

# 大學生對於語料庫輔助翻譯之態度探究

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## 摘要

過去許多研究已證實語料庫對翻譯的教與學皆相當有助益，然而只有少數的研究探討過大學生對於語料庫輔助翻譯應用之態度。本研究旨在探討，對台灣的大學英語主修生，實施以學生為中心的語料庫輔助翻譯教學法，所帶來的以下兩個層面的影響。第一個層面為學生如何使用語料庫學習翻譯，以及在此過程中所認知的益處與經歷的困難有哪些？第二個層面為此翻譯教學法是否對於學生的翻譯學習態度有所助益，例如學習自主、學習動機、興趣之增強、對譯文自信心的提升等方面。

為探究大學生如何使用語料庫學習翻譯，研究者對此翻譯教學法進行個案研究分析。研究背景設定在台灣北部的某一所私立大學，研究者在此校教授一門翻譯課程，而研究對象則為選修此課程的二十九位同學。本研究選用的語料庫工具為TOTALrecall雙語索引語典和TANGO搭配詞索引語典，資料蒐集法包括問卷調查、團體訪談和學生的線上意見回饋。研究結果證實大多數的學生對於語料庫輔助翻譯抱持正面的態度，並且在學習使用語料庫工具輔助翻譯之後，對學習翻譯的態度變得更感興趣、更有學習動機、對譯文更有信心，亦增強了學習自主性。

關鍵字：語料庫、雙語索引語典、以學生為中心的教學法、翻譯教學法。

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# Exploring College Students' Attitudes towards Corpus-assisted Translation

Shih-Ping Cheng Zhao-Ming Gao

## Abstract

Previous studies show that corpora are helpful to translation teaching and learning in numerous ways; however, the students' learning attitudes towards corpus-assisted translation are seldom discussed. This research addresses two issues regarding the implementation of a student-centered corpus-assisted translation approach with a group of Taiwanese university students undertaking English-majors. Firstly, how do students make use of corpora to learn translation, and what are students' perceived benefits and difficulties in this process? Secondly, is the student-centered corpus-assisted translation approach helpful to the students' learning attitudes towards translation in areas such as learner autonomy, increase of interest, motivation and confidence. A case study on student-centred corpus-assisted translation approach was conducted based on twenty-nine subjects in the context of a private university in northern Taiwan where one of the researchers teaches a translation course. The selected corpus tools for the approach are the TOTAL recall bilingual concordancer and the TANGO collocation concordancer. The instruments for data collection are questionnaires, group interviews and students' online feedbacks. The results indicate that the majority of the students are positive towards corpus-assisted translation and their learning attitudes in areas such as interest, motivation, confidence and learner autonomy are enhanced after learning to use the corpus tools to assist them in translation.

Key Words: Corpus, Bilingual Concordancer, Student-centred Approach, Translation  
Pedagogy

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## 1. Introduction

Using corpora as an aid to translation has been widely discussed by several scholars. Possamai (2009) states that the use of corpora has shed light on the field of translation over the past decade, and computer software has made analysis of the corpus data possible. Corpora, therefore, have been utilized in various translation-related fields. Numerous research and teaching experiments have been conducted to prove the usefulness of corpus as an important resource in translation production and translator training. Scholars and researchers believe that corpus and bilingual concordancers are useful resources in teaching and learning translation (Bowker, 1998; Gao, 2011; Kenning, 2010; Possamai, 2009; Rodríguez-Inés, 2009, 2010; Tseng, 2009; Wang, 2011; Xiao and Yue, 2009; Zanettin, 1998, 2002).

The literature offers much evidence about the value of corpus-assisted approaches to translation but few studies have been conducted into the use of a student-centred corpus-assisted translation approach. There are also few studies on the use of the approach with Taiwanese students. Researchers and translation teachers in Taiwan have only noticed the importance of corpora recently; traditional translation teaching approaches are still commonly adopted by most translation teachers in Taiwanese universities. Therefore, the researchers are proposing a translation course for teaching with a student-centred corpus-assisted translation approach. More specifically, a bilingual concordancer and a collocation concordancer were selected as training tools for the students to make enquiries and learn to solve translation problems independently.

The researchers are interested in investigating how the corpus-assisted method will work with Taiwanese university students of intermediate English level, how the students use corpus tools to learn translation and their perceptions and attitudes towards the approach. A case study was conducted by using corpus and concordancer to teach a translation module and research data was collected at the same time. This research aims to find out the following two perspectives regarding the implementation of a student-centred corpus-assisted translation approach with a group of Taiwanese university students undertaking English-majors. First, how the students use corpus to learn translation, and the students' perceived benefits and difficulties in this process. Second, whether the student-centred corpus-assisted translation approach is helpful to the students'

learning attitudes towards translation in areas such as learner autonomy, increase of interest, motivation and confidence. For this paper, the researchers are going to report on the second perspective. The research questions this paper addresses are the following:

1. What are the students' perceptions and attitudes towards the student-centred corpus-assisted translation approach?
2. Is there any evidence of the effectiveness of the approach in areas such as increase in students' level of interest, motivation, confidence and learner autonomy in translating?

## **2. Literature Review**

This research involves 4 sub-fields in the literature review, which include corpora and language learning, corpus-assisted translation, using corpus in teaching and learning translation, student-centred corpus-assisted translation approach. The literature review thus will be discussed from these four perspectives.

