

# Implementing the flipped classroom model in teaching a translation module in Vietnam

Nhat Quang Nguyen Banking University of HCMC, Vietnam nhatng@buh.edu.vn

Kean Wah Lee The University of Nottingham, Malaysia KeanWah.Lee@nottingham.edu.my

Csaba Zoltan Szabo
The University of Nottingham, Malaysia
Csaba.Szabo@nottingham.edu.my

Dung Ngoc Phuong Nguyen Banking University of HCMC, Vietnam dungnnp@buh.edu.vn

DOI: 10.12807/ti.113202.2021.a07

**Abstract:** This study provided a novel flipped classroom model with a detailed combination of in-class and out-of-class activities to teach a Vietnamese-English Translation module. The study aimed to (1) provide an in-depth insight into how the model was actually implemented in a specific scenario to make the teaching-learning process more interesting and meaningful, and (2) investigate the effectiveness of the flipped classroom model towards learners' translation performance through various assessments. 39 English-majored juniors at Banking University of Ho Chi Minh City, Vietnam participated in the study during the second semester of the 2018-2019 academic year. The study implemented a case-study mixed method design, applying assessment analysis and content analysis of one specific learning scenario to clarify how the flipped learning model contributed to the training process. Results show that a careful design of the flipped model contributed to the relevant literature on how to implement flipped learning in actual classroom settings, but also effectively improved learners' performance in translation studies.

**Keywords:** Flipped classroom; translation; assessment; Vietnam; effectiveness; competence-based.

#### 1. Introduction

As English becomes the lingua franca in many professional fields, competent translators are vital for non-English speaking countries that seek to integrate economy into the world for social, educational, and economic achievements (Robert, Remael, & Ureel, 2017). Hence, there is a high demand for proficient translators as well as for effective educational methods for translation subjects (Sanchez, 2017). Vietnam is a country where the improvement of translation training is undertaken as an integral part of many faculties of foreign languages, and of translation lecturers' desire to adopt contemporary active, student-centred methods to enhance learners' performance (Nguyen et al., 2016). However, Vietnamese translation lecturers are struggling to adopt educational approaches that can enhance learners' independence and autonomy (Pham, 2016). Many instructors still stick to traditional methods with plenty of silent in-class translation practice and product-oriented exercises (Nguyen et al., 2016). For

example, Le et al. (2012) found that 67% of graduates from eight universities in Hi Chi Minh City (HCMC) stated their translation programmes did not provide sufficient skills practice, maintaining that most teachers favoured monotonous traditional training and offered few real-life activities, whereas the students still spontaneously adopted word-to-word translation techniques. While 28% of the participants considered these courses useful for their employability, others did not feel well-prepared to enter the market after graduation. Hence, there is a need to change the current situation of translation training in Vietnam (Do, 2020; Nguyen et al., 2016).

With the increased availability of web-based educational technologies, some scholars have studied the teaching of translation from the perspective of computer-aided instructions (Barr, 2012), online platform (Wang, 2017), and PEnPAL (Vale de Gato et al., 2016). While the research mentioned demonstrates beneficial effects on teaching translation using modern technology, there are some limitations, such as the limited adaptability of online resources with relevant curriculum content. Moreover, these studies neglected physical in-class interactions to boost collaborative learning and develop professional competences. Therefore, a better application of technology in the translation classroom with a more detailed description of the in-class procedures such as flipped learning might be beneficial since this method can integrate online features with the advantages of physical classroom activities. Moreover, the implementation of this approach in translation training, especially in the Vietnamese setting, is limited.

Finally, a review of recent literature reveals some gaps in the flipped learning theories (Ha, O'Reilly, Ng, & Zhang, 2019; Mustafa, Rahmah, Hanafi, & Wahidah, 2019). First, most studies do not describe what activities take place outside the classroom and how actively the participants get involved in the respective online platform to promote individualised learning. Moreover, it is still difficult to envision how in-class activities enable learners to master their skills with regard to the learning objectives and the course requirements (Akçayır & Akçayır, 2018). Therefore, further investigation is needed to clarify how teaching activities and assessment tasks are aligned to the course objectives and learning outcomes, in order to enhance test achievements and skill competency. These are the reasons that provided a rationale for this study.

This research sought to provide a flipped model with a detailed combination of in-class and out-of-class activities to shed light on how flipping is actually implemented in translation training. The study also aimed to clarify the extent to which the alignment of learning outcomes, assessment tasks, and teaching contents enhances learners' test achievements and skills competency. Finally, in-depth quantitative and qualitative evidence was provided in the paper to demonstrate the benefits of this suggested flipped model.

The first part discusses the problematic issues in translation training and flipped learning. The following section reviews the literature on both translation training in Vietnam and flipped classroom pedagogy, and also establishes two research questions. Then, section 3 provides a methodological consideration of research design, sampling, course procedure, data collection and analysis method. Subsequently, section 4 displays the findings of the study, while section 5 addresses how major findings connect with previous literature and how these findings inform insights and recommendations for practice in translation training and theories of flipped learning. The last section summarises the research contents and indicates areas for further research.

#### 2. Literature review

#### 2.1 Translation training in Vietnam

Translation training is a branch of the translation discipline with the purpose of educating high-quality translators to meet market needs. Whether in the form of

tertiary degrees, certificates or vocational diplomas, formal translator training has been an indispensable activity of many institutions. As a result, this institutionalisation has made great progress worldwide, and many translation academics are looking for methods to teach translation efficiently (Do, 2019). However, there remain significant gaps between translation pedagogy and actual training practice. For example, research into translation teaching continues to focus on the end products, particularly on the accuracy or error correction, while there is still a lack of empirical studies on how processoriented training can help novice learners improve their capabilities during the training process (Martín de León, 2016). Moreover, although researchers have explored various topics on translation methodology, a framework with a detailed procedure implementing effective learning theories to improve translator training has not received adequate attention (González-Davies & Enríquez-Raído, 2016). Hence, this study, in seeking to introduce a specific flipped model for translation training in Vietnam, aims to remedy these two gaps.

Vietnam's open-door policy and its recent integration into the international economy have led to a great demand for competent professional translators in the country. More importantly, since Vietnam joined the WTO in 2007, translation education has undergone huge transformations in the realms of professional practice and scholarly research (Do, 2019). Many language faculties acknowledge the real-world requirements of their graduates to keep up with the market needs, and the need to develop specialised courses in which translation is the major subject of study in its own right. However, it is noteworthy that translator training and research in the Vietnamese context have not yet received adequate attention. There is a lack of professional instructional materials, an inconsistency in content designs among institutions, no welldefined classroom procedures, and subjectivity in quality assessment (Nguven et al., 2016; Pham & Tran, 2013). One reason is that teachers tend to adopt the product-oriented method and follow the traditional formats in translation training (Pham, 2016). In fact, it is normal to find a translation classroom in which the teacher is a "knowledge transmitter" (Pham, 2016), who tries to correct every translation mistake made by their students. Nguyen et al. (2016) further claimed that this teacher-centred classroom is monotonous and develops neither students' self-confidence nor translation competence. Therefore, more studies need to be done to develop efficient teaching models in this discipline (Do, 2019; Nguyen, 2016).

In recent years, certain attempts have been made to develop more teaching methods to equip learners with professional translation skills. For example, several conferences and seminars have been organised throughout the country since 2015 to investigate innovative trends and methods in translation training (Pham, 2016). In addition, at the national level there have been governmentsponsored studies and training programs for improved translation curricula, consistent content design, and standardised course books (Nguyen et al., 2016). In theory, these programs have a relatively clear aim and seem to cover most of the main points regarding preparation for translator training. However, in reality, problems occur during implementation since the programs lack appropriate tools for selecting students, materials, and course evaluation instruments (Do, 2015; Do, 2019). In addition, most of them are currently at the development and implementation stage but still without any reported findings. Finally, there is no systematic mechanism to evaluate if those programs are, at present, actually taking into account the translation employment market and students' needs (Nguyen, 2016). Therefore, a reform of the curriculum is needed since Vietnamese tertiary education is still theory-oriented and scholastically-driven (Do, 2020).

In short, translation training in Vietnam is still in its infancy, with the product-oriented and traditional format as its prevailing method, while

educators and the government are struggling to improve the quality of this field by innovative methodologies, consistent content, and standardised course books. One suggestion is to find solutions to the problem of teaching methods, which then helps to provide an approach to syllabus design, thereby guiding the updating of teaching materials, and more importantly, offering instructors consistent pedagogical principles for teaching translation (Do, 2019; Nguyen, 2016).

