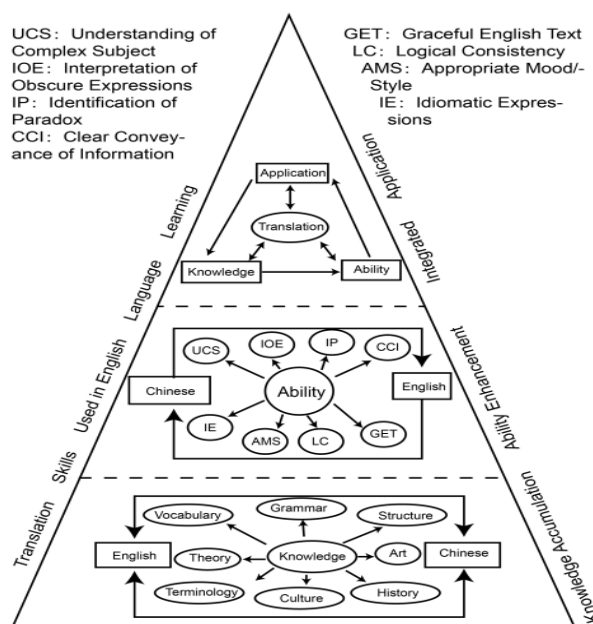


Figure 1. TELM Based on Translation Skills

Together, the model demonstrates that translation competence develops progressively—from building foundational knowledge, through skill application, to integrated professional performance—with each layer reinforcing the others in a continuous learning cycle.

10. Conclusion

1. Participants from public universities have a better assessment on translation skills used in English language learning.

2. Respondents especially emphasize Chinese knowledge and ability when using translation skills in English learning, for example, the knowledge of Chinese culture and contextual knowledge, and the ability to obtain the intended communication effect and justify translation decisions. However, the knowledge and ability about English language have a weak function in using translation skills to learn English.

3. The TELM is represented as the guidance for Chinese students' English learning based on skills. The model represents the three layers of translation skills used in English learning, highlighting that the interaction between knowledge accumulation and ability enhancement leads to effective translations.

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