### **2.1 Corpora and Language Learning**

With the rise of using corpora in language learning, the value of corpora has been widely discussed in relevant studies (Kenning, 2010; Possamai, 2009; Xiao and Yue, 2009; Zanettin, 2001). Based on the huge authentic language data collected, corpora were originally developed for the purpose of language analysis, for instance finding out the patterns of grammatical rules. Later, corpora were used to draw out authentic example sentences to compile dictionaries. Reppen and Simpson (2002) stated that one of the most significant contributions of corpus linguistics is that it reveals the patterns of language use in various settings. It also supplies a powerful instrument in analyzing authentic language, and can differentiate between oral and written communication, official and informal discourse. Language teachers use corpora to supply them with authentic language examples and to assist them in preparing classroom materials.

Boulton (2011) stated that Tim Johns was the first person that suggested the idea of “data-driven learning” more than twenty years earlier, and mentioned the term “data-driven learning” (DDL) in a paper for the first time in 1991 in a

collection of influential papers that was co-edited with Philip King, his colleague. Corpus has gradually become accepted and used in language teaching and learning. Chambers (2010) argued that Data-driven Learning (DDL) changed the role of language teachers substantially, and they became facilitators of language learning in the classroom instead of the only authority on target language knowledge. They help the students to understand the search results, provide suggestions on searching strategies for corpus, and examine and understand the search results. Gilquin and Granger (2010) stated that the DDL teaching method allows learning to be arguably more inspiring and interesting because it contains a component of discovery. Gilquin and Granger used a variety of activities to inspire the trainees they were teaching to make use of corpus, make observations of language use and obtain understanding of the language. They observed that learners following the DDL teaching method are more engaged, enthusiastic, and eventually more autonomous in their language learning.

## 2.2 Corpus-assisted Translation

More than a decade ago, corpora were introduced to assist translation production and translator training. Rodríguez-Inés (2010) defines a parallel corpus as one which contains the original language texts of one designated language and their translated target language texts in one or more other languages, which have been aligned with each other. Baker (1995) asserted that Parallel corpora have made the most significant contribution in Translation Studies by supporting the shift of focus from prescriptive to descriptive translation studies. Baker also contends that parallel corpora allow an evidence-based model to be established to help novice translators by demonstrating how translation problems are solved in actual practice. Possamai (2009) also argued that the use of corpora has shed light on the field of translation over the past decade, and computer software has made analysis of the corpus data possible. Corpora, therefore, have been utilized in various translation-related fields. Aston (1999), Bowker (1998), Gao (2011), Rodríguez-Inés (2009), Rodríguez-Inés (2010), Tseng (2009), Wang (2011), Xiao and Yue (2009), and Zanettin (1998) argue that corpora are helpful to translation teaching and learning in numerous ways.

Aston (1999) claims that whenever suitable corpora are available, translators are able to find quicker and more accurate reference from corpora for identical situations to solve their translation problems. They have an affirmative impact on

learning and can help translators to better understand the source texts and acquire strategies in producing more idiomatic and native-like target texts. Xiao and Yue (2009) argue that a monolingual corpus of the source or target language generally can help the translators increase their knowledge in language and culture, and can be a useful and powerful tool of reference for translators and learners of translation; therefore, they are really valuable to Translation Studies.

Kenning (2010) contended that the importance of comparable and parallel corpora lies in their accessibility to the massive collected data. Translators use them to solve the problems they encounter in translation by searching for knowledge and ideas in them. They have been used as a major tool for training translators in many current programs. Corpora have become an important resource of great value to translators and translator training. Xiao and Yue (2009) asserted that the three critical contributions of corpora to applied Translation Studies are “corpus-assisted translating, corpus-aided translation teaching and training, and development of translation tools” (p. 243). Xiao and Yue noted that the significance of corpora, corpus linguistic skills and applications have been proved by a growing number of research papers showing that they are helpful to translation assessment, translator training and facilitating the generation of translation texts.

### **2.3 Using Corpus in Teaching and Learning Translation**

Scholars argue that corpora can increase the language awareness of translation trainees and are useful to learning translation in many different ways (Gao, 2011; Gilquin and Granger, 2010; Tseng, 2009; Wang, 2011; Zanettin, 2001). Wang (2011) argues that utilization of corpus has become increasingly significant in translation studies in China, and it can improve the language awareness of translation trainees because of the excessive amount of authentic language data stored. Zanettin (2001) found that the trainees’ understanding of languages and relevant cultures can be increased and their capability in reading and writing cultivated when they apply comparable corpora and concordancer in translation activities. The results from Gao’s (2011) research experiment correspond with Zanettin’s (2001) findings. Gao (2011) argues that the results from his survey showed that most participants were positive about the learning effects of using a parallel Chinese-English Concordancer called CERT (a bilingual concordancer developed by Gao), and agreed that it can be helpful to their learning of English

writing, reading and translation. In Tseng's (2009) research experiment, he found that a bilingual concordancer is indeed helpful in increasing the students' language awareness in translation.

Scholars argue that corpora are better translation aids than dictionaries because they provide authentic language reference that dictionaries often do not contain, and help translators solve translation problems and confirm hypotheses (Kenning, 2010; Possamai, 2009; Rodríguez-Inés, 2009, 2010; Zanettin, 1998, 2002). Zanettin (2002) states that a parallel corpus contains a collection of translation strategies that were used by previous translators when they were facing similar translation problems as the persons who make enquiries in the parallel corpus. Zanettin also contends that parallel corpora offer information that bilingual dictionaries often do not; they can supply evidence of how translators deal with equivalence in word choice in cases when no equivalent is available between the two languages involved. Kenning (2010) also argues that by searching for knowledge and ideas in corpora, translators use corpora as resources to help them solve the translation problems they encounter.

