

## **Problems and Countermeasure Analysis of Sci-Tech Translation Course for the Master of Translation and Interpreting in Chinese Inland Universities**

**Chaozhong Peng**

Jiangxi Research Center of Incorruption Governance Culture, Jiangxi Normal University,  
Nanchang City, China

&

Foreign Languages College, Jiangxi Normal University, Nanchang City, China

Corresponding Author: [kenpengcn@jxnu.edu.cn](mailto:kenpengcn@jxnu.edu.cn)

**Xia Peng**

Jiangxi College of Foreign Studies, Nanchang City, China

Email: [754736339@qq.com](mailto:754736339@qq.com)

Received: 09/27/2022

Accepted: 11/19/2022

Published: 12/15/2022

### **Abstract**

The education program for the Master of Translation and Interpreting has drawn much attention in recent years in China due to the increasing demand for translators and interpreters with the rapid development of global trade. The program has cultivated many talents, but problems that occurred also deserve attention. This paper explores the common issues in the “Science and Technology Translation” course for the Master of Translation and Interpreting, including the lack of actual practice from the translation market, the shortage of professional knowledge for both teachers and students in many special fields, and the insufficiency of up-to-date materials in Chinese universities, especially those inland ones. Based on some Chinese scholars’ research and the mode of the Simulated Translation Bureau of some European universities, the study aims at proposing a countermeasure of the Simulated Translation Project from several aspects such as its particular purposes, features, application procedures, and advantages and disadvantages. This study is qualitative and the observation results collected are based on the performance of different Groups in the past three years from 2020 to 2022. After the practice in three spring semesters, the study concluded that the countermeasure is not only effective in solving the problems, improve students’ language service consciousness and translation competence, but also valuable in guiding students to choose suitable projects materials to construct an interdisciplinary vision, guarantee the ideological and political education function of the course for the contribution to the communication between China and other countries.

*Keywords:* Master of translation and interpreting, science and technology translation, project management, simulated translation project, language service consciousness, interdisciplinary vision, ideological and political education

**Cite as:** Peng, C., & Peng, X. (2022). Problems and Countermeasure Analysis of Sci-Tech Translation Course for the Master of Translation and Interpreting in Chinese Inland Universities *Arab World English Journal*, 13 (4) 251-264. DOI: <https://dx.doi.org/10.24093/awej/vol13no4.16>

## Introduction

With the rapid development of global trade in recent years, the role of translators and interpreters is becoming increasingly important. Therefore the cultivation of translation talents has been a hot topic in China. And Master of Translation and Interpreting (MTI) training centers have soared from 15 in 2007 to 259 so far (Tao & Huang, 2021). The rapid growth of the number demonstrates the quick progress of the education program and the large demand for translators and interpreters.

To guarantee the quantity and quality of translators and interpreters, many universities throughout China have put a series of measures into effect, among which interdisciplinary vision and shared values-based education is advocated from different levels. First, the Ministry of Education of the People's Republic of China issued a *Notification of Recommendation on Practice Projects Research and Reform of New Liberal Arts from the General Office of the Ministry of Education* (2021), which recommends an interdisciplinary vision for constructing new liberal arts education system to train more competent liberal arts talents. Second, shared values-based education associated with ideological and political education was first proposed by the Shanghai Municipal Communist Party of China (CPC) Committee and Shanghai Municipal People's Government in 2014 to stress the importance of blending ideological, political, and values education properly of specialized courses and general courses, which has drawn much attention ever since.

What is mentioned above can be treated as the general request for the education program of MTI. To realize the target, some particular problems, especially those from classroom teaching, in the cultivation of MTI must be taken into consideration. MTI is supposed to be capable of translating and interpreting on different occasions after roughly three years of practical training at universities, but the problem is the real practice is not enough. Many researchers from China have proposed the strategy of actual translation projects from the translation market in solving the problem. Translation project is helpful, but it is not easy to obtain, especially for those Chinese Inland Universities. The research questions of this study are as follows:

- 1) What particular problems exist in the classroom teaching for MTI?
- 2) What do translation instructors in China and other countries do to solve the problems?
- 3) What other strategy is feasible to achieve the goal?

This study, different from many macroscopic types of research concerning the general system construction of the program, would go deep into one specific course for MTI to focus on the problems that occurred in Chinese inland universities. By taking Science and Technology (Sci-tech) Translation course as an example, this paper aims to make a detailed and meaningful analysis of the existing problems and propose a feasible strategy to overcome them based on the teaching practice during the past three years from 2020 to 2022 in each spring semester in Jiangxi Normal University (JXNU), one inland multi-disciplinary comprehensive university in Jiangxi province in southeast-central China.