#### 2.2 Flipped learning

Flipped learning is a teaching method in which more physical class time is devoted to real-life practice and collaborations while technology-assisted learning is exploited for content delivery outside of the classroom (Bergmann & Sams, 2012). The flipped classroom model is a guiding framework to implement flipped learning in a particular context: under this paradigm, students are expected to prepare for the next lessons by gaining exposure to new knowledge, collaborate in online discussions, and do some preparatory tasks at home with the aid of technology. This means that students know the learning tasks and learning objectives in advance. They can also complete the tasks on lower-order thinking skills by watching the related videos to construct new knowledge. Then, during face-to-face sessions, teachers check the students' understanding, clarify their comprehension problems, and offer interactive opportunities for them to do real-life or simulated practice. Class time is primarily dedicated to nurturing socio-constructivism and active learning by means of collaborative activities based on the pre-class work with the guidance of instructors and support from peers, while less time is spent on the traditional instructor-led lecture sessions. Consequently, the students can utilise class time more efficiently, targeting specific objectives to acquire a deeper understanding of the required knowledge or to improve their skill proficiency.

#### 2.3 Flipped learning in translation training

While much existing literature on flipped learning has been conducted in different disciplines, studies on the effectiveness of this method in translator training are quite rare. There are currently five accessible empirical studies on the effectiveness of flipped learning in translator training from prestigious sources, all of which lack a coherent design of the flipped classroom procedure.

First, Ling (2017) applied flipped learning in a Chinese translation class for twenty non-English majors, and used a questionnaire-type survey to explore learners' perceptions of the approach. More than 87% of responses stated that flipped learning improved various aspects of their translation ability. However, this study did not reveal any quantitative evidence to show that an improvement in learner perceptions could bring about perceived better learning outcomes.

Then, Mei (2017) conducted a study on translation training in his flipped classroom with fifteen students. The class procedure was divided into three main steps: (1) pre-class work (video watching, material reading, and comprehension exercises), (2) in-class activities (revision, exercise correction, students' presentations, and discussions), and (3) after-class feedback. Through observations, questionnaires, and test analysis, he showed that the method had improved teaching and learning efficiency, with the average test scores of the flipped class being higher (93%) than for the non-flipped class (86%). He also asserted that it could improve student engagement, as the exercise completion rates and participation rates in the flipped class averaged roughly 99% and 91%, considerably better than those for the traditional session (91% and 91%). However, to what extent this method influences learners' translation ability is still left unanswered. Also, the number of students is too small for generalisation.

Lou et al. (2017) reviewed a flipped translation class experiment among 124 first-year non-English majors in China. Their post-test analysis showed a significant difference between the control class and the experimental class (t=-2.262, p=.027). The mean scores of the experimental students (M=10.468) also were higher than those of the traditional class (M=9.936), confirming the effectiveness of this approach. One year later, Deng (2018) examined how a project-based flipped classroom could improve the performance of 32 third-year English majors in a business translation course in China. His statistical data suggest that the flipped model can enhance the students' performance as compared to the traditional class (mean=84.4; t=-3.456; p=.011). However, these two studies failed to state what classroom procedures were followed to ensure the active learning aspects as well as the development of higher-order cognition.

In terms of the effectiveness of flipped learning on learners' usage of translation strategies, Lin (2019) investigated the perceptions of thirteen English majors about the effectiveness of a flipped translation classroom in Taiwan. Her semi-structured interviews revealed that most participants were able to use professional strategies such as choosing appropriate vocabulary and formulating sentence patterns for different text types and text genres. Participants also expressed an increase in their motivation, autonomy and inclass participation. However, more information is still needed to see how this approach can enhance learners' translation habits, and how learners actually adopt professional strategies in their assignments.

In conclusion, there is a general lack of empirical investigation into how students experience flipped translation lessons that use a detailed instructional procedure in a systematic way. In fact, no published academic paper on the implementation of a flipped classroom model in Vietnamese translation training could be found at the time of writing this paper, and this was another motivation for conducting this study. Research is needed with further evidence and more pedagogical experiments to fill these gaps and thus assist instructors who would like to implement flipped classrooms in translation training.

#### 2.4 Flipped learning and Bloom's taxonomy

Bloom's taxonomy plays an important role in the implementation of flipped learning. This taxonomy classifies human cognitive thinking according to six levels of complexity, providing the basis for instructors to encourage their students to "climb to a higher level of thought" (Honeycutt & Garrett, 2014, p. 13). Following the revised model by Anderson et al. (2001), the three lowest levels are remembering, understanding and application, while the three highest are analysis, creation and evaluation. The approach of analysing flipped learning in terms of Bloom's taxonomy laid the foundation for classroom activities aimed at developing learners' cognitive performance from lower to higher levels. For example, when learners watch pre-recorded lectures and do preparatory tasks at home – such as researching unknown words, exploring new concepts, and reading the content of the next lesson -, they are practising their lower-level thinking skills in their own time and place. The classroom environment is where students come for challenging collaborative activities, where their higher-order cognition is fostered with guidance from the teacher and peer support. Figure 1 below shows how the flipped classroom is designed in conjunction with Bloom's taxonomy.

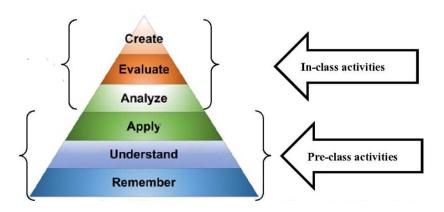


Figure 1. Flipped classroom and the revised Bloom's taxonomy (Wang, 2017)

However, a review of the relevant literature also shows that certain aspects of Bloom's taxonomy have not been described adequately. For example, theoretical reasoning states that lower-level thinking skills can be practised in the pre-class stage. However, the logical structure of these activities is not fully addressed, such as how to facilitate learner retention and understanding of the video contents. Other issues are still left unanswered – such as how the in-class activities are organised, or how assessment tasks should be built upon so that learners can put the knowledge into practice and promote higher-order thinking skills. Finally, a demonstration of how Bloom's taxonomy can be used as a basis for allocating the various expected learning outcomes, assessment task types, and learning activities could also be useful to ensure the successful implementation of flipped learning. As a result, these aspects should be investigated in an empirical study.

#### 2.5 Research questions

Following on from gaps in current literature on flipped learning and from the need for an empirical study, this paper intends to answer two research questions:

- 1. How is the flipped classroom model actually implemented inside and outside the classroom to ensure the alignment between learning activities and learning outcomes, assessments, and educational theories in one particular flipped scenario?
- 2. To what extent does this method influence students' translation performance as measured through their formative and summative assessments?

#### 3. Methodology

#### 3.1. Research design and classroom procedure

This study adopted a mixed-method design to examine how the flipped classroom was adopted and how it impacted students' academic achievements through various assessment tasks. This design was attributed to Bigg's theory of constructive alignment (2014), in which 'constructive' means that learners actively construct their knowledge through various collaborative activities, while 'alignment' implies how instructors process the lessons to ensure activities and assessments are appropriate to the intended learning outcomes (Biggs, 2014). Learners potentially have opportunities to reflect on their own experiences and practical knowledge, while collaborations enable them to solve real-life and simulated problems. Students are also enabled to foster knowledge construction, learning behaviours and required skills, as well as to self-assess their outcomes. Therefore, this constructive alignment-based research design may be seen as placing more emphasis on student-centred methodology, autonomous learning, well-supported assessments, and outcome-based

instructions. All elements of learning outcomes, task assignments, assessment activities and evaluation criteria are coordinated to maximise student learning.

The research design for this study therefore had specific characteristics. At the outset, it adopted a systematic procedure to implement how data collection and analysis process were segmented based on the constructive alignment theory. The learning outcomes for the whole module (as described in table 3-2) were built upon the course objectives, school policy, specific subject syllabus, descriptors of the institution, and Bloom's taxonomy (required by the Vietnamese educational system). For example, participants could have more time for collaborative practice to achieve the required competences based on the initial three levels of Bloom's taxonomy. Students' performance was also assessed via formative assessments, aligning with other levels of Bloom's taxonomy. This would accordingly provide a basis for the implementation of all learning activities and assessment criteria, while the design itself was straightforward to describe and the results were easy to report.

Second, the design entailed various assessment activities and criteria in grading the performance of students. For instance, it employed a norm-referenced standardised assessment to rank students' translation capability. It also encompassed criterion-referenced assessments, including self-evaluation and peer-evaluation to empower students' critical thinking skills. Moreover, ipsative assessment was also employed via the use of portfolios and a group forum to analyse participants' progression through their earlier levels of attainment. All of these activities would both enable students' autonomy and clarify the extent in which the flipped classroom approach influenced learners' performance and translation habits.

Lastly, the learning activities and teaching contents of this design include elements of flipped learning (in-class and out-of-class activities) and student-centred theories (e.g., socio-constructivism, active learning) with various learning strategies such as problem-solving, individual and team work, and personal and interpersonal skills.