Possamai (2009) argues that when translators are translating, they can use corpus to help them double check their decisions, look up the collocations of specific words, search for alternatives, obtain jargon, etc. Rodríguez-Inés (2009) argued that the way students obtain translation skills can be enhanced by using resources such as electronic corpora and their analysis tools. If translation teachers want to improve students' abilities to resolve translation problems, the students need to be supplied with approaches to use existing resources, devise new ones and make the best use out of them. Zanettin (1998) asserts that comparable corpora are helpful in confirming translation hypotheses and offering potential resolution to translation problems of certain texts in the classroom context. Rodríguez-Inés (2010) argues that the value of parallel corpora in translator training is not restricted to providing a fixed resolution for translation problems, but it can also provide information such as useful translation strategies for the translation classroom.

The application of corpora in translation classrooms have improved the way translation teachers teach and translation students are trained (Gao, 2011; Rodríguez-Inés, 2009, 2010; Zanettin, 2001). Zanettin (1998) demonstrated the usefulness of bilingual corpora in designing a series of classroom activities with

the objectives of improving the trainees' comprehension of the source language text and capability to interpret the meaning and transfer it into the target language text. Rodríguez-Inés (2009) argues that in the documentation stage electronic corpora and corpus analysis tools are useful resources to translators, and have advanced translation related activities including the way translation is practiced and taught, and translation trainees are trained.

Bowker (1998), Gao (2011), Rodríguez-Inés (2010), Tseng (2009) and Zanettin (1998) have conducted teaching experiments to prove the value of corpora as an important resource in assisting translators and translation trainees to produce translation of better quality in various ways. Bowker (1998) conducted a pilot research with her translation trainees in comparing the translations produced from using conventional tools and specialized monolingual corpus, and found that translations produced with aids from corpus demonstrate better performances in professional knowledge, term choice and idiomatic expressions. Gao (2011) implemented experiments and a survey on 21 university students of higher-intermediate English level on the effectiveness of using CERT parallel Chinese-English Concordancer (a bilingual concordancer developed by Gao) to help the students with their learning of translation. Evidence was found in the post-test that using the bilingual concordancer helped the students with their lexical choice, collocations, phrasing and word forms in their translation tasks.

## **2.4 Student-centred Corpus-assisted Translation Approach**

The difference between a traditional translation approach and the student-centred corpus-assisted translation approach lies in the change of roles for the teacher and the students (Rodríguez-Inés, 2009, 2010). Liao (2009) states that both traditional translation teaching and a grammar translation approach in EFL (English as a Foreign Language) teaching are teacher-centered approaches; the teacher plays the role of a knowledge distributor. However, the roles of teachers and students are really different in the student-centred corpus-assisted translation approach. Wang (2011) contends that learners are not receivers of knowledge anymore in corpus-driven learning; instead they have become joined researchers who pay more and more attention to the language patterns. Wang argues that the role of the teacher involves stimulating the learners to search for truth and answers and take pleasure in the process of learning in this kind of teaching approach. Rodríguez-Inés (2009) argues that the role of teachers used to be that of

information providers who had an answer for every question; however, because of the challenging job market that the students are facing, the ideal role of contemporary translation teacher has become information facilitator, who enhances the students' training processes and assists them anytime when needed, and most importantly inspires the students in expanding their operative knowledge, which refers to their *know how*.

Wang (2011) discusses the situation of translation teaching in China, asserting that innovative teaching approaches are needed in China, and corpus has provided an increasingly significant application in translation studies. Wang investigates the role of corpus-driven learning in training translation students at the university level in China. Wang found that with the emphasis of the constructive learning process which is supported by the large amount of authentic language data, corpus-driven learning is a possible resolution to the difficulties that the student translator training in China is facing because it can help the trainers to become more confident in their teaching, and assist the students to become more efficient and precise in their translation.

Rodríguez-Inés (2009) adopted a student-centred task-based approach and used corpora to teach a translation course in her research, and evaluated both the translation process and the outcome. Rodríguez-Inés found that using corpora allowed the students, the translation task and the resources in use to be the center of the learning process instead of the teacher. Rodríguez-Inés (2010) asserts that the corpus-assisted translation teaching method symbolizes a change from the traditional translation method. She adds that with the use of corpora, translation teachers and learners no longer need to depend on their language instincts; instead they can make decisions objectively by drawing evidence from the corpora.

Using a student-centred corpus-assisted translation approach helps the translation trainees to produce a translation of better quality and have a stronger interest in learning translation. In Gao's (2011) research experiment, he found that the students' ability to correct their own translation was improved through using a bilingual concordancer, as were the students' language awareness and learner autonomy. Tseng (2009) investigated the relationships between students' corpus enquiry strategies and their translation proficiency. In his research findings, Tseng refers to students' improvements in their translation performance and increase of interest in translation through using a bilingual concordancer to assist their

translation. However, besides the increase of students' interest in translation, Tseng did not mention other aspects of the students' attitudes towards using the bilingual concordancer.

As several aspects of students' attitudes towards using corpus to learn translation have not been fully explored, the researchers are interested in finding out other aspects of students' attitudes towards using corpus tools to assist their translation.