## Literature Review

Since 2011, the Chinese translation market has moved into a new stage to focus more on translating Chinese culture, science and technology to foreign countries. The translation service is centered on science and technology, business, education, tourism, etc., to demand progress in the related types of translation (Chen, 2020). Sci-tech translation market has been growing fast in

recent years because of the enormous information exchange requirement as a result of the quick science and technology development. The sci-tech Translation is hence one compulsory course for MTI in many Chinese universities. Admittedly, it has contributed to the education program, but the emerging problems are also worthy of attention.

### *Lack of Practice*

MTI is the degree to train pragmatic translation talents, while the common problems in China are the lack of teaching staff, teaching materials, and practice options (Huang, 2017). Practice is one decisive point in the training program of MTI. There do exist some possibilities in the translation market, and some MTI candidates can get the chance. Still, real translation practice is difficult for students from universities in vast central and western regions to get because of the less developed economy and smaller translation market. The shortage of translation practice is, therefore, like a bottleneck for improving the quality and competence of MTI.

### *Shortage of Professional Knowledge*

On the one hand, sci-tech translation training is necessary to meet the market demand. Still, on the other hand, the lack of professional knowledge for teachers and learners in specific sci-tech areas makes the training complex. The reserve of “specialized knowledge” is important for sci-tech translation (Shan, Fan & Xie, 2017; Fu & Tang, 2012; Li, 2014). The shortage of professional knowledge in geology, medical science, etc., will hinder translation learners’ understanding and translation quality (Zhang, 2015; Yu & Sun, 2022).

To alleviate the problem, non-English undergraduate majors from different directions are allowed or even encouraged to apply for the degree of MTI. But the truth is only a tiny percentage of non-English undergraduate majors have this attempt due to the challenging entrance examination, which mainly centers on English and translation ability.

Table one below is about the number and percentage of non-English undergraduate majors of MTI students of JXNU in the past three years from Grade 2019 to Grade 2021. Non-English major candidates just take a small portion and demonstrate a declining trend. Actually, for those non-English major candidates, their undergraduate professional knowledge reserve, for example, in E-commerce, is beneficial for them to understand the given material in the same field and fulfill the translation task. However, they are the minority, and still, fewer have much knowledge in science and technology.

Table 1. *Number and percentage of non-English major candidates of MTI students*

| Grade | Total Number of MTI Students | Number of Non-English Major Candidates | Non-English Major candidates' Undergraduate Majors  | Percentage of Non-English Major Candidates |
|-------|------------------------------|--|---|--|
| 2019  | 20                           | 4                                      | international economics and trade, primary education, E-commerce, electronic science and technology | 20%  |
| 2020  | 21                           | 4                                      | international economics and trade, tourism management, International Chinese education              | 19%  |
| 2021  | 21                           | 2                                      | hotel management, finance   | 9.5%                                       |

### ***Insufficiency of Up-to-date Materials***

Another problem for many MTI training courses, especially in Sci-tech Translation, is using outdated teaching materials (Li, 2019). To make translation training easy to direct and supervise, some teachers would repeatedly use the same materials to train students year by year, which is undoubtedly unsuitable because science and technology nowadays are developing fast, and those outdated or even obsolete training materials will mislead the candidates. The unsatisfactory choice of outdated materials, an instruction for an MP3 player, for example, is difficult to inspire students to translate, and harmful for both the lecturer and students to develop an interest in the advancement of science and technology. The lack of up-to-date materials is, therefore, another major problem to be settled for practical translation training.

### ***Solution Research Concerning Project in China***

To solve the problems mentioned above, some scholars in China have proposed various teaching strategies in which Project Management is considered adequate. As to Zhang and Wang (2020), a translation project is to undertake the task of translating a monograph, textbook, contract, thesis, specification, product introduction, etc., from the source language to the target language under the request of a client, which is challenging, demanding, and influential. Therefore the practice in real translation projects is a significant way to enhance the capability of MTI. In an attempt to guarantee the implementation of some translation projects, Zhang (2012) also explored computer-aided translation technology in classroom teaching, and his teaching reform has helped MTI candidates from Beijing Normal University improve their ability in translation, collaboration and understanding of the occupation.

Project Management is a relatively new concept for many teachers and students. Some Chinese researchers would then attempt to design a curriculum about it. Wang (2014), for example, has developed a Translation Project Management Course to mainly introduce some essential knowledge points, including a general introduction to the language service industry, management of a language service company, translation project bidding, planning, process and cost management of translation project, etc. associated with features and requirements of modern translation service according to the framework of *A Guide to the Project Management Body of Knowledge (Fifth Edition)* of Project Management Institute in the US (2013).

Besides the research on the connection between computer technology and curriculum construction, the translation projects' comparative advantages and application strategies also attract some scholars' attention. As to Wang and Yan (2011), the introduction of Project Management into the MTI teaching system is not only connected with the objective of MTI cultivation but also conducive for the candidates to know about the primary project management mode in the translation market. Compared with the traditional translation pattern, which is relied on the efforts of a few masters, modern translation service has new features emphasizing team cooperation to achieve high efficiency in translation projects via information technology and network.

