

## The Effects of Pot-Luck Flipped Classrooms (PFC) on the Development of Translation Competence: A Study of Novice Translators

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**Abstract:** The present study investigates the effects of Pot-luck Flipped Classroom (PFC) as an innovative technique, in a flipped classroom (FC), on the development of translation competence (TC). The advances and developments in science and technology and the need to exchange the newly-developed information, knowledge, and technology highlight the demand to train professional translators, and thus, the development of TC becomes an essential skill of the 21st century. The FC learning model and pot-luck innovative teaching technique have proven the enhancement of effective learning. Therefore, in this study, we combined them as PFC to develop TC via collaboration and active involvement in a learner-centered environment. A total of 57 Translation Studies students, including 27 males and 30 females took part in this study. We used a quasi-experimental design with an experimental (PFC) and a control group. Data were collected via the Translation Competence Acquisition Questionnaire before and after the intervention of PFC. The findings showed a statistically significant difference in all TC components in the experimental group after the intervention of PFC. Thus, PFC proved to be efficient. Finally, pedagogical implications are discussed and suggestions for further studies are also provided.

**Keywords:** Flipped Classroom, Pot-Luck Innovative Technique, Translation Competence, Collaborative Learning, Active Involvement.

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## Introduction

Traditional teaching and learning approaches are in conflict with constructivist approaches due to their teacher-centeredness (Brooks, 2002). In traditional lectures, the information presented might be familiar for some students, while others might have difficulty in comprehending what is presented so rapidly or might lack the necessary knowledge in order to take in the concepts which have already been introduced (Goodwin & Miller, 2013). The innovative trends in teaching and learning promote student-centered approaches, where students are responsible for their own learning in a context that involves participation, problem-solving, critical thinking, various activities, meaningful interaction, and group work not just having passive students who are instructed through rote memorization thus being unable to progress and develop. One presented model to embark upon a profound transformation is Flipped Classroom (henceforth FC). In flipped instruction, which is a form of blended learning, online learning is connected with face-to-face learning. However, the outside activities assigned in FCs are not necessarily online, and handouts and hard copies might also be involved. In this pedagogical model, the traditional class lectures and homework assignments are reversed. Instruction is delivered outside of class and assigned homework is moved into the classroom, thus inverting the traditional teaching methods (Colina, 2002). Accordingly, teachers can put more time into tutoring students rather than giving lectures (Wallace, 2013). In this model, a teacher is not a provider of knowledge, but an organizer, facilitator, and guide (Basal, 2015). Above all, flipping a class is not just about reorganizing a lecture, but it also changes one's outlook. Not only is the context of learning altered, but also students' attitude towards learning is changed. A flipped learning focuses more on a student-centered approach to learning where learners are expected to play an active role in their learning (Krumsvik & Jones, 2016). The idea of FC emphasizes the fact that learners should not only inactively munch information obtained from a restricted range of sources presented to them but also use a variety of resources. FC hence is a learner-controlled setting for developing higher-order thinking skills (Brookhart, 2010).

## Theoretical Background

Pot-luck was first utilized as an innovative technique of project-based learning (PBL) by Bagherzadeh, Motallebzadeh, and Ashraf (2014) in order to address the shortcomings of classic teaching models by focusing on learners' involvement and collaboration in a learner-centered

environment. As described by Bagherzadeh et al. (2014), Pot-luck means a feast for which whoever is invited brings something to eat; therefore, everyone shares the meal or shares the ingredients of the meal. Bagherzadeh et al. (2014) brought the concept of pot-luck as a sharing and caring party in real life to the classroom environment to deal with learning problems innovatively. They have explained the procedures of a pot-luck project-based learning classroom as the following:

Pot-luck needs learners to take the instruction in advance and come to class prepared. Inside the classroom, they deal with the problems by applying this technique in Pot-luck Time through sharing and caring. In other words, at the beginning of each part of the lesson through pair work and group work in collaborative problem-solving activities, first, students discover the problems; then, participate and engage actively in solving them. Psychologically, the concept of Pot-luck as a caring and sharing meeting and the comparison of learning with food and its vitality not only brings fun to the learning process but also emphasizes the importance of learning and feeling responsible by sharing and caring. In addition, learners have Pot-luck Time outside the class in Pot-log, a Pot-luck blog, and even other virtual situations or social media. Therefore, they start preparing for the class and sharing ideas in advance, then continue solving problems inside the class. They can even continue the discussion outside the class in online virtual contexts. The teacher monitors the students, and if the need arises, gives them help and advice as a facilitator (Bagherzadeh et al., 2014). Overall, previous research revealed that being involved in the process of learning, feeling autonomous and responsible, working cooperatively, and caring about each other's problems created a positive stance towards learning and increased students' achievement in a Pot-luck course. Therefore, Pot-luck, as an innovative technique, boosted the quality and efficiency of PBL and helped effective learning. Subsequently, we selected Pot-luck (adopted from Bagherzadeh et al., 2014) as an innovative technique to be utilized in FC in order to investigate how this combination will corroborate the effective acquisition of TC.

### ***Pot-luck in Relationship with Methods and Post Method***

According to Bagherzadeh et al. (2014), Pot-luck is a technique rather than a method, meaning that it is very flexible and could be utilized as a technique in different contexts based on the learners' needs and the teachers' decisions. Thus, Pot-luck is an innovative technique that bridges the gaps of restrictive methods and makes a link towards the flexibility of the Post-Method era.