## 2.5 Definition of Terms

In this research, evidence of the students' learning attitudes towards corpus-assisted translation were organized into four categories, including the students' level of interest, motivation, learner autonomy and confidence. These terms are used in the research according to the following definitions.

For the first category of attitude, the definition of interest is “the feeling of wanting to know or learn about something or someone” (Oxford Dictionaries). Longman Dictionary of Contemporary English interprets it as “if you have an interest in something or someone, you want to know or learn more about them.” In this research, the researchers have defined interest as having the willingness to learn more about translation.

For the second category of attitude, the definition of motivation is “desire or willingness to do something; enthusiasm” as defined by the Oxford Dictionaries. Similarly, the Longman Dictionary of Contemporary English explains it as “eagerness and willingness to do something without needing to be told or forced to do it.” Although ‘motivation’ seems to be very close in meaning to ‘interest’, the definitions show that there is a distinguishing level of passion between the two terms. Therefore, the researchers defined motivation as having a strong feeling to do something with enthusiasm, and it does not need other people to force them to do so. In other words, students with motivation have the passion to learn translation without being asked to do so by the teacher.

The third category of attitude is learner autonomy. Longman Dictionary of Contemporary English interprets autonomous as “having the ability to work and make decisions by yourself without any help from anyone else.” The Cambridge

Dictionaries Online explains autonomy as “the ability to make your own decisions without being controlled by anyone else.” The researchers define learner autonomy as being autonomous and spontaneous in learning translation, which means the students found the drive from inside rather than outside, and they learn translation spontaneously.

The fourth category of attitude is confidence. Longman Dictionary of Contemporary English describes confidence as “the belief that you have the ability to do things well or deal with situations successfully.” The Cambridge Dictionaries Online interpret confidence as “the quality of being certain of your abilities or of having trust in people, plans, or the future.” Therefore, the researchers define confidence as the students’ belief in themselves that they have the ability to translate the texts, and are confident in the accuracy of their translation.

The results and evidence from the group interviews were sorted into these categories. The findings that support these four categories of attitudes are reported respectively in the results section of the paper.

### **3. Methodology**

This is a study evaluating the value of corpora to translation students and investigating their use of particular corpora and their attitudes to this approach in a translation course. The appropriate research strategy adopted was empirical enquiry. A case study was carried out of the student-centred corpus-assisted translation approach, using mixed methods. Both quantitative and qualitative research methods are adopted to analyze the data, but it is mainly a qualitative study since the majority of the collected data is qualitative.

#### **3.1 Context and Research Participants**

The context for this study was a private university in the northern part of Taiwan where one of the researchers teaches a translation course. There were 30 students in the class; however, one of them dropped the class after mid-term examination. Therefore, this research is based on 29 students who majored in English in the Foreign Language Department of a private university. The research participants are full-time students who elected the researcher’s translation module, Corpus-assisted Translation, as part of their program requirements. They were

invited to participate in this research voluntarily. All of them agreed to do so, and signed the informed consent form.

### **3.2 Methods of Data Collection**

This research has combined several data collection methods, rather than relying on one single research method. Three research instruments were chosen to collect data of different aspects in order to form a clear picture of the study, namely questionnaires, group interviews, and students' online feedback. The three chosen instruments were selected to triangulate the results of the study and confirm its findings. They also increase the reliability and validity of the research. These three instruments will now be discussed in turn.

Two questionnaires were administered to the students to find out their attitudes towards learning translation and their level of confidence in translating in midterm (after the teacher-centred traditional translation approach) and final (after the student-centred corpus-assisted translation approach) exam weeks respectively.

#### **3.2.1 Questionnaire**

29 questionnaires were collected for the midterm questionnaire, and 27 for the final questionnaire (one student did not return the questionnaire to the Researcher and one questionnaire was invalid). In both questionnaires, some of the questions were multiple choice questions based on a 5-point Likert scale, suitable to capture attitudes, and others were open-ended questions. The closed and multiple choice questions were easy for the students to fill out, whereas the open-ended questions took more time to answer, and some of the students might not take the time to answer them. However, these questions can help the researchers collect richer data and avoid prior assumptions of how the students might be thinking.

Questionnaires are instruments that can reveal the attitudes and thoughts of the student participants, and they allow comparisons to take place between the two questionnaires that were administered at different points of time. So, the scales of the students' attitudes and level of confidence in their translation can be compared. The questions in the questionnaires were designed based on the

research questions of the study. The researchers had expanded each research question into several relevant questions in the questionnaire, and had also devised two negative questions as checkers to see if the collected questionnaires are valid data for analysis.

The final questionnaire included all the questions that appeared in the midterm questionnaire, and some questions about the students' views and perceptions about using corpora to learn Translation. The repeated questions in both the midterm and final questionnaires are designed to compare the students' attitudes and level of confidence in their translation. However, there was one distinct difference between the two questionnaires. The midterm questionnaire was anonymous, but the students were asked to write down their student number in the final questionnaire. The researchers explained to the student participants that the reason for putting down their student number is for the purpose of data analysis, so that comments expressed in the final questionnaire could be analyzed and addressed with the students' coding number in the research paper.

### **3.2.2 Group Interview**

Group interviews were conducted at the end of the one-semester course for more in-depth views of the students' attitudes and perceptions towards using corpora to learn translation. The researchers decided to conduct group interviews instead of individual interviews because the student participants might be more relaxed if they were interviewed in groups with their fellow classmates than on a one-on-one basis. To make the interviewees more comfortable, the researchers chose Mandarin Chinese to be the interview language, which was the mother tongue of both the student participants and the researchers, so the student participants could express their thoughts more easily and completely.