Other Professors would look further to broaden the realm. Based on three internet effects on translation and translation teaching mentioned by Miguel Jiménez-Crespo (2015) and the notion of constructivism and experiential learning, they introduced a "crowdsourced translation project" (a collaborative translation launched by a company and undertook a network platform jointly by participants not entirely for an economic motive ) into the training of the MTI to improve the learners' motivation and teaching efficiency (Zhang & Wen, 2020). Ma (2017) argues that

crowdsourcing provides both a stable source of translation projects for universities and handles problems such as decreased student motivation and the limitations of translation practice. In the crowdsourcing and project-based teaching mode, students are the main driving force of translation projects. Compared with the traditional translation teaching mode, the learning of students has changed from being “passive” to “active.” In this process, students can participate in teaching and learning interactively and reflect on their performance actively (Zhang & Huang, 2022).

The introduction of translation projects into the MTI education system is beneficial in helping postgraduates understand the translation market and develop their competence. Its application research is still prevalent in China. However, the following problems related to translation projects cannot be overlooked. First, actual translation projects are not easy for MTI education centers to obtain because the translation markets are not evenly distributed throughout China. As “Crowdsourced translation” refers to the process of outsourcing translation tasks initially performed by professional translators to non-specific translators (Howe, 2006; Howe, 2021; Tran, Yonatan & Mahnke, 2016; Pérez-González & Susam-Saraeva, 2012), it is too ideal to find enough crowdsources each time in carrying out the translation project. Second, previous research on translation projects are diverse, but few are on its application in some specific courses like Sci-tech Translation. Finally, even if real projects could be obtained and translation materials are enough, not all the materials can meet the talents’ training objectives, one of which is to spread Chinese culture and serve the Belt and Road Initiative. Therefore some complementary measures are to be taken to improve the teaching effect of some special translation courses according to their features.

### ***Measures Developed in European Countries***

Quality in translator training has received much attention since the launch of the European Master’s in Translation network in 2009, which sets out quality requirements for translator training programmes in universities (Buysschaert, Fernández-Parra & van Egdom, 2017). A simulated translation bureau (STB), an effective measure to train translation majors, was developed by the Maastricht School of Translation and Interpreting of Zuyd University of Applied Sciences in the Netherlands in the 1980s. In STB, teams of students set themselves up as a (fictitious) translation agency as part of their university/higher education training system and run their agency under mock-realistic circumstances, which vary from one course to another. They work on authentic tasks, though not necessarily “live.” The bureaus typically run alongside students’ other courses as part of their studies (Buysschaert et al., 2017).

Later on, the STB has been continuously implemented in translation training institutions throughout Europe. As a way of stimulating cooperation and exchanging best practices, a number of institutions decided to join efforts in the International Network of Simulated Translation Bureaus (INSTB) in 2015 (Buysschaert, Fernández-Parra, Kerremans, Koponen & van Egdom, 2018). Some universities, such as Ghent University, Turku University, etc., in several European countries like Belgium, Finland, France, Germany, Spain, the Netherlands, and the United Kingdom increase graduate employability by offering students practical, market-oriented experience during their studies. Vandepitte (2008) and Thelen (2016a, 2016b) provide an overview of how simulated translation bureaus can be run successfully within a tertiary education setting. The reactions of the participants—students, mentors and clients alike—definitely hint that the methodology provides important added value in preparing students for the market (Buysschaert et al., 2018).

## Methodology

Two methods, quantitative analysis and qualitative analysis, are widely applied in academic research. Quantitative research is used to quantify attitudes, behaviors, and other defined variables with the goal of confirming or refuting hypotheses about a particular phenomenon and possibly contextualizing the study sample's findings in a larger population (or specific groups) (Park & Park, 2016). This research is similar to that of the implementation of STB, and the success of simulated translation bureaus and their contribution to better opportunities for graduates has not been proved “in figures.” Quantitative research into this would need a reliable control group and the exclusion of many interfering factors (Buyschaert et al., 2018).

Qualitative research, on the other hand, is mostly used in exploratory research. Every qualitative research is based on different/specific concepts (Duffy & Chenail, 2009). It is generally utilized to obtain a deeper understanding of individual experiences, thoughts, attitudes, and trends (Khreisat, 2022). This study is primarily qualitative investigation because the target of the research is to explore the effective teaching strategy in guiding translation practice, in which MTI candidates' experiences, thoughts, and attitudes will demonstrate individuality, which, together with specific requirements of different translation materials, deserves attention.