Adapted from Biggs' model (2014), the following figure 2 illustrates the basis for categorising outcome statements in this design.

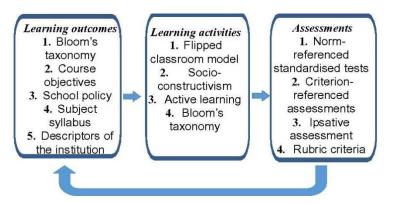


Figure 2. Aligned elements of the course design

#### 3.1.1. Learning outcomes

At the end of the module, learners can:

- (1) Identify the main characteristics of certain business text genres.
- (2) Categorise common problems of different translation units.
- (3) Implement appropriate strategies to solve translation problems found in the Vietnamese-English (V-E) pairs.
- (4) Manage relevant resources and technological tools when translating business genres.
- (5) Demonstrate professional work ethics, confidence, and responsibility when working in groups as well as alone.

# 3.1.2. Learning activities

Figure 3 illustrates the classroom procedure to help learners develop their translation competency.

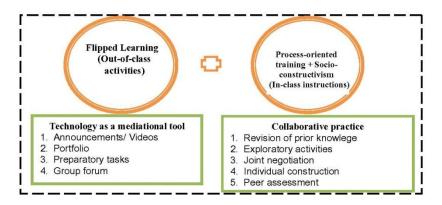


Figure 3. Classroom procedure

First, students were provided with a week-long set of structured activities and worked in small learning groups of four members for out-of-class activities. The groups, created based on students' preferences, were required to choose a leader and work on a clear division of labour to maintain fair contributions as well as to meet the assignment deadlines. Second, a learning platform was created on Classcraft for video watching, group discussions, and assignments. This gamified environment with interactive educational functions also made it easier for the teacher to provide online support and supervision.

In terms of out-of-class activities, the flipped classroom was employed to improve educational efficacy. Students were first introduced to the topics and video lessons that would be covered in the following face-to-face lesson. Each video lasted from 20 to 30 minutes to focus the students' attention, triggering their active learning and thinking styles. During the process of video watching, students were required to take notes, write down new content, and identify difficult concepts. After watching the video, the students were asked to complete some preparatory assignments related to the video contents. During the process of preparatory assignments, they might exchange difficult problems with fellow classmates or teachers through the Classcraft forum, and thereby they could actively build on the knowledge and better grasp what they had learned in the videos.

The in-class activities consisted of five steps: revision, exploratory activities, joint negotiation, individual construction, and peer assessment. First, consolidation guizzes, mini-tests, and homework correction were used to revise previous lessons as well as video-related content. Second, the exploratory activities required students to be explicitly engage in a critical analysis of how the authentic texts were organised in terms of grammatical structures, lexical items, particular text types, and text registers so that they could reformulate new translation versions. These activities might include error identification, error correction, gap filling, or sentence elaboration. The purpose of these activities was to place the participants in practical contexts, whereby they could investigate translation tasks in groups, re-build on their knowledge, and cultivate their independent learning ability. During the joint negotiation step, the learners collaborated to make new translation products from the exploratory activities. Afterward, they constructed their own texts individually with regard to clear purposes, audience, and organisation. Regarding the objectives of these last two steps, the instructor aimed to give priority to individual learners to articulate, explore, and investigate solutions without much intervention from the instructor. In some cases, the instructor might provide some help by explaining how best to adopt translation strategies to solve certain tasks. Finally, the students conducted peer assessment activities before submitting their learning outcomes to the teachers, which could be done in the form of group marking, debating, or reports – thus also fostering development of their translation assessment capabilities (See Appendix A for the flipped structure).

#### 3.1.3. Assessments

Table 1 describes the translation tasks, their weighting to learner's total results, the assessed sub-competences, and learning outcomes.

Table 1. Assessment scheme

Assessment tasks and weighting	Assessment requirements and allocated marks
1. Translation test at the lexical level (5%) Formative (Week 3)	<ul> <li>Identify and classify six problems at the lexical level in a short text (3 pts.)</li> <li>Solve eight problems with appropriate translation strategies in context (4 pts.)</li> <li>Use electronic tools to solve six cultural-specific problems (3 pts.)</li> </ul>
2. Translation test at the syntactic level (10%) Formative (Week 6)	<ul> <li>Correct six translation errors at the lexical level in an article/leaflet (3 pts.)</li> <li>Provide English translation for four Vietnamese sentences (4pts.)</li> <li>Proofread and correct the translated versions of their peers with appropriate translation strategies and electronic tools (3 pts.)</li> </ul>
3. Translation test at the paragraph level (15%) Formative (Week 8)	<ul> <li>Identify six translation problems at the syntactic level and suggest translated solutions (3 pts.)</li> <li>Translate a short paragraph (120-150 words) with appropriate strategies (4 pts.)</li> <li>Produce a report about this translation process (3 pts.)</li> </ul>
4. Portfolio Formative (20%)	Notes of video lectures (2.5 pts.)     Preparatory tasks (2.5 pts.)     Refined versions of the tasks (2.5 pts.)     Comments on the teaching method and self-assessment of their progress (2.5 pts.)
5. Final exam (50%) Summative (close exam)	- Translate four sentences with appropriate strategies at the lexical and syntactic levels (4pts.) - Translate a short journalistic text with 200 words approximately (6pts.)

# 3.1.3.1 Formative assessments. A combination of analytical and holistic assessments was used in this study.

Assessment 1: this test was comprised of three sections. First, learners were required to formulate the main ideas of a text and classify six translation problems at the lexical level. These problems had been taught during the course, therefore requiring the lowest level of Bloom's taxonomy to do the task (remembering). Second, learners had to use translation strategies appropriate to the meaning in the source language and the communicative level of the target language to translate eight lexical terms. This part requires higher-order levels such as distinguishing the connotative and contextual meanings of a word (understanding) and transferring words with respect to the target grammatical structure and functions (applying). Finally, learners had to use electronic tools to solve culture-specific problems. This task required learners to use advanced levels of Bloom's taxonomy such as interpreting the underlying problems of the cultural-specific terms (applying), analysing the suitable strategies with the use of electronic tools (analysing), and predicting the potential risks in translating these terms (evaluating).

Assessment 2: first, learners had to correct six translation errors at the lexical level in a business leaflet. This was a consolidation of the previous lessons and required lower-order cognitive skills such as remembering and

understanding. They were then required to provide an English translation for four business-related sentences. Finally, they proofread and corrected the translated versions produced by their peers. Sometimes both original and corrected versions were accepted as long as the students could provide appropriate explanations based on the theories of translation strategies. The participants were also asked to comment on the products in terms of strengths, weaknesses, lexical choices, grammatical features, as well as corrections for any translation errors. Therefore, learners had to adopt higher-order thinking skills to deal with these two tasks.

Assessment 3 (Translation test at the paragraph level): this assessment included three tasks. First, learners had to identify six problems at the syntactic level and provide translated solutions. Afterwards, they had to work in small groups to translate a short paragraph (about 150 words) with appropriate strategies. Finally, they submitted the paper and produced a report on this translation process. The report was prepared at home and submitted online.

#### 3.2. Research sampling

The study population included 39 third-year students at the Faculty of Foreign Languages, Banking University HCMC, Vietnam, from February to May 2019. Before the module, potential participants were advised in advance about the classroom procedure and the research objectives; accordingly, those who were assigned to the experimental class had all voluntarily agreed to participate in the research process. No student had any prior learning experiences with the researcher or the flipped classroom model. There were in fact 40 students in class 1, but one male student was late for the final exam. As a result, the data of 39 students were collected, as displayed in Table 2 below.

Table 2. Distribution of the participants (N=39)

Gender	Number of participants
Male	4
Female	35
Total	39

#### 3.3. Data collection and management

Two data instruments were used in the study. First, content analysis (Erlingsson & Brysiewicz, 2017; Weber, 1990) was adopted to capture one specific scenario of the flipped translation class (Day 3). Two reasons were attributed to the selection of this scenario. On the one hand, learners had overcome initial frustrations and tensions regarding the new teaching approach, and got used to both the classroom procedure and the teacher's expectations. On the other hand, formative assessments were conducted in this module, and it was therefore convenient to investigate the connection between the activities and the learning outcomes, as well as the assessment results. Both in-class and out-of-class activities were qualitatively analysed, evaluated and mapped against the learning outcomes and theoretical framework with the use of constructive alignment to shed light on how the in-class activities related to the pre-class materials and facilitated the learning process.

A test comparison was performed to examine how well these activities contributed to enhancing learner performance and translation habits. Since the test contents and item analysis had been evaluated by the faculty committee, the content validity of the test instruments was satisfied (Sujana, 1998). This instrument was administered in two steps.