The group interviews were structured interviews with 4 categories of discussion topics covering 22 interview questions recorded on a group interview question form. The question forms were distributed to the student participants on the day when the group interviews took place. Providing the interview schedule prior to the group interview allowed the student participants to have an idea of what the group interviews might be like. The researchers explained to the student participants that the questions on the form were the ones that would be discussed in the group interview. They were requested to read through the questions and

think about potential answers, so that it would be easier to discuss these topics in the group interviews.

The student participants were asked to form groups of 4 to 6 people and sign up as groups on an interview timetable one week prior to the interview. There were 25 students (5 groups) who participated in the group interview. The group interviews were designed to be 30 minutes in length, however when the interviews actually took place, it was difficult to control the time due to the number of questions and lively discussion so that group interviews lasted from 30 minutes up to an hour.

The atmosphere in the group interviews led to deep discussions and good interactions between the student participants and the researchers, yielding rich data for the study and providing a huge amount of information on how students use corpora to learn translation and their perceptions and attitudes towards the approach. The interviews were recorded and transcribed.

### **3.2.3 Students' Online Feedback**

Students were asked to share their feedback and suggestions towards the translation course and their thoughts about learning translation right from the beginning of the semester. The researchers established discussion forums for the translation module on the University Moodle system, where the students could post their thoughts and feedback. After midterm examination, new discussion forums were established regarding the corpus-assisted Translation approach. The students were also asked to express how they felt about using corpus to learn translation. The students' learning feedback was also an important source of data for the study because it recorded the students' perceptions and suggestions for the course as the module progressed. The students' online feedback was evaluated to triangulate the study.

### **3.3 Follow-up Procedures**

The one-semester translation course was divided into two parts. The first part was from the beginning of the semester till mid-term examination: the second from the mid-term examination till the end of the semester. A teacher-centred traditional translation approach was implemented in the first part of the course,

and the student-centred corpus-assisted translation approach in the second. Teaching and training the students how to use corpora tools to assist them to translate was the intervention for the research.

The selected corpus tools in this study are the bilingual concordancer named TOTALrecall and the collocation concordancer called TANGO. They were developed by Liou, H. C., Chang, J., Yeh, Y., Liaw, M., Lin, C., Chen, H., You, G., Chuang, C., and Gao, Z. under the CANDLE (corpora And NLP for Digital Learning of English) Project in 2003 ([http://candle.fl.nthu.edu.tw/newcandle/Home\\_E.asp](http://candle.fl.nthu.edu.tw/newcandle/Home_E.asp)). They are collectively called corpus tools in this research when they are discussed as tools for the teaching approach. Throughout the semester, the classes took place in a computer lab where Internet access is available to all the students and the teacher. The students were asked to practice making enquiries on the TANGO (<http://candle.fl.nthu.edu.tw/collocation/webform2.aspx?funcID=9>) and TOTALrecall (<http://candle.cs.nthu.edu.tw/totalrecall/totalrecall/totalrecall.aspx?funcID=1>) websites.

The curriculum for the Corpus-assisted Translation Course was designed by the researchers to meet the needs of students undertaking English-majors and for the purpose of collecting data in this research. The research was carried out during one semester from September 2011 till January 2012. The purpose of adopting the student-centred approach in this study was to help the students construct knowledge of translation skills by themselves. Using corpus tools to assist translating provides the support of information and language evidence to the students. The teacher plays the role of an information facilitator instead of information provider in the learning process (Rodríguez-Inés, 2009).

The intervention of the student-centred corpus-assisted translation approach started after the midterm examination. There were 8 weeks of time between the midterm and final examination ranging from week 10 to 17. However, 2 weeks of classes were taken away because the students went on a department field trip to visit local businesses in week 10, and had university sports (athletic meeting) in week 12. Therefore, there were only 6 weeks of classes with two hours each for the actual training of using corpus tools to help the students translate. The themes of training in each week are listed as the following:

- Week 11: Introduce BNC (British National Corpus) & demonstrate using TANGO
- Week 12: University athletic meeting (No class)
- Week 13: Demonstrate more enquiry skills in TANGO
- Week 14: Demonstrate making enquiries in TOTALrecall
- Week 15: Demonstrate how to make use of TANGO and TOTALrecall to assist translation
- Week 16: Training of enquiry skills and strategies, e.g. use English/ Chinese phrases to narrow down search results/ have focused search
- Week 17: Training of observing grammar patterns from the search results & strategies for solving translation problems

The teacher started the training by introducing what corpus is and showed the website of BNC web as an example to the students. The teacher then demonstrated using TANGO collocation concordancer because the majority of its collected data is based on BNC. In the first two weeks of the training (Week 11&13), the teacher only talked about and demonstrated TANGO. After the students got more familiar with TANGO, TOTALrecall was introduced and demonstrated in the third and fourth week of training (Week 14&15). In the last two weeks of training (Week 16&17), the focus of training became how to use corpus tools to help solve translation problems.

The design of the curriculum is to help the students get familiar with corpus and to use the corpus tools—first TANGO then TOTALrecall, and then train them to use the corpus tools to assist their translation. The students are guided with enquiry skills demonstrated by the teacher and are allowed to explore the corpus tools on their own. After they become familiar with using the corpus tools, the teacher then trains the students with enquiry skills to use the two corpus tools back and forth to find out ways to translate the Chinese words or phrases, and check the collocation combinations of the English equivalents for the translated text. The students are trained with corpus enquiry skills to assist their translation gradually, and are encouraged to discuss their enquiry methods with each other. The teacher often asks the students to share voluntarily about their enquiry strategies with all their fellow classmates. Through the process of hands-on practice and the stimulus of sharing from their fellow classmates, the students may acquire new enquiry strategies to solve translation problems.