## Participants

In this study, all of the participants were MTI candidates at JXNU who have passed the Postgraduate Entrance Examination nationwide administered by the Chinese Education Ministry. To obtain the master's degree, the candidates must take at least 17 courses, 12 of which are compulsory, such as A General Introduction to Translation, English-Chinese Translation Course, Computer Aided Translation, Literary Translation, Economic and Trade Translation, Cross-cultural Communication, Sci-tech Translation in three years. Sci-tech Translation is given in the second semester for first-year postgraduates. As is shown above in table one, this study has collected data and analyzed the behaviors of altogether 62 candidates altogether in three consecutive spring semesters in the past three years. They are 20 from Grade 2019, 21 from Grade 2020, and 21 from Grade 2021. We have used the “purposive sampling technique” as a non-probability sampling technique in which all the participants of the study share the same background characteristics (Crossman, 2020). The selection of study participants in this way is to ensure the reliability of the research.

## Main Findings

According to the Expert Panel of MTI Degree Evaluation, the education goal of MTI is to cultivate high-level, application-oriented, professional translators and interpreters to satisfy the market needs to build up the Chinese economy, culture, society, and improve its international competitiveness in global economic integration (Academic Degrees Committee of the State Council, 2007). As a compulsory course for MTI education, Sci-tech Translation, on the one hand, has to conform to the general education goal of MTI. While on the other hand, it has its features, purposes, and requirements for teachers and MTI candidates to consider.

Problems like the lack of actual translation project practice are common for many MTI education centers in China in teaching students some pragmatic translation skills, especially in some applied translation courses like Sci-tech Translation. Based on some studies on translation project management in China, the comparison with STB in some European universities, and

especially the teaching practice, the study puts forward the countermeasure of the Simulated Translation Project(STP).

### ***Simulated Translation Project for Particular Purposes***

Different from literary translation, sci-tech translation stresses not elegance in polishing words, but fidelity in both content and form of the target text to the source text, since science and technology text often uses specialized technical terms, theories, or discoveries in an organized and systematic way (Fang, 2015). Its main characteristics are objective, professional and precise. Sci-tech translation must therefore maintain the same features in information transmission.

It is then understandable for the course of Sci-tech Translation to have particular purposes and requirements to get students familiar with standard language features of science and technology text and improve pragmatic translation competence through adequate sci-tech translation training and practices. However, as mentioned above, real translation projects, including technical texts, are challenging for MTI candidates, especially those from Chinese inland universities, to get from the market. The countermeasure of STP, which coincides with the idea of STB, is similar to actual projects. It can therefore be introduced into the Sci-tech Translation course.

### ***Features of Simulated Translation Project***

#### ***Roles Division Made on Group to Stress Collaboration***

STP in Sci-tech Translation course is also a student-centered approach, but different from STB in which students take on different roles, including project manager, translator, or reviser, roles division in the mode of STP is made on “Group” work, including project Client Group, Manager Group and Translator Groups with two members in each Group to stress collaboration. Right at the beginning of the course, each candidate must find a fixed partner to form a Group for the whole semester, while the role of each Group is not unchanged. All Groups will play the roles of project client, manager, and translator, in turn, to ensure each one has equal opportunity. So this approach is also different from the crowdsourcing project, which is used in the third phase of the course (i.e., the experimental phase) (Ma, 2017; Zhang & Wen, 2020; Zhu, 2021 ). The roles among 5 team members rotate from project to project to ensure that each member understands the responsibility of each role and the whole process of crowdsourced translation (Zhang & Wen, 2020).

Under the instruction of the lecturer, for each project, the simulated Client Group is responsible for searching for translation materials, collecting related technical terms to construct a mini corpus, and evaluating the project generally; Manager Group is for communication with the Client Group, project task division, translating progress coordination and specific evaluation of each Translator Group, and Translator Groups for translating, proofreading and polishing.

#### ***Material Selection Completed by Students***

For each STP, the lecturer would release a general requirement on the project’s topic, word count, deadline, etc., for MTI students to meet instead of finding translation materials in person or using outdated materials repeatedly. After receiving instruction on a particular project topic, the Client Group is responsible for the search for accurate and suitable material from the internet, for example, the production technology of N95 Respirators in March 2020, Mars Exploration Technology in May 2021, China Railway Highspeed in April 2022 (see Table 2) , all by themselves. The target formulation in a translation curriculum, the material selection of a course,

and its implementation are often adjustable according to the learners' development needs (Yang & Wang, 2019, p175-180). And the mode of STP is likely to meet the individual needs of MTI students. Even though it is up to the Client Group to choose the project material, they need to check if the degree of difficulty and linguistic style of the material is suitable for the practice; otherwise, it will not be approved by the lecturer.