### ***Pot-luck and Flipped-style Learning***

Pot-luck and FC are in correspondence with each other. First, FC and Pot-luck learning both are innovative and creative styles of learning. Second, as in FCs, instruction is delivered outside the class and assigned homework is moved into the classroom, Pot-luck also requires students to take instructions in advance and come to the class prepared. Therefore, the class is the place for problem-solving. Third, FC is a form of blended learning, in which online learning is connected with face-to-face learning with the utilization of technology. Likewise, the utmost efficiency of the implementation of Pot-luck requires the integration of online and face-to-face instruction and utilizing technology. Fourth, FC and Pot-luck learning both aim at altering the learners' attitude towards learning and creating a positive stance towards learning by making learners actively involved in the process of learning. Fifth, both FCs and Pot-luck learning are learner-centered rather than teacher-centered, and the teacher is an organizer, advisor, and facilitator not the authority in the classroom. Last but not least, FC and Pot-luck learning both emphasize collaboration, sharing/caring, critical thinking, and active involvement in order to boost the efficiency of the instruction and achieve effective learning.

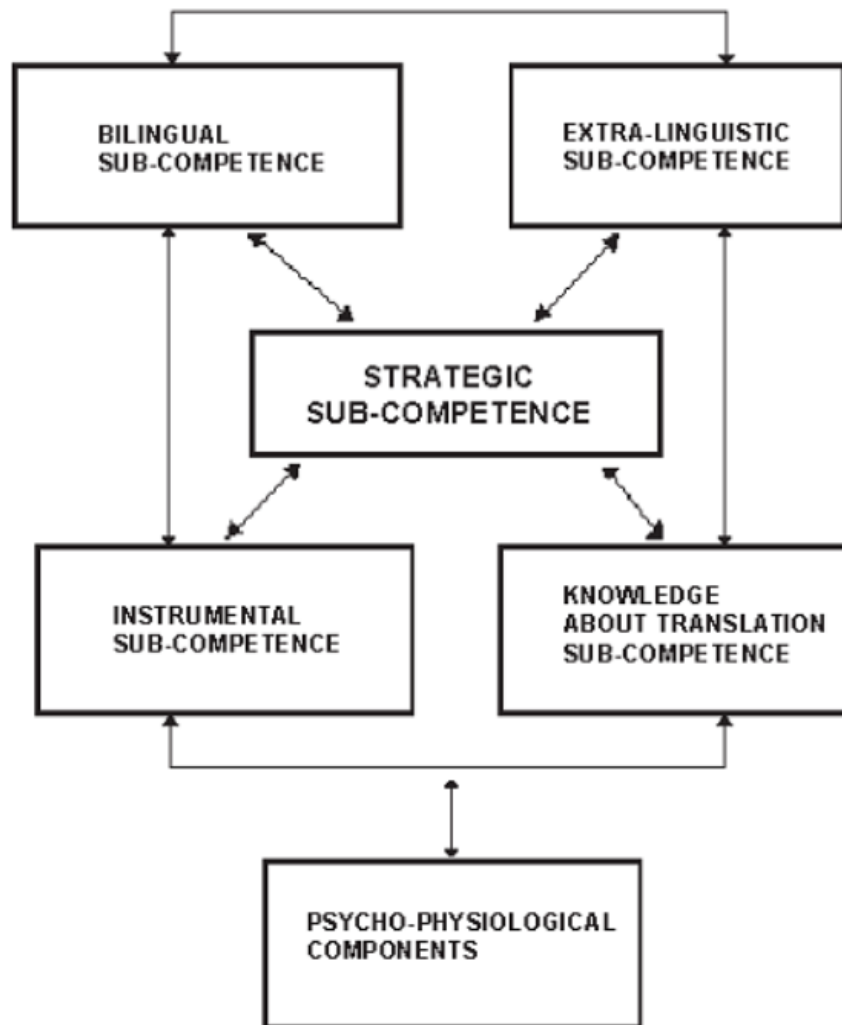
### ***Translation Competence: Definitions and Theoretical Model***

The PACTE Group defines TC as the fundamental system of knowledge needed to translate. They believe that TC: (a) is expert knowledge; (b) is principally procedural knowledge, (c) includes various inter-related sub-competencies; and (d) encompasses a strategic component that is of high significance. The model comprised the following competencies (PACTE, 2003):

- 1) *Bilingual sub-competence*: It is mostly procedural knowledge for communicating in two languages. It consists of pragmatic, socio-linguistic, textual, grammatical, and lexical knowledge in the two languages.
- 2) *Extra-linguistic sub-competence*: It is declarative knowledge, involving bicultural, encyclopedic, and subject knowledge.
- 3) *Knowledge about translation sub-competence*: It is declarative knowledge mainly about the translation profession.
- 4) *Instrumental sub-competence*: It is procedural knowledge about the use of documentation resources and IT equipment in translation. Also, it focuses on the use of different dictionaries, encyclopedias, and electronic corpora.
- 5) *Strategic sub-competence*: It is procedural knowledge used to control the translation process.
- 6) *Psycho-physiological components*: Different mechanisms such as cognitive and attitudinal

components are included in this competence (PACTE, 2003).

**Translation Competence:** Over recent years, translation and interpretation studies have attracted a great deal of attention. This appears to be affected by the demands of academic and industrial circles. The advances in science and technology and the need to exchange the newly-developed information highlight a deep demand to train professional translators. One of the most critical factors contributing to professionalism in translation and training professional translators is the development