In step 1, the results from formative assessments were analysed to explore learners' competence over the course (see Appendix B). The tests were collected and then analysed to find out and classify translation errors. Data were examined quantitatively and qualitatively to determine the percentage

occurrences of these errors, whether their frequency decreased over the assessment tasks, and how their performance improved (or worsened) over the assessment tasks. The tests had been approved by instructors from the University's translation division. The data were analysed descriptively as well as by the use of analysis of variance (ANOVA).

In step 2, the results from the summative task were analysed according to various aspects of the rubrics and learning outcomes. Quantitatively, the translation errors were computed and tabulated, followed by qualitative analysis in discussing these problems using some individual cases. Table 3 displays the analytical rubric adapted from American Translators Association (ATA, 2013) and used to grade the test papers of the participants in this study.

Categories **Sub-categories** Incorrect meaning Cultural elements Multi-word units Lexical errors (4 pts.) Terminology Untranslated terms Preposition Typos Miscellaneous Structures Word formation Redundancy Syntactic errors (3 pts.) Word order Voices Article Punctuation Tenses Style and naturalness Coherence and cohesion Translating errors (3 pts.) Reformulation techniques Total (10 pts.)

Table 3. Translation rubric

#### 4. Results

This section begins with a detailed analysis of one flipped scenario, illustrating how the activities were organised and showing the interconnection between translation activities, assessment tasks, and learning outcomes. Next, quantitative and qualitative analyses of formative assessments were depicted to describe how learners' capabilities were sharpened.

#### 4.1 Description of the flipped scenario

#### 4.1.1. Learning contents, objectives, and outcomes

The learning contents of this specific module include:

- 1. Translation problems at the lexical level
- 2. Techniques to deal with translation problems at the lexical level
- 3. Practice in business-related texts (leaflets, brochures, and short articles)

The learning contents belong to the University's pre-existing course syllabus (*Module 3: Translation practice at the phrase level*), commencing with an analysis of translation problems at the lexical level. Next, students were given suggested strategies to deal with these lexical problems. Both these parts could be seen as theory components and were included in the online lessons. Besides pure translation knowledge, selected elements of discourse analysis, sociolinguistics, and contrastive analysis were used to compare the differences between the Vietnamese and English texts. The lecturer also added personal translation experience and supplemented the video with additional business

knowledge so that contextual relevance and cultural appropriateness was ensured.

In terms of learning objectives, the lesson aimed to develop both lowerorder and higher-order thinking skills of translation. Specifically, at the end of the lesson, learners could:

- (1) Identify and classify common problems in translating lexical terms
- (2) Implement appropriate strategies to solve these problems in the business context
- (3) Make use of relevant resources and electronic tools to analyse and summarise necessary information when translating business-related lexical terms
- (4) Demonstrate professional work ethics, confidence, and responsibility when working in groups and working alone

These objectives provided a basis for activity design because lowerorder skills could be fostered outside the classroom while higher-order skills were reinforced in the face-to-face session. As a result, the teacher was geared towards helping learners to develop their lower-order abilities at home – for example, identifying lexical problems, classifying errors, distinguishing the various meaning of the source language, and explaining the mismatch between the source texts and the target texts. Meanwhile, in-class collaborative activities could foster higher skills such as implementing appropriate strategies to solve translation problems, comparing the effectiveness of different strategies, evaluating the suggested answers of documentary resources or electronic tools, and evaluating the translated products. Finally, the lesson also helped students focus on the development of the necessary qualities of a real translator, such as professional work ethics, confidence, and responsibility. This requires teachers to pay greater attention to learners' varied learning needs, working styles, and motivations by using both group work and individual work to maximise learner involvement. It also implies that real-life or simulated practice should be exploited, and learners constantly encouraged to go beyond their own perspectives or the teacher's comments. In other words, trainee translators are reminded to keep their responsibilities toward the intended readers and the working translation community firmly in view.

#### 4.1.2. Learning activities

#### 4.1.2.1. Pre-class activities. Learners had to complete three pre-class tasks.

Video watching. The video was uploaded to the online platform, and included interactive elements such as visual representations, screencasts with images of the teacher talking, and diagrams together with audio narration. There was also an emphasis on varied vocal inflection and active body movements. These elements were used to help students learn better when facing multiple inputs with different mental models to enable them to understand and build connections.

Another important aspect of the video was its special consideration for contextual relevance. The teacher tried to build visual tools into the online material to create additional inventory gained from the topic and content of the video. He also provided updated Vietnamese examples in the business context to clarify the theories. For example, the use of culturally significant elements (such as 'zombie enterprise' or 'communism') makes a strong impact on learners' viewing experience. Finally, the video included context-based tasks such as incorporating current affairs into one's translation practice to help learners make connections between what was being taught and what was happening in the real world.

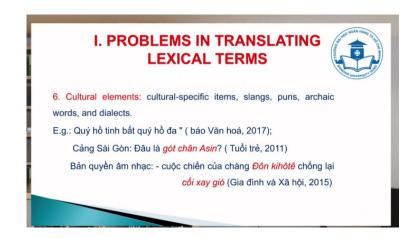


Figure 4. Cultural elements as a problem area

Preparatory tasks and portfolio writing. Learners had to take notes while watching the videos and do some preparatory tasks in their portfolios. This activity was built on the belief that there was a gap between video watching and learners' actual understanding. Therefore, the teacher should provide scaffolding by creating suitable activities to spark pre-class engagement and ensure students' preparedness for the in-class activities. This is the essence of active learning and individualised learning, where the student acquires new knowledge motivated by the need to apply it into low-order thinking activities. It could also leverage teacher's understanding of students' comprehension via video lectures.

Group forum discussion. In this lesson, the Group forum provided some spaces for interactions and peer assistance among group members, as well as the teacher's guiding support (see Appendix B). Because the preparatory task was individualised, the learners' responses and submissions were varied, which led to various conceptual confusions, linguistic misunderstandings, and some mismatches between learner comprehension level and real-life situations. Therefore, the role of community sharing in the group forum became significant, since it provided learners with opportunities to disseminate their ideas, support each other online, evaluate different approaches to solve the problems, and justify one's choices. The out-of-class activities, as a result, not only improve lower-order thinking levels but also facilitate learners' deeper understanding of the subsequent high-order thinking exercise. In summary, the diversified functions of this online forum provided the necessary differentiation and personalisation to support self-regulated learning activities and out-of-class interactions significantly.

- 4.1.2.2. In-class activities. The in-class activities followed the sequential structure in Table 4 below, with a solid focus on socio-constructivist and active learning theories to help students enhance their competences and sharpen their skills.
- 4.1.2.3. Post-class activities. Regarding the post-class activities, learners were required to reflect their strengths and weaknesses during the session and write down in the portfolio some methods they would use to improve their skills in subsequent assignments. They were also reminded that their first formative test papers would be uploaded online with teacher's comments and marking results. These papers were stored in the "translation portfolio" section of the online platform and could be used to review for the final exam.

Table 4. In-class activities

STEPS	Activities descriptions
1. Revision (30 minutes)	This step involved two small tasks: + Pre-lesson quiz + Homework correction
2. Exploratory activities (60 minutes)	Learners worked in groups to identify and classify the translation problems in practical contexts, re-build on their knowledge, and reformulate translation versions. These materials were taken from the course book, and required learners to activate higher-order thinking skills such as analysing and synthesising to solve the problems. These materials were also somehow similar in format as in the formative assessment.
3. Joint negotiation (60 minutes)	Learners were required to work in groups or in pairs to make new translation products from different separate sentences and a short piece paragraph (see Appendix C). First, they had to identify single one-to-one terms (which they had studied in the previous module) and provide a suitable translation. Second, they had to categorise translation problems inherent in each sentence. Then, they followed the suggested process to refine the meaning and translate these lexical items in a business-related context. Finally, they exchanged their solutions with their friends.
4. Individual construction (30 minutes)	This task was the first formative assessment. Learners had to do the test individually within the time limit. This task served three purposes. First, it could measure how well each individual student could absorb the lesson and master their skill proficiency. Afterward, the instructor could know how to adjust his instructional pedagogy and provide personalised support to the students. Second, it took into account different learning styles and learning needs when both introvert and extrovert students could have chances to work independently. Therefore, they could gain critical thinking, time-management skills, and self-control during the course. Finally, it could meet the requirements of the local educational policy, stating that community sharing and personal growth should be fostered so that learners could work independently and responsibly.
5. Peer review (45 minutes)	This step was incorporated into the peer assessment activity in which learners exchanged their individual papers to mark according to the assessment rubrics. The students also posted their papers on Padlet for more comments from their peers, as can be seen in Appendix B.  When this step was used as a learning element of the flipped model, it could enhance learners' self-confidence and self-awareness of strategies for personal improvement. The students could gain better insight into the intended learning outcomes and the assessment criteria. As a result, this activity personalised the learning experience and motivated a continued learning process.