Table 2. *A brief introduction to STPs finished in the past three years from 2020-2022*

| Grade | Number of MTI Students | Groups Formed | Projects Finished | Projects Topics  |
|-------|------------------------|---------------|-------------------|--|
| 2019  | 20                     | 10            | 10                | Coronavirus Disease 2019, N95 Respirators, 5G Technology, Moutai Liquor Manufacture, Nail Art, Intelligent Vehicle, Butterfly Bush, Food Processing, Interior Decoration, BeiDou Navigation Satellite System                                     |
| 2020  | 21                     | 10            | 10                | COVID-19 Vaccine, Jingdezhen's Blue and White Porcelain, Qualcomm Snapdragon, Civil Unmanned Aerial Vehicle, Biodegradable Magnesium Alloys, Mars Exploration, Marine Salvage, Regional Specialties of Jiangxi, Jiangling Motors, Komodo Dragon  |
| 2021  | 21                     | 10            | 10                | Remdesivir, China's Ultra-high Voltage Transmission, China's New Energy Vehicles, China Railway Highspeed, Ocean Exploration Technologies, Underground Mining, Patented Traditional Chinese Medicine, Crop Cultivation, Skincare, Smart Bracelet |

#### *Project Coordination Fulfilled by the Manager Group*

In this Project-based course, the role of the Manager Group is to coordinate each group to ensure the effective implementation of each project. The Manager Group has three major tasks. The first is to contact the Client Group to get the translation material timely and determine the requirements. The second is to divide the material into several parts for each Translator Group to handle, organize necessary online or offline workshop discussions, remind Translator Groups of the deadline, and combine all parts to form a complete text. The last is to submit it to the Client Group, from whom the group will also get the general assessment in a score, which will then be further divided unevenly by the group to award all Translator Groups according to their performance respectively. To make the evaluation objective and reliable, the Manager Group should, in the meanwhile, comment on each group's translation.

#### *Project Evaluation Mainly Conducted by Students*

Reasonable and acceptable project evaluation is very significant for the sustainability of the student-centered approach. Since the client has the last word on the quality of the translation in the actual language service market, the simulated Client Group also has the right to assess the work submitted by the Manager Group by giving a general score within 100 as a token payment, which is then divided unevenly by the Manager Group to evaluate the performance of each Translator Group. And the teacher will merely appraise the contribution of two groups-- the Client Group and the Manager Group. By the way, each member in a group gets the same score to make sure two (three, at most) members in one group will work hard together.

*Different Roles Taken by a Teacher*

In this teaching mode, the role of the teacher is different from that in conventional translation teaching classes. Many teachers in traditional translation courses often teach students relative theories and valuable strategies and then correct and comment on exercises submitted by students regularly. While once STP is introduced, the teacher has to adjust to the quick shift of roles, first to a director giving general direction before a project, then to a consultant making suggestions in the middle, and finally to a judge making comments. The role shift makes it possible for a teacher to meet the targets of the course in both translation skill training and ideological and political education by giving direction for students to follow, like searching for the latest scientific development in different fields and regions and then gradually build the interdisciplinary vision between translation and other sciences.

*Procedures for its Application*

The Sci-tech Translation course for MTI candidates in JXNU is arranged in the second term (from February to July each year) for each grade. And the lecturer would generally teach primary theories, common skills in doing Sci-tech Translation, and introduce the notion, significance, function of STP to the students in the first four weeks, and then put the project-based learning into practice. For the rest of the term, about ten projects will be carried out, with each student having a role to play. To make the MTI candidates experience the strict requirements of the actual translation market, each simulated project must be fulfilled in just six days from the early to the final stage, which can be illustrated in the table below (see Table three).

Table 3. Roles performed by different groups in various stages

| Stage  | Duration | Teacher's Role     | Client Group           | Manager Group                | Translator Groups          |
|--------|----------|--------------------|------------------------|------------------------------|----------------------------|
| Early  | Day 1    | Giving direction   | Searching for material | Contact Client Group         | —                          |
| Middle | Day 2-4  | Making suggestions | Building corpus        | Task division & coordination | Translation & proofreading |
| Final  | Day 5-6  | Commenting         | Project evaluation     | Evaluation Translators group | —                          |

*The Early Preparation Stage*

The early stage must cover two points to prepare a project in one day. The first point is for the teacher to give a direction, including a general topic, word count, translation type, deadline, etc., of the project. Then the Client Group will search for the material on the internet under the direction. After choosing a material, the Client Group will send it to the teacher to confirm its feasibility. Once the confirmation is obtained, the Client Group will immediately send the material to the Manager Group, which has to be active in contact with the Client Groups to know the requirements.

*The Middle stage*

The middle stage is a vital part of the project that usually takes three days. In this stage, all students are involved in undertaking different tasks. The Client Group, after having issued the project material, is responsible for building a mini terminology corpus concerning the same topic, for example, Mars Exploration, which must be uploaded to the online working platform and updated for the reference of the Translator Groups and future work. The Manager Group should

first divide the project material evenly and adequately for all the Translator Groups (eight or so) to implement the project smoothly, then organize online discussions when necessary and coordinate each Translator Group to proceed. All the Translator Groups must discuss first to reach a broad agreement on the translations of the key technical terms and meaning of the essential concepts and then work together with the other group member to finish the task of each group.