When the students are assigned with in-class translation tasks, the teacher

would walk around in the classroom to ask the students if they have any questions. If the students ask questions, the teacher usually would not answer the questions right away. Instead, she would ask the students some guiding questions and always tries to help the student think about some possible answers or solutions before she gives the answers to the questions. If the student really has no idea about the solutions, the teacher sometimes would ask the whole class what they would do and call for volunteers to share their thoughts or enquiry methods. The purpose of doing so is to help the students develop their ability to solve problems independently and inspire one another with different ways of solving translation problems with the corpus tools. With the training of the student-centred corpus-assisted translation approach, it is hoped that the students eventually would get to construct their own corpus-assisted translation strategies.

### **3.4 Data Analysis**

For this paper, the focus is mainly on qualitative analysis of all the data relating to students' attitudes. The data collected from the student group interviews are transcribed and coded. 25 student participants were group interviewed in total. Each student was assigned with a number after the transcription process, so that their responses are identified as S1, S2, etc. The responses from the student group interviews were color-coded into 7 different categories. Responses relevant to the category of students' attitudes towards the student-centred corpus-assisted translation approach were selected for data analysis in this paper. Then, these responses were further organized into 6 sub-categories, and translated into English. The evidence will be reported in regard to the following four aspects: students' level of interest, motivation, self-confidence, learner autonomy, etc. when they translate with the approach.

### **3.5 Validity and Reliability**

Even though the majority of the collected data for this study was qualitative, the validity and reliability of the study could still be assured by the piloting process and triangulation of the data collection methods. This study adopted questionnaires, Group Interview and Students' Online Feedback as data collection methods that triangulate each other and provide data from various perspectives. Besides, the translation curriculum itself was piloted with the Pilot Group of the research one to two weeks prior to the official implementation with the Research

Group. Piloting the research increased validity of the research, and helped the researchers to avoid bias and increased the reliability of the research. The researchers found the pilot really useful in finding out improvements for how the course could be taught in a better way and became more confident about what she was doing when she taught the curriculum with the Research Group. The piloting of questionnaires and Students' Online Feedback were also equally important. Therefore, triangulation of the data collection methods and piloting the research really increased and assured the validity and reliability of the research.

## **4. Results**

This research aims to explore two perspectives regarding the implementation of a student-centred corpus-assisted translation approach with a group of Taiwanese university students undertaking English-majors, namely, how the students use corpus to learn translation and whether the approach is helpful to their learning attitudes. As stated in the introduction, the second perspective will be discussed in this paper—the students' perceptions and attitudes towards the student-centred corpus-assisted translation approach. Evidence for the effectiveness of the approach in areas such as learner autonomy, increase of motivation and self-confidence in translating will be investigated.

The results of this section are based on 25 students who were group interviewed. The results show that the majority of the students are positive about using corpus to learn translation, which is in-line with previous studies (Bowker, 1998; Gao, 2011; Kenning, 2010; Possamai, 2009; Rodríguez-Inés, 2009, 2010; Tseng, 2009; Wang, 2011; Xiao and Yue, 2009; Zanettin, 1998, 2002). Evidence of the students' perceptions and attitudes towards the approach will be reported in the following four areas including the students' level of interest, motivation, self-confidence and learner autonomy.

### **4.1 Interest**

Several student participants (S6, S9, S15, S21, S24) experienced an increase of interest in learning translation because of the implementation of using corpus tools to assist them to translate in the translation module. Some students said that their interest in learning translation has increased after they learned to use corpus.

S6: After I learned how to use the corpus, it is indeed quite helpful to me and my interest in learning translation has been slightly increased.

S15: When accuracy and sense of achievement in translation increase, interest increases naturally.

S21: Oh! I became really interested in learning translation.

Corpus-assisted translation helps the students who used to have poor performance in translation to become more interested in the subject. It also helps the students to overcome the sense of difficulty towards the subject, and become more motivated and interested in translation.

S9: I also think that my interest in learning translation has been increased. I used to have poor performance in translation and grades. However, I became more interested in translation after we started to use corpus.

S24: I think corpus tools are quite useful to me. It helps me not to feel that translation is a troublesome work. ... I have a higher level of motivation in learning and feel more interested in translation.

The students generally responded that making enquiries in the corpus tools with their translation problems is very useful in arousing interest in learning translation. The students emphasized that their interest in learning translation has increased after using corpus tools to help them translate. The evidence confirmed the usefulness of corpus tools in increasing the trainees' interest in learning translation.

## 4.2 Motivation

Some student participants (S4, S12, S16, S18, S24) responded that making enquiries in corpus tools with their translation problems helped to increase their willingness in learning translation. One of the students said that because corpus tools are helpful to translation, she became more motivated in learning translation. She also got more enjoyment in doing the translation tasks after being introduced to the use of corpus tools. Another student responded that she felt encouraged if she knew that she translates something correctly. She found the motivation to keep herself going, and felt that translation is not so difficult anymore with the help of corpus tools.

S4: Yes. Just because it is helpful, I have a stronger will to learn translation. Comparing to the time before the corpus tools were introduced, I now get more enjoyment in doing the translation tasks.