4.1.2.4. Comments on the learning activities. Activities in this scenario were interconnected and aligned with the learning outcomes and objectives, as well as with the theoretical framework. Various kinds of assessments were adopted, including self-assessment (i.e., portfolio and assignment refinement), peer assessment, hetero-assessment, criterion-referenced assessment, norm-referenced assessment (a bonus for the top five students in the preparatory tasks), and ipsative assessment (post-class activity). The assessment items were mainly constructed based on real-life contexts, and contained questions that probed similar aspects of course contents; there was also the final exam. In addition, these activities facilitated overall class engagement and assessed individual problem identification, providing feedback to the instructor on the achievement level of students so that appropriate scaffolding could be given promptly.

#### 4.1.3. Assessment activities

4.1.3.1 Video-embedded questions (activity a). Learners had to answer five multiple-choice questions while watching the video. These questions were related to the video contents to activate learner engagement with the materials as well as to stimulate lower-order thinking levels. It required learners to play an active role while watching the videos, to interact with the materials, and to internalise this knowledge to answer the embedded questions. This accordingly

supports active learning and Blooms' taxonomy. It was also useful to ensure that learners actually watched the video and took careful notes instead of skipping the contents. Finally, the embedded questions helped the instructor to assess the effectiveness of the videos, determine whether learners could achieve the pre-determined objectives, and make modifications in the subsequent online lessons.

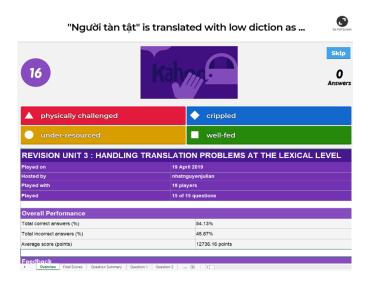


Figure 5. Video-embedded multiple-choice questions

4.1.3.2 Pre-lesson quiz (activity b). Learners worked in pairs and answered the questions related to the video lesson with the use of the game-based learning platform Kahoot. This kind of assessment had two main purposes. First, it checked learners' understanding of the video contents as the questions included both term-responses and application questions to foster lower-order and higher-order thinking levels. Therefore, the instructor diagnosed learners' misunderstandings to provide detailed clarifications and give appropriate individualised support. Second, it was a warm-up activity to stimulate learners' prepared attitudes to join in the following collaborative activities. As a result, this provided support for students (both low-achievers and high-achievers) to adapt to the new learning session.

4.1.3.3 Translation test at the lexical level (activity c). This was the first formative assessment of the course, and the result accounted for 5% of learner's total grade. The test was comprised of three sections. First, learners were required to formulate the main ideas of a text and classify six translation problems at the lexical level. These problems had been taught during the course, so it required the lowest level of Bloom's taxonomy to do the task (remembering). Second, learners had to use appropriate translation strategies associated with the meaning in the source language, and the communicative level of the target language to translate eight lexical terms. This part requires higher-order levels such as distinguishing the connotative and contextual meanings of the word (Understanding) and transferring the words with respect to the target grammatical structure and functions (applying). Finally, learners had to use electronic tools to solve cultural-specific problems. This task required learners to use advanced level of Bloom's taxonomy such as interpreting the underlying problems of the cultural-specific terms (applying), analysing the suitable strategies with the use of electronic tools (analysing), and predicting the potential risks in translating these terms (evaluating).



Figure 6. Sample for translation test at the lexical level

Test task 1. Identify and classify six problems at the lexical level (3 pts.) Learners were required to identify and classify six lexical problems (hyponymy, connotative, ambiguity, terminology, and cultural elements) taken from real-life situations such as business cards, commercial billboards, business leaflets, and newspapers. This task required learners to use the first two levels of Bloom's taxonomy (remembering and understanding) to fulfil the requirements.

Test task 2: Solve eight problems in context (4 pts.). This task required learners to understand the underlying issues behind the italicised words so that they could use appropriate translation strategies for each situation. These problems might be hyponymy, synonyms with different connotative meanings, ambiguity, business one-to-one terminology, eponyms, or acronyms. Therefore, students had to activate higher-order thinking skills to analyse inherent meanings of the italicised words and the intentions of the writer, distinguish various nuances of the source language, and select appropriate strategies with respect to the relevant contexts and linguistic structures.

Test task 3: Use electronic tools to solve six cultural-specific problems (3 pts.) This was the most difficult part in which learners were allowed to use reference resources and electronic tools to analyse and provide suggested corrections to six cultural-specific terms. This task could accordingly test particular translator capabilities of the students. First, they had to understand the communicative intention of the Vietnamese words and work through a suitable process to encode the new words in English. Second, they had to activate extra-linguistic knowledge about Vietnamese working styles of animal breeding and farming together with the culinary arts to solve these general knowledge and cultural problems. Third, they were allowed to use materials to do the task so that their instrumental sub-competence could be enhanced. Finally, they had to use appropriate translation strategies for each particular case. Since this task was performed in a complete text, learners' deeper understanding and skill proficiency could be assessed and measured.

4.1.3.4 Peer review (activity d). After the test, learners were asked to swap their papers and conduct a peer assessment in fifteen minutes (based on the rubric). They were allowed to edit the papers, make adjustments, and provide alternatives to any words/phrases they did not agree on. It was a useful way for the students to understand the assessment criteria better, and by building up their understanding it could also encourage the students to learn more deeply and develop their critical thinking ability.

Finally, learners submitted their test papers to the teacher, who evaluated them off campus – marking the papers, correcting the mistakes, evaluating learners' proficiency, and providing feedback through the online platform.

4.1.3.5 Comments on the assessment activities. Assessments in this design took into account the following considerations. Firstly, a combination of different types such as self-assessment, peer assessment, and hetero-assessment were

used to assess a wide range of knowledge and competences. Therefore, learners could learn from various viewpoints of their fellow students; thus, fostering knowledge construction. Second, the students were required to assess not only the end products but also the process involved to gather more information about their translation competences (e.g., identifying problems, employing strategies). Third, the assessments were also made from three different perspectives (criterion-referenced, norm-referenced, and ipsative assessments). This accordingly enabled the assessment process to not only meet the standardised institutional norms but also provide a multiplicity of testing formats to suit learners' varied needs and preferences. Besides, the grading scale system was transparent to all learners at the beginning of the course. Thus, the aforementioned rubrics provided the students with transparency about what elements were assessed, which not only allowed the instructor to evaluate the tasks better but also enhanced feedback to students. Finally, emphasis was placed on the ongoing use of formative assessments aligned with learning outcomes to serve as a guide for self-learning by students and self-reflection by teachers about their teaching practice. The range of assessment activities was also helpful for teachers to know how students perceived the intervention, and what elements of the teaching strategies might be less successful.

# 4.2 Student's performance through assessments

The following sub-sections displayed data taken from the formative and summative assessments to clarify how the flipped classroom model impacted learners' translation performance.

## 4.2.1 Learners' performance through assessment tasks.

This part aims to examine if there was a significant difference (or improvement) of learners' competence over formative and summative assessments. Table 5 shows the descriptive analysis of three formative tests and the summative test results.

	Maan	S.D.	Std.	95% Con Interval f		Min	May
	Mean	จ.ม.	Error	Lower Bound	Upper Bound	IVIII	Max
F. Test 1	7.66	0.85	0.14	7.38	7.93	6.0	9.0
F. Test 2	8.17	0.65	0.10	7.96	8.38	7.0	9.5
F. test 3	8.6	0.54	0.086	8.55	8.78	7.0	9.5
S. Test	8.75	0.61	0.098	8.55	8.95	7.0	9.6
Total	8.29	0.79	0.06	8.17	8.42	6.0	9.6

Table 5. Descriptive analysis of four assessment results

The average scores of the 39 sampled participants ranged from 6.0 to 9.6, with a mean of 8.29 and a standard deviation of 0.79, which was high and supported the effectiveness of the flipped classroom model. It clearly shows that the mean, min, max, and confidence interval increased over the assessment tasks, indicating that the learners' performance in the study improved consistently over the course.

The test of homogeneity of variances (Appendix D) gave a p-value of 0.005, indicating that within-group variance was non-equivalent across the group; therefore, a Tukey HSD test was invoked to determine if the differences among assessments are statistically significant. Results run from the Tukey HSD test (Appendix E) showed that the p-values for each test were all higher than 0.05. Therefore, this post hoc test proved that there is an equal within-group variance across the assessment results.