#### *The Final Summary Stage*

It will take two days. First, the Manager Group should collect all parts of translated version from the Translator Groups and unite them to form a complete translated text. After a thorough check of the whole text, the Manager Group will send it in no time to the Client Group, who must make a general comment and give feedback with a score of 92, for example, the general impression and assessment of the project to symbolize the payment. And the score will then be divided by Manager Group unevenly according to the translation quality of each group. To evaluate the two Groups as objectively as possible, both the Client Group and the Manager Group must write comments with convincing examples. Finally, the teacher will have one day to check the two comments to evaluate the two groups' performance also by giving a score a little higher or lower than the average score of the Translator Groups, and then survey the whole translation project to find some points to comment and explain for the classroom teaching next day.

#### **Discussion**

The study has analyzed the common problems, such as the lack of actual practice from the translation market, the shortage of professional knowledge for both teacher and students in many particular fields, and the insufficiency of up-to-date materials, in some specific courses for MTI education in many Chinese inland universities. To solve the problems, the study has compared some research concerning project based translation teaching modes in China and STB applied in some European countries and then proposed a countermeasure of STP.

The results indicate a benefit similar to STB, which embarks on a series of complex (near-) authentic projects in which students are exposed to a slew of multi-faceted learning activities that urge them to leave their comfort zones and come up with solutions to unique and unanticipated problems independently, or with the support of their peers (Buyschaert et al., 2018). In simulated translation bureaus, teams of students cooperate to undertake translation projects from beginning to end ((Buyschaert et al., 2017; Kerremans & van Egdome, 2018). Similarly, the countermeasure of STP is also a student-centered approach based on a series of projects continuously. But STP has its unique features because both teacher and students will actively participate in each project. It can lead the awareness of the market in teaching activities by turning teachers into directors, students into clients, managers, and translators of projects to enhance their practices and ability. After several years of teaching practice at JXNU, its advantages and disadvantages can be analyzed and summarized as follows.

The first significant point of this project-based teaching is the realization of enough translation practice in the atmosphere of a language service market in which everyone has the chance to play different roles. Second, it is more likely to motivate the learners to participate in translation activities and explore the unknown field than the traditional teacher-centered instruction manner because their interest in choosing material and participation in the assessment of peer performance is fully respected. Third, the newly found unique materials are beneficial for

the MTI students to construct interdisciplinary vision because of the particular requirement of the Sci-tech Translation course. Fourth, the selection of the translation material is flexible under the direction of the lecturer, who can roughly confine the scope of students' choice by making a list of topics for a whole term in which some latest Chinese technologies or discoveries, such as BeiDou Navigation Satellite System, Biodegradable Magnesium Alloys, etc. can be led in to arouse students' national pride and translation enthusiasm. Fifth, the project is conducive for the students to improve a strong team spirit for future work since they have to communicate and cooperate to finish given tasks before the deadline. Finally, the STP's strict time requirement, similar to the actual translation project from the language service market, will push MTI candidates forward to acquire some interdisciplinary knowledge and become familiar with some valuable skills in searching for information and using translation tools such as DeepL, CNKI, which are essential for the improvement of their pragmatic translation competence.

Compared with the advantages, the disadvantages of the approach also deserve attention. The material chosen by the simulated Client Group is sometimes groundbreaking and innovative. Still, some theoretical statements or technical terms in it may be difficult or even impossible for the project translators to understand and make clear in the target language. The evaluation of the Client Group and Manager Group, another innovative point of the approach, can sometimes be subjective due to the lack of ability or carelessness of some students. The last problem is that the workload of the teacher, which seems to be lessened, is however increased since the lecturer has to be familiar with the fresh and professional translation material also in a short period to judge if the project manager's comment is proper or not and then give the feedback to the class.

As to the unexpected problems, such as translation inaccuracy, subjective evaluation, and increased burden, the study has not found a suitable solution. Translation inaccuracy is caused by some real challenges like strict time limits and shortage of interdisciplinary knowledge. Further application of modern translation tools and comparative research in building an interdisciplinary vision is thought to be the ideal way out. And the problem of students' subjective evaluation can also be lessened by the proper usage of translation technologies. While a heavy workload sometimes does exist for the lecturer, it is also suitable for improving teaching. And anyway, Samuel Johnson ever mentioned, "example is always more efficacious than precept," so it is with a teacher.