S16: With the help of corpus tools, when I translate something correctly, I would think, ok, I shall continue. ... I thought I'll carry on. ... Every time I translate something, I feel that this sentence isn't all so difficult at all.

Some other students said that they did not know how to organize the words they checked into sentences. However, after they learned to use the corpus tools, their translation work became easier to them because they could check the collocation combinations from corpus and observe the way words are organized in sentences. Besides, they think that translation has become less difficult and they learned how to write the sentences without having to think for a long time.

S12: Before I learned about the corpus tools, I only knew how to check vocabulary, but I didn't know how to turn the words into a sentence. However, after I used the corpus tools, I can figure out its collocations, and turn the words into a sentence. I then have a strong motivation to finish the sentence.

S18: Translation becomes less difficult than it was before. I used to think for a long time because I had no idea how to write the sentence as I was translating. Now, I am less confused and troubled than I was before.

The other student said that when she used an electronic dictionary to help her translate, she just wanted to quickly wrap up the work and finish as soon as she could. However, when she used the corpus tools to assist her translation, she found that there is something extra compared to using an electronic dictionary. She realized that she could learn a lot of things other than doing the assignment itself, and most importantly, she gained motivation in learning translation.

S24: I used to use electronic dictionary to help me do my translation task, and I felt like I want to quickly wrap up and finish the task. Now I use the corpus tools to help me translate, and feel that I can learn a lot of things apart from doing the assignment. ... There is something extra compared to the past—I found the motivation in learning.

The students found that corpus-assisted translation is helpful in increasing

their willingness to learn translation. The corpus tools can help them overcome the difficulties they encounter in translation; therefore, they have stronger motivation to do the translation tasks. They think that doing translation tasks in class becomes a more enjoyable work, and corpus tools have also helped them to become more motivated in learning translation.

### 4.3 Confidence

Many students (S4, S7, S8, S11, S13, S14, S18) stated that with the availability of the corpus tools, it saves them a lot of time trying to figure out the answers from checking the dictionaries. It also boosts the level of confidence in the accuracy of their translation. One of the students said that translation has become easier to her with the availability of similar sentences and grammar patterns from the corpus, and she felt that she translated well after finishing her work.

S20: Yes (the method is helpful to increase level of confidence)! Because it has similar sentences, I can figure out how to use grammar, and my translation would be more beautiful (better). As a result, I feel that it (translation) is actually not as difficult as I have imagined.

Some of the students respond that corpus tools help increase the accuracy of their translated texts, and their translation texts are much more correct than when they used dictionaries to assist them translate. Most importantly, many students expressed that their level of confidence in the accuracy of translation has increased substantially after they used the corpus tools to enquire translation problems.

S18: A little bit (increase of confidence in the accuracy of their translated texts).

S4: Yes, it does (the method is helpful to increase level of confidence in accuracy of translated texts).

S11: Seems like the translated texts are more accurate.

S14: I think knowing how to use the corpus tools can help me increase the accuracy of my translated texts. Even though it does take some time to figure out the answers, I still think it is worthwhile doing so. Because it is far better than spending a lot of time thinking and guessing the answers by myself.

S8: With this method, I would become more confident. Otherwise, I sometimes

spend a lot of time checking the dictionary, but all that I translated was wrong. However, things become better when I have the corpus tools, i.e. my translated texts are much more correct (than when I used dictionaries to help me translate). Even if something goes wrong, it won't be too far away from what is correct (it won't be serious mistakes).

S7: I used to feel really bothered and annoyed when I am assigned with one translation assignment. However, after receiving these training (of using corpus tools), I realized translating is actually quite interesting. I feel that I translated very well although mistakes are sometimes found and marked in my work. Nevertheless, I always feel that I translated really well after I finish translating. Therefore, my confidence in translating has been improved.

S13: Yes (my confidence has been increased). I just feel that I am well capable of finding answers really quickly. I am super! Wow~ I can write (translate) it all. Then, I feel really happy and don't think translation would be a problem to me. Having access to the two corpus tools has make things more handy. However, if I don't have the tools, I felt that I would return to what I used to be— not knowing how to translate and things are more difficult to me.

A brief summary of what the students said about the increase of confidence in their translation is discussed in the following. The students realized that translating is actually quite interesting after receiving training in using corpus tools. Knowing how to use the corpus tools helped the students increase the accuracy of their translation, and they know that even if they make mistakes, it will not be too far away from what is correct. Being able to find answers really quickly and knowing how to translate help the students no longer think translation would be a problem to them. These are some of the reasons why the students' confidence in translation would increase substantially after using the corpus tools to assist them in translating. Therefore, it is convincing that corpus-assisted translation can help the students to increase their level of confidence in the accuracy of their translation.

#### **4.4 Learner Autonomy**

Several students (S6, S9, S14) said that their interest in learning translation has been increased because of using corpus tools. They further explained that they became more spontaneous and autonomous in learning translation after they learned how to use corpus to assist them in translating. One of the students said

that using corpus has increased her interest in learning translation, but somehow it is not as helpful as expected. It is probably because the student was quite motivated even before she started learning to use the corpus tools.

S14: Yes, it does (arouse my interest in learning and make me want to learn translation spontaneously), but not as much (as expected).

The other student responded that using corpus tools is useful in arousing her interest in learning translation, and has helped her to become more autonomous in learning translation and studying English.

S9: I became more interested in translation after we started to use corpus. Consequently, I would search for information relevant to translation, or spontaneously study some English.