Table 6 below shows the results of ANOVA analysis, indicating that there was a statistically significant difference among the tests with F = 20.991 and p-value = 0.00. This means that learners' performance improved consistently throughout the course.

Table 6. ANOVA analysis of the assessment tasks

	Sum of Squares	df	Mean Square	F	Sig./p- value
Between Groups	28.361	3	9.45	20.991	0.000
Within Groups	68.455	152	0.45		
Total	96.816	155			

An effect size calculation was made to examine the magnitude of differences and strengthen the research endeavour. The result is f=0.64, implying a relatively high effect (Cohen, 1988). Moreover, an investigation into the effect sizes of the assessments was also conducted, as can be seen in Appendix F. Results show that most figures were high, implying the effectiveness of the flipped classroom on learner achievement. Meanwhile, the effect size between the formative Test 3 (week 8) and the summative test (week 11) was quite small (f=0.25) because of the short time span between these two assessments. Learners had one more in-class session in week 9 for consolidation and then one week to review their lessons at home for different final tests, which led to a small effect size.

Finally, Figure 4 reveals the mean differences among the assessments. It emphasises that learners' scores substantially increased throughout the intervention, indicating that learners had achieved certain translation capabilities stated in the learning outcomes.

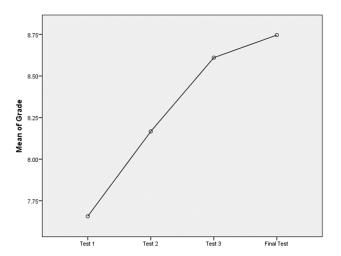


Figure 4. Mean plot of assessment results

#### 4.2.2. Error analysis through assessment tasks

This sub-section displays the error analysis of learners' translation papers through four assessment tasks. Both quantitative and qualitative data are analysed to shed light on how learners mastered required translated competence over the course.

Lexical errors were the first aspects to be investigated. These errors were categorised into five types, namely incorrect meaning (due to inability to comprehend the connotative meaning of source words), non-standard terminology, untranslated terms (incorrect translation of acronyms and eponyms), cultural elements, and multi-word units (See Table 7).

Table 7. Error analysis of lexical errors

	Sub- categories	Test 1	Test 2	Test 3	Summative test
	Incorrect meaning	132 (38%)	56 (43%)	43 (41%)	42 (47%)
	Terminology	56 (16%)	21 (16%)	21 (20%)	17 (19%)
Lexical errors	Untranslated terms	46 (13%)	11 (8%)	0	3 (3%)
Lexical	Cultural elements	63 (18%)	14 (11%)	14 (14%)	11 (12%)
	Multi-word units	52 (15%)	28 (22%)	26 (25%)	17 (19%)
	Total errors	349 (100%)	130 (100%)	104 (100%)	90 (100%)

Results showed that the total lexical errors, as well as the errors in each sub-category, decreased consistently over the tests. Errors of translating words with incorrect meaning had the largest frequency, followed by the errors of multi-word units and terminology. The reason for such high frequency of lexical errors in these three sub-categories could be attributed to the complexity of the Vietnamese language, the learners' lack of domain knowledge, or lack of a comprehensive contemporary Vietnamese dictionary. This might also be caused by learners' unfamiliarity with the online corpus, which required the instructor to spend more time with them on this aspect. Notably, however, the number of these errors in the final test was only one-third of that in the first formative assessment.

Table 8 displays the syntactic errors that learners made in Test 2, Test 3 and the final test.

Table 8. Error analysis of syntactic items

	Sub-categories	Test 2	Test 3	Summative test
	Typos	0%	1 (0.5%)	4 (4%)
	Miscellaneous	8 (5%)	5 (4%)	2 (2%)
	Redundancy	11 (7%)	10 (8%)	7 (7%)
	Word order	17 (10%)	7 (5.5%)	7 (7%)
so	Article	47 (28%)	42 (33%)	28 (29%)
Syntactic errors	Tenses	22 (13%)	14 (11%)	11 (12%)
ntactio	Preposition	37 (22%)	33 (25%)	26 (27%)
Sy	Structures	2 (1%)	5 (4%)	4 (4%)
	Word formation	15 (9%)	6 (5%)	4 (4%)
	Voices	7 (5%)	5 (4%)	4 (4%)
	Punctuation	0	0	0
	Total errors	166 (100%)	128 (100)	97 (100%)

The results revealed that learners still encountered some difficulties with English syntax. The total errors fell over the tests from 166 in Test 2 to 97 in the summative test, and no mistake was found in punctuation. Errors of typography, grammatical structures, word formation, active and passive voice, and miscellaneous categories received the lowest frequency. However, errors relating to the use of articles and prepositions showed the largest frequency with more than 25% in each assessment – an area which requires more attention and further practice to enhance learner competence in these two error subcategories.

Table 9 shows a breakdown of learner errors in using translation knowledge to handle the tasks at paragraph level or above.

Table 9. Descriptive and	llysis of translat	ting errors (par	agraph and above	;)
--------------------------	--------------------	------------------	------------------	----

	Sub-categories	Test 3	Final test
હ	Style and Naturalness	24 (31%)	17 (27%)
Translating errors	Coherence and cohesion	17 (22%)	15 (23%)
anslati	Reformulation techniques	37 (47%)	32 (50%)
<u> </u>	Total errors	78 (100%)	64 (100%)

The data showed that translating errors were the least severe in these three types of error categories, with only 78 and 64 errors in the last two assessments respectively. Two reasons could be attributed to this. On the one hand, within their first two academic school years, learners had received ample practice in academic writing skills for coherence and cohesion. They received ample exposure to business genres, text types, and text registers. Therefore, these two textual properties might not pose too many challenges for them when translating. On the other hand, there were few items to test learner competence in these sub-categories, and as a result they also made fewer translating errors of this type as they did lexical errors and syntactic errors.

There was also a perceived difficulty of some participants to use reformulation techniques (i.e. addition, omission, clarification, and adaptation) with any great frequency – 47% in Test 3, and 50% in the final test. Since mastery of reformulation techniques is necessary for a professional translator, more time and effort should be devoted to enhancing learners' competence of translation skills and reformulation techniques.

In summary, the error analysis of the learner group's translation papers in different formative and summative assessments provided insightful contributions to the effectiveness of the flipped classroom model on learner translation competence. First, a consistent decrease of errors over the tests confirmed the positive impact of this approach on learner performance. Thanks to more collaborative in-class practice and the constructively aligned classroom procedure, all activities were interrelated to improve learner performance based on the learning outcomes, assessment criteria, and pedagogical framework. As a result, their competences in translation skills at the lexical level, syntactic level, and paragraph-level were enhanced, with error rates falling over the test papers. Second, this error analysis was an effective tool to help educators diagnose students' strengths and weaknesses so that adjustments could be made throughout the course. The teacher planned and applied more efforts to addressing students' problem areas and minimizing the corresponding errors. Therefore, the model underwent on-going adaptations to meet various learning needs or specific expectations, progressively shaping a more contextually relevant and culturally appropriate teaching process for both teachers and learners.

### 5. Discussion and implications

The reality of pedagogical improvement achieved by flipping the classroom model is illustrated by analysis of the data obtained during a case study of a Vietnamese - English (V-E) translation course. As a specific snapshot the case provides a way of visualising the processes that occurred inside and outside the classroom. Instead of the traditional lecture approach, a series of short video clips were made available online to students before each face-to-face session. Course objectives, assessment tasks, video delivery, and classroom procedure were all clear and interconnected in accordance with the ideology of active and socio-constructivist learning. Learners firstly consolidated their experiences through online videos. Then, preparatory tasks and a group forum were utilised for information exchange and reflection, during which the pre-viewed online lectures could be better understood. Therefore, learner comprehension was improved. Where group understanding and thinking could not reach consensus, members' abstract conceptualisations required sharing and mutual consultation among instructors and peers through the in-class procedure. Ultimately therefore the learners not only obtained their own personalised solutions but also learned more from the instructor's and their peers' diverse answers. Their perceived values were then resultingly enhanced. Finally, when students' reflections and translation strategies were consolidated to foster professional translation habits under the instructor's guidance and peers' mutual feedback, they were prepared to engage in the next experience of individual construction and peer review.

In this case study, students had more chances to work actively in different learning modes (individual or teamwork) both inside and outside the classroom, to enhance their translation skills and achieve better learning outcomes. There was a greater extent of peer interactions during the course, with each student receiving support and feedback from the lecturer on an individual and group basis. As a result, the model promoted students' active engagement in the learning process significantly.