## Conclusion

The study intends to explore an effective mode for teaching Sci-tech Translation for MTI and has proposed the countermeasure of STP. After three years of implementation of the project mode in the training of three different grades of MTI students from 2020 to 2022 in JXNU, the study claims the feasibility and effectiveness of the project since the problems mentioned above are mostly solved. Besides the solution of translation practice insufficiency, STP can also improve MTI students' language service consciousness of the market, translation competence, and collaborative spirit. In the meantime, by the special arrangement of simulated translation subjects such as China's Ultra-high Voltage Transmission and China Railway Highspeed, teachers can generally guide students' choice of projects materials to realize other targets in ideological and political education, interdisciplinary vision construction, build up their patriotism and form a positive attitude to modern science and technologies for the preparation of contribution to the communication between China and other countries.

### Acknowledgments

This study was supported by Jiangxi Incorruption Governance Culture Research Center of Jiangxi Normal University (NO.JXLZWHYJ-201904) and the Jiangxi Academic Degree and Postgraduate Education Teaching Reform Research Project of Jiangxi Education Department (No. JXYJG -2017-038) .

### About the Authors:

**Chaozhong Peng** is an associate professor and the Director of the First Teaching and Research Department of Foreign Languages College at Jiangxi Normal University in China. His main research interests include Practical Translation Teaching, Practical Translation, Advertising Translation, Traditional Chinese Medicine (TCM) Translation.

ORCID ID: <https://orcid.org/0000-0003-3281-8491>

**Xia Peng** is a lecturer in Jiangxi College of Foreign Studies in China. Her areas of expertise are College English teaching, second language acquisition. After graduating from Jiangxi Normal University with a master's degree of arts, she has been teaching College English for more than 7 years. ORCID: <https://orcid.org/0000-0003-2952-6711>

### References

- Academic Degrees Committee of the State Council of the People's Republic of China. (2007, March 30). *Notice on the Issuance of the “ The Scheme to Set Professional Degree of Translation and Interpreting(MTI).”* Available at [http://www.moe.gov.cn/srsite/A22/moe\\_833/200703/t20070330\\_82704.html](http://www.moe.gov.cn/srsite/A22/moe_833/200703/t20070330_82704.html) 2007.3).
- Buyschaert, J., Fernández-Parra, M., Kerremans, K., Koponen, M., & Van Egdome, G. (2018). Embracing Digital Disruption in Translator Training: Technology Immersion in Simulated Translation Bureaus. *Revista Tradumàtica. Tecnologies de la Traducció*, 16, 125-133. Doi: 10.5565/rev/ tradumatica.209
- Chen, S. Y. (2020). Chinese Translation Service Industry Development Report. In S. B. Qu (ed.), *China Language Service Industry Development Report 2020* (pp298-308). China: The Commercial Press.
- Crossman, A., & Nicki, L. C. (2020). Understanding Purposive Sampling. *Thought Co*, 1-2. Available at <https://www.thoughtco.com/purposive-sampling-3026727>.
- Duffy, M., & Chenail, R. J. (2009). Values in qualitative and quantitative research. *Counseling and values*, 53(1), 22-38. Doi: 10.1002/j.2161-007X.2009.tb00111.x
- Buyschaert, J., Fernández-Parra, M., & van Egdome, G.W. (2017). Professionalising the Curriculum and Increasing Employability through Experiential Learning: The Cases of INSTB. *Current Trends in Translation Teaching and Learning E*, 4, 78-111.
- Fang, M. Z. (2015). *A Textbook of Pragmatic Translation*. China: Shanghai Foreign Languages Education Press.
- Fu, Y. L., & Tang, Y. Q. (2012). *Scientific Translation*. Beijing: Foreign Language Teaching and Research Press.
- Jiménez-Crespo, M. A. (2015) The Internet in Translation Education: Two Decades Later. *TIS: Translation and Interpreting Studies*, 10(1): 33-57.
- Howe, J. (2006). The rise of crowdsourcing. *Wired*, 14, 1-4.