One of the students expressed her views towards the student-centred corpus-assisted translation approach, and said that the approach has helped her to learn translation autonomously. She thinks that the student-centred corpus-assisted translation approach is more useful to her learning of translation than the teacher-centred translation approach. The reason is because she would check the information in corpus spontaneously instead of waiting for the answers from the teacher.

S6: The latter (student-centred corpus-assisted translation approach) is more useful to my learning of translation because it becomes that we spontaneously check the information (in the corpus) by ourselves. It is not like we don't want to do the translation task and wait until the teacher demonstrates (how to translate the sentence). The situation becomes like you had to check (the answers) by yourself. As long as you check it and understand the word, it becomes yours. It's different from the way that the teacher teaches about it, and you think, "O.K. That's how it works."

It is interesting to learn that the students were no longer sitting and waiting for the teacher to explain the answers. Instead, they became autonomous in doing the translation tasks in class, and understood that they acquire the knowledge once they start to check the information and answers by themselves. The results show that using corpus to learn translation can help increase the learner autonomy of the

students.

#### 4.5 Other Discoveries

Some students (S4, S25) noted that using corpus to assist them translate made doing translation tasks more enjoyable to them. It was also easier for them to find desired answers to their translation problems based on the language evidence provided in the corpus. Nevertheless, one of the students said that if she cannot find desired answers, she would feel like giving up using the corpus tools.

S25: But, if I cannot find the answers that I need, I wouldn't feel like using the corpus tools.

S4: Compared to the time before the corpus tools were provided, I now find more enjoyment in doing translation practice. ... It has become easier to find the answers because I have the corpus tools. Also, I get to know whether I have translated the texts correctly.

With the availability of the corpus tools, the students find it more enjoyable to do the translation tasks because it has become easier for them to find desired answers based on language evidence from corpora.

### 5. Discussion

Many scholars argue that corpora are helpful to translation teaching and learning in numerous ways (Aston, 1999; Bowker, 1998; Gao, 2011; Rodríguez-Inés, 2009, 2010; Tseng, 2009; Wang, 2011; Xiao and Yue, 2009; Zanettin, 1998). The majority of the existing literature suggests the value and usefulness of corpora to translator training in areas such as increasing language awareness of the translation trainees (Gao, 2011; Gilquin and Granger, 2010; Tseng, 2009; Wang, 2011; Zanettin, 2001), providing authentic language evidence and helping translators solve translation problems and confirm hypotheses (Kenning, 2010; Possamai, 2009; Rodríguez-Inés, 2009, 2010; Zanettin, 1998, 2002), and helping translators to produce translation of better quality (Bowker, 1998; Gao, 2011; Rodríguez-Inés, 2010; Tseng, 2009; Zanettin, 1998), etc.

However, there is little literature which discusses students' attitudes towards using corpora to learn translation. The only literature that the researchers have found so far that discussed about this issue is Tseng (2009) and Gao (2011). In

Tseng's (2009) research findings, he refers to students' improvements in their translation performance and increase of interest in translation through using a bilingual concordancer to assist their translation. Gao (2011) conducted research experiments, and found that the students' ability to correct their own translation was improved through using a bilingual concordancer, as were the students' language awareness and learner autonomy.

The results of the present study are in line with Tseng (2009) and Gao's (2011) findings in that corpora increase students' interest and learner autonomy in learning translation. The researchers also found that corpora enhance students' motivation and confidence. The student-centred corpus-assisted translation approach has made them feel positive about their learning and their ability to translate.

With partial interview data relevant to the students' attitudes being analyzed in the present paper, more than two-thirds of all the interviewees, 17 (S4, S6, S7, S8, S9, S11, S12, S13, S14, S15, S16, S18, S19, S21, S22, S24, S25) out of 25, have commented that their level of interest, motivation, confidence and learner autonomy have increased after using corpus tools to assist their translation. They think the corpus tools are very helpful in providing reference to language usage and production of better translation. None of the interviewees have expressed negative feedback on the usefulness of the corpus tools. Therefore, results from the study show that the majority of the students are positive towards corpus-assisted translation and found their learning attitudes in areas such as interest, motivation, confidence and learner autonomy enhanced after learning to use the corpus tools to assist them to translate.

## **6. Conclusion**

This research hopes to provide teachers of translation with the experience of how corpus can be applied in a translation course to assist the students with their Chinese to English translation. More importantly, it aims to discover answers to the question of how helpful the corpus tools are in enhancing the students' attitudes in learning translation. The results of the study consolidate existing research on using corpus to learn translation; they build on the findings of other scholars and researchers and add more specific understanding of how students feel about using corpus to learn translation.

Another important contribution of this research is to share the experience of implementing a student-centred corpus-assisted translation approach to a group of Taiwanese students at university level, and provide a better understanding of how students use corpus to learn translation and their attitudes towards corpus-assisted translation. Corpus-assisted translation approach can offer an alternative translation pedagogy to translation teachers, and will possibly bring about some change and innovation in translator training and translation pedagogy in Taiwan. Therefore, it is hoped that the present study can possibly shed some light on the student-centred corpus-assisted translation approach for translation teachers in Taiwanese Universities and researchers of translation in Taiwan.

The present study is a preliminary investigation of 29 college students' attitudes towards corpus-assisted translation. In our future study, we plan to explore the empirical effects of the proposed approach on the quality of students' translation as well as the relationship between students' proficiency levels and their attitudes toward corpus-assisted translation.

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