When classroom activities went smoothly, individual performances showed fewer problems and learners could achieve better scores. An analysis of learners' test papers in different formative and summative assessments confirmed the effectiveness of this flipped classroom model in the Vietnamese context. The success rate was attributed to several factors, perhaps most significantly the careful consideration of different formative tasks as well as feedback to students on their learning progress. Finally, the translated versions students submitted were done with more care thanks to the peer review/peer assessment process, possibly reflecting an increased sense of the responsibility and prospective-reader awareness that a professional translator should ideally have

In short, the results showed that classroom flipping with cooperative learning improved student performance and translation habits. This student-centric approach helped the participants to develop their higher-order thinking skills, critical analysis skills, and translation skills. As a result, academic performance is potentially improved.

# 6. Conclusion

This paper has illustrated how the flipped classroom model can be implemented practically both inside and outside the translation classroom. In line with the

findings of Ling (2017), Mei (2017), and Shu (2015) in translation training, this study's results of the test analysis also showed significant differences between the performance of the subjects over various learning activities and assessment tasks..

Regarding the procedure of the intervention, learners were firstly required to watch videos with learning contents developed specifically for the course in order to prepare for the classroom activities. This was then reinforced with nonclassroom preparatory tasks, a student work portfolio, together with the online guidance of the instructor and supporting feedback from peers in a group forum. During the classroom sessions, the revision and exploratory activities enabled learners to apply prior knowledge and associate past experiences with new problems. The exploratory activities also provided multiple representations to help the learners focus on relevant aspects of the lessons. The workshop sessions allowed learners to collaborate in groups or pairs to demonstrate their understanding via specific translation assignments. During this step, learners could enjoy a variety of practical experiences with the gradual withdrawal of support from the instructor. Next, individual practice afforded an opportunity for the learners to synthesise their understanding and knowledge to create new insights and implement what they had internalised during the previous education steps. Finally, the peer review stage offered the learners a reciprocal opportunity to assess each other's critical thinking. In order to attain the expected learning outcome and assessments, the learning materials and activities were chosen as a series of tasks culminating in simulated translation practice. That is, the tasks were carried out in a realistic manner and required corresponding collaborations among the team members.

This study aimed to provide insightful contributions to the increasing interest in understanding the effectiveness of flipped learning in translation training, and developing a conceptual model for implementing this method in a specific context like Vietnam. First, the major theoretical contribution of this study is the development of a novel model of flipped learning, as proposed in Figure 2. This suggested model was validated and constantly adjusted from a constructive alignment perspective. Flipped classroom features such as content delivery, learner-centric experience, contextual relevance, and cultural appropriateness were incorporated into both the video-making process and the activity design so as to promote active learning and ensure individualised learning. This study thus supports other evidence indicating the beneficial influence of flipped classroom elements on translation training, demonstrating that student accomplishment of set tasks both inside and outside the classroom is a driver of learning effectiveness.

The study has some limitations, and several implications for future research arise. First, readers may need to interpret the results carefully as this research is a context-specific case study. Thus, a thorough understanding of the flipped classroom model in translation training could be provided via empirical research with longer timeframes and larger participant numbers. Second, the research was limited to a single unit of the translation curriculum in a single Vietnamese public university. Therefore, more feedback is needed from different teaching environments, such as public and private universities. Moreover, the impact of flipped learning in translation training might be different in other modules across this discipline. For example, the use of flipped classrooms in translation theory modules might be less effective as this approach seems suitable for classes designed for students to generate a product and discuss it along the way, with the outcome comprising an intangible part (the knowledge each person acquires) and a tangible one (the translations and portfolios). Therefore, future research is needed to revise the effectiveness of flipped learning in various translation courses with varying practices of teaching. Finally, qualitative results were limited to those students who received instructional guidance in the flipped classrooms, whereas responses from a

control group (i.e. students in the traditional format) could not be collected. Therefore, more methods should be conducted such as observations, interviews, or document analysis to explore the actual in-class procedures as well as learners' real thinking about their own learning process.

#### References

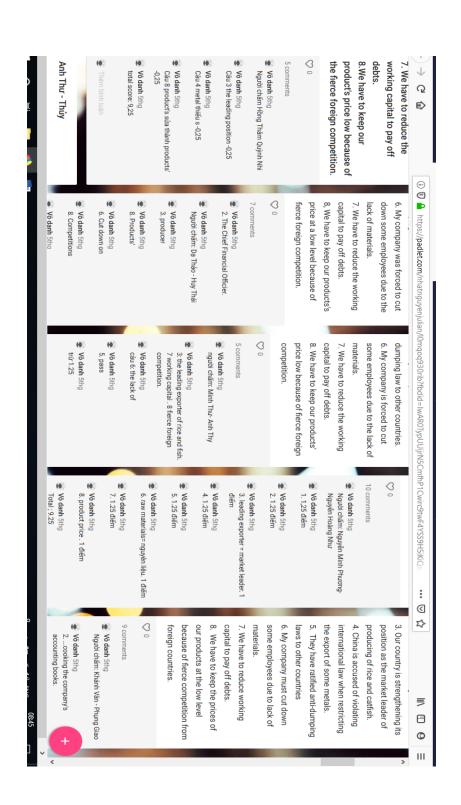
- Akçayır, G., & Akçayır, M. (2018). The flipped classroom: A review of its advantages and challenges. *Computers and Education*, 126(August), 334–345.
- Anderson, L. W., et al. (2001). A taxonomy for learning, teaching, and assessing: A revision of Bloom's taxonomy of educational objectives. New York: Longman.
- ATA. (2013). ATA standards, criteria, and assessment. Retrieved from http://www.atanet.org/certification/aboutexams\_overview.php
- Barr, D. (2012). Embedding technology in translation teaching: Evaluative considerations for courseware integration. *Computer Assisted Language Learning*, 26(4), 295–310.
- Bergmann, J., & Sams, A. (2012). *Flip your classroom*. Eugene, Oregon: International Society for Technology in Education.
- Biggs, J. (2014). Constructive alignment in university teaching. *HERDSA Review of Higher Education*, 1, 5–22.
- Deng, L. (2018). The project-based flipped learning model in Business English translation course: Learning, teaching and assessment. *English Language Teaching*, 11(9), 118.
- Do, T. T. Q. (2015). Towards translator competence in educating professional translators The case of university translation program in Vietnam. In & N. A. H. Haroon, H. C. Omar, & G. S. Seong (Eds.), Proceedings of the 15th international conference in translation: Synergising the translation community: Academia, industry and professional practice (pp. 489–499). Kuala Lumpur: Malaysian Translators Association, Institute of Language and Literature, Malaysian Institute of Translation & Books Kota Buku.
- Do, T. T. Q. (2016). Job opportunities for translation graduates towards appropriate translation methodologies. In *Giang Day Bien-Phien Dich Bac Dai Hoc* [*Proceedings on Teaching Translating and Interpreting at Higher Education*] (pp. 319–331). Ho Chi Minh City: National University HCMC Press.
- Do, T. T. Q. (2019). Pedagogical and professional perspectives on developing graduates' employability: The case of university translation programmes in Vietnam. Transformation and Empowerment through Education: *Reconstructing Our Relationship with Education*, Chapter 6, (January), 95–115.
- Do, T. T. Q. (2020). Translators' work requirements and graduates' preparedness: multi-perspective data from Australia and Vietnam. *Asia Pacific Translation and Intercultural Studies*, 7(144), 1–25.
- Erlingsson, C., & Brysiewicz, P. (2017). A hands-on guide to doing content analysis. *African Journal of Emergency Medicine*, 7(3), 93–99.
- González-Davies, M., & Enríquez-Raído, V. (2016). Situated learning in translator and interpreter training: bridging research and good practice. *Interpreter and Translator Trainer*, 10(1), 1–11.
- Ha, A. S., O'Reilly, J., Ng, J. Y. Y., & Zhang, J. H. (2019). Evaluating the flipped classroom approach in Asian higher education: Perspectives from students and teachers. *Cogent Education*, *6*(1), 1–12.
- Honeycutt, B. B. & Garrett, J. (2014). Expanding the definition of a flipped learning environment. In M. Bart (Ed.), *UFV Faculty Focus Special Report. Blended and Flipped: Exploring new models for effective teaching and learning* (pp. 12–13). Madison, Wisconsin: Magna. Retrieved from https://www.ufv.ca/media/assets/teaching--learning-centre/blended-and-flipped-specialreport.pdf.
- Le, T. T. T., Nguyen, T. N., & Nguyen, T. Q. N. (2012). The status of mainstream English-majored graduates at HCMC universities. *Scientific Journals Open University HCMC*, 1(24), 54–69.
- Lin, Y.-T. (2019). Cooperative experiential learning in a flipped translation classroom. *International Journal of English Linguistics*, 9(5), 29.