- Howe, J. (2021). *Crowdsourcing: A Definition*. Available at [http://crowdsourcing.typepad.com/cs/2006/06/crowdsourcing\\_a.html](http://crowdsourcing.typepad.com/cs/2006/06/crowdsourcing_a.html).
- Huang, Y. Y. (2017). Professional Degree Education of MTI: An Epoch-making Reform Leading to Bright Future. *Chinese Translators Journal*, 14(3), 5-6.
- Li, B. (2019). Innovation in English Translation Teaching and Translation Strategies in Universities: A Review of Innovation in English Translation and Teaching. *Technology Enhanced Foreign Language Education*, 4. Back Cover.
- Li, J. (2014). *EST Reading and Translation* (2<sup>nd</sup> ed.). Beijing: Foreign Language Teaching and Research Press.
- Kerremans, K. & Van Egdom, G. (2018). "Professionalisation in Translator Education through Virtual Teamwork." In: Vandepitte, S., Moustien, B., Maylath, B., & Arno, E. (eds.). *Multilingual writing and pedagogical cooperation in virtual learning environments* (pp. 291-316). Hershey [PA]: IGI Global.
- Khreisat, M. N. (2022). English Language Learning Strategies during COVID-19 in the Middle East: A Systematic Review. *Arab World English Journal*, 13(1), 56-71. DOI: <https://dx.doi.org/10.24093/awej/vol13no1.4>.
- Ma, X. Y. (2017). Let Crowdsourcing Play a Role in Project--Based Translation Teaching. *Shanghai Journal of Translators*, 6, 62- 66.
- Ministry of Education of the People's Republic of China. (2021, March 5). *Notification of Recommendation on Practice Projects Research and Reform of New Liberal Arts from General Office of the Ministry of Education*. Available at [http://www.moe.gov.cn/srcsite/A08/moe\\_741/202103/t20210317\\_520232.html](http://www.moe.gov.cn/srcsite/A08/moe_741/202103/t20210317_520232.html)
- Park, J., & Park, M. (2016). Qualitative versus quantitative research methods: Discovery or justification?. *Journal of Marketing Thought*, 3(1), 1-8. Doi: 10.15577/jmt.2016.03.01.1.
- Pérez-González L. & Susam-Saraeva, S. (2012). Non-professionals Translating and Interpreting. *Translator*, 2, 149-165.
- Project Management Institute. (2013) *A Guide to the Project Management Body of Knowledge* ( 5<sup>th</sup> Ed.) . PA: Project Management Institute, Inc.
- Shan, Y., Fan W. Q., & Xie, F. (2017). A Visualized Analysis of Science and Technology Translation ( 1985—2015) in China, *Shanghai Journal of Translators*, 2, 34-42.
- Tao, L. C., & Huang, Y. Y. (2021) On Translation Discipline Construction and Translation Talent Cultivation in the New Era. *Foreign Language Education*, (1), 10-14.
- Thelen, M. (2016a) Professionalisation in the Translator Training Curriculum. In: Bogucki, L., Barbara Lewandowska-Tomaszczyk & Marcel Thelen (eds.), *Translation and Meaning*. Frankfurt am Main: Peter Lang, 117-141.
- Thelen, M. (2016b). The Practice-oriented Translator Training Curriculum: An Example. *Current Trends in Translation Teaching and Learning E*, 3, 163-200.
- Tran, Y., Yonatany, M. & Mahnke, V. (2016). *Crowdsourced translation for rapid internationalization in cyberspace: A learning perspective*. *Int. Bus. Rev.* 25, 484-494.
- Vandepitte, S. (2008). Entrepreneurial Competences in Translation Training. *8th Portsmouth Translation Conference: The Changing Face of Translation*. Available at <http://www.port.ac.uk/media/contacts-anddepartments/slas/events/tr08-\vandepitte.pdf> on 14/03/17

- Wang, C. Y., Yan, L. L., & Zhang, Y. L. (2011) Translation Project Management and Vocational Translator Training. *Chinese Translators Journal*, (1), 55-59.
- Wang, H. S. (2014) *The Construction of "Translation Project Management" of MTI*. *Chinese Translators Journal*, (4), 54-58.
- Yang, Z. J., & Wang, C. J. (2019). On the Functions and Adaptation Adjustment of Translation Curriculum from the Perspective of Curriculum Sociology. *Journal of Jiangxi Normal University (Philosophy and Social Sciences Edition)*.52, 175-180.
- Yu, N. R. & Sun, J. C. (2022). Strategies and Methods for Chinese-English Translation of Scientific Documents, *Research Conference on Development and Innovation of Foreign Language Education and Translation*, 561-566. DOI : 10.26914/c.cnkihy.2022.002927
- Zhang, J. (2015). An Attempt to Make Up for the Lack of Professional Knowledge in Medical English Teaching, *Journal of Higher Education*, 1, 15-16.
- Zhang, M. & Huang, Z. (2022). Crowdsourcing Used in Higher Education: An Empirical Study on a Sustainable Translation Teaching Mode Based on Crowdsourced Translation. *Sustainability*, 14(3140), 1-17. doi: org/10.3390/ su14063140.
- Zhang, W. H., & Wen, J. (2020). A Study of MTI Curriculum Mode Centered on Crowdsourced Translation Project. *Shanghai Journal of Translators*, 4, 35-40.
- Zhang, Z., & Wang, B. (2020). Project-based Teaching and Translation Competence Cultivation of MTI: Theory and Practice. *Foreign Language World*, 2(3), 65-72.
- Zhang, Z., & Zhang, S.Z. (2012). Real Project, Real Practice, Real Experience-- A Case Study Based on CAT Teaching Exploration and Practice in Beijing Normal University. *Chinese Translators Journal*, (2), 43-46.
- Zhu, M. L.(2021) Project-based learning model design based on crowdsourcing- Take "Game Project Development Practice" as an example. *In Proceedings of the 2021 2nd International Conference on Education Development and Studies*, Hilo, Hawaii, USA, 9-11 March; 63-66.