- Ling, T. (2017). The application of flipped classroom in the teaching of translation for college English majors. *Advances in Social Science, Education and Humanities Research*, 99, 473–475.
- Lou, Y., Du, Y., Li, Z., Gong, P., & Li, Y. (2017). Effect of the flipped classroom model on Chinese non-English-majored college students' translation skills. *Open Journal of Social Sciences*, 5(4), 270–281.
- Martín de León, C. (2016). From research to didactics: Tools for detecting and improving translation patterns. *Hermeneus. Revista de Traducción e Interpretación*, 1, 209–234.
- Mei, Z. (2017). A study on simulating crowdsourcing translation in flipped classroom. *International Journal of Emerging Technologies in Learning*, 12(8), 46–57.
- Mustafa, M., Rahmah, U., Hanafi, H. & Wahidah, N. I. (2019). Analysis trends of flipped classroom research in education. In *Proceedings of the International Conference Primary Education Research Pivotal Literature and Research UNNES 2018 (IC PEOPLE UNNES 2018)* (pp. 8–10). Amsterdam: Atlantis Press.
- Nguyen, N. T. T. (2016). Investigating the translation and interpretation training programmes from the management perspectives. In *Giang Day Bien-Phien Dich Bac Dai Hoc* [*Proceedings on Teaching Translating and Interpreting at Higher Education*] (pp. 357–367). Ho Chi Minh City: National University HCMC Press.
- Nguyen, T. N. N., Nguyen, T. K. T., & Le, T. N. A. (2016). An Investigation into the current status of translation/interpretation training in some Vietnamese universities. In *Giang Day Bien-Phien Dich Bac Dai Hoc [Proceedings on Teaching Translating and Interpreting at Higher Education]* (pp. 3–20). Ho Chi Minh City: National University HCMC Press.
- Pham, H. H., & Tran, L. T. (2013). Developing graduate knowledge and skills for the world of work: The case of the translation curriculum in Vietnam. *The Journal of Language, Society and Culture, 36*, 7–17.
- Pham, H. P. V. (2016). Model of teaching translation. In *Giang Day Bien-Phien Dich Bac Dai Hoc [Proceedings on Teaching Translating and Interpreting at Higher Education*] (pp. 94–109). Ho Chi Minh City: National University HCMC Press.
- Robert, I. S., Remael, A., & Ureel, J. J. J. (2017). Towards a model of translation revision competence. *Interpreter and Translator Trainer*, 11(1), 1–19.
- Sanchez, M. (2017). The pragmatics of translator training in the 21 century. *International Journal of English Language & Translation Studies*, 5(2), 81–85.
- Sankoff, P., & Forcese, C. (2014). The flipped law classroom: Retooling the classroom to support active teaching and learning. *Canadian Legal Education Annual Review*, 7, 119–145.
- Shu, X. (2015). An empirical study of flipped classrooms in an open university: A case study on translation theory and practice. *Asian Association of Open Universities Journal*, 10(1), 53–63.
- Shu, X. (2016). An empirical study on a flipped classroom in Open university teaching based on an ecological perspective: A case study on a translation theory and practice course. *Asian Association of Open Universities Journal*, 10(1), 53–63.
- Tsai, Y. & Tsai, A. (2014). Flipped translation training: The student perception. Retrieved from ctld.ntu.edu.tw/rp/report/103 08.pdf
- Vale de Gato, M., Janssen, M., De Barros, R. Q., & Valdez, S. (2016). Teaching and researching literary translation in the digital context: PenPal in trans as a case-study. *Matlit: Revista do Programa de Doutoramento em Materialidades da Literatura*, 4(1), 63–80.
- Vilceanu, T. (2013). Planning for success. Proactive behaviour in teaching translation skills to master's students. *Procedia Social and Behavioral Sciences*, 76, 873–879.
- Wang, L. (2017). On interactive teaching model of translation course based on Wechat. *English Language Teaching*, 10(3), 21.
- Weber, R. P. (1990). *Basic Content Analysis* (2nd ed.). Newbury Park: Sage Publications.
- Zhang J. (2016). "Flipped class model" applied to translation class. *Sino-US English Teaching*, 13(2), 142–149.

Appendix A: Contents of the flipped translation course

	Learning contents	Activities
MODULE 1: OVERVIEW (Week 1)	<ul> <li>An overview of V-E translation</li> <li>Translation principles</li> <li>Translation units and practice in the business context</li> </ul>	<ul> <li>Introduction of the flipped course</li> <li>Demonstration</li> <li>Case study of violation in translation principles</li> <li>Identification of translation units in business-related texts</li> </ul>
MODULE 2: TRANSLATION SKILLS AT THE	Single terms and     Translating business     single terms     Handling lexical     problems in business-     related texts	<ul> <li>Relaying</li> <li>Table filling</li> <li>Equivalent finding</li> <li>Translating banking forms</li> <li>Betting</li> </ul>
SKILLS AT THE WORD LEVEL (Weeks 2+3)	Elements of cultural- specific terms     Handling problematic issues of cultural- specific terms	<ul> <li>Kahoot game</li> <li>Classifying translation problems</li> <li>Translating leaflet/Brochure</li> <li>Translation Test 1</li> <li>Peer correction</li> </ul>
MODULE 3: TRANSLATION SKILLS AT THE PHRASE LEVEL (Week 4)	Translating short phrases Translating long phrases Collocations and modern language in business-related texts	<ul> <li>Errors quizzes</li> <li>Phrase matching</li> <li>Translating collocations</li> <li>Translation exercise</li> <li>Mini-debate</li> </ul>
MODULE 4: TRANSLATION SKILLS AT THE	<ul> <li>Translation problems at the syntactic level</li> <li>Steps to translate sentences</li> <li>Key message analysis</li> </ul>	<ul> <li>Quizizz learning platform</li> <li>Error finding</li> <li>Paraphrasing</li> <li>Translation Test 2</li> <li>Error counting and report</li> </ul>
SYNTACTIC LEVEL (Weeks 5+6)	:     Reformulation techniques     Practice in the Banking and Finance context	<ul> <li>Classcraft quests</li> <li>Message analysis</li> <li>Hunting game of reformulation techniques</li> <li>Translation exercise</li> <li>Peer correction</li> </ul>
MODULE 5: TRANSLATION SKILLS AT THE PARAGRAPH LEVEL (Week 7)	<ul> <li>Text types and text genres</li> <li>Coherence and cohesion</li> <li>Addition, omission, adaptation, and clarification</li> </ul>	<ul> <li>Reorder + Identification</li> <li>Text type analysis</li> <li>Text register modification</li> <li>Translation competition</li> <li>Editing game</li> </ul>
MODULE 6: TRANSLATING JOURNALISTIC ARTICLES (Weeks 8 + 9)	Typical features of journalistic genres Characteristics of journalistic articles Translating headlines Techniques to translate journalistic articles	<ul> <li>Gap filling + Multiple choice</li> <li>Headline translation</li> <li>Reformulation of different genres</li> <li>Translation Test 3</li> <li>Peer marking and presentation</li> <li>Revision and final review for summative test</li> </ul>

Appendix B: Examples of peer assessment, and group forum discussion





Mọi người cho mình hỏi " Tam giới " là giới nào, dịch sao. "Đã đặt chân vào top Ten" dịch sang step into Top ten ổn không "Tranh thủ xuống giống", tranh thủ dùng từ nào được vậy?



# Appendix C: Joint negotiation task

- 1. Bộ GD&ĐT phát hành chỉ thị về lương tối thiểu cho giáo viên .
- 2. Tổng sản phẩm quốc nội của VN năm 2018 tăng 7%.
- Tòa án nhân dân Tp. HCM đã quyết định tạm ngưng (suspend) phiên toà giữa Vinasun và Grab.
- 4. Công ty Luật TNHH Michael Lorenz (Việt Nam) cần tuyển 2 nhân viên trong lĩnh vực luật quốc tế.
- 5. Giá bất động sản ở Tp. HCM vọt lên 12 triệu đồng/ m2.
- 6. Giá vàng tháng 3 năm 2019 biến động khoảng 40 triệu/lượng.

# **Appendix D: Test of Homogeneity of Variances (N=39)**

Levene Statistic	df1	df2	Sig.	
4.388	3	152	0.005	

# Appendix E: Tukey HSD test

	Test N		Su	bset for alpha =	0.05
	1621	רי	1	2	3
	Test 1	39	7.6564		
	Test 2	39		8.1667	
Tukey HSD <sup>a</sup>	Test 3	39			8.6103
·	Final Test	39			8.7462
	Sig./p-value		1.000	1.000	0 .808

# Appendix F: Effect sizes of paired assessments

	F. Test 1	F. Test 2	F. Test 3
F. Test 2	0.78		
F. Test 3	1.74	0.796	
S. Test	1.79	0.95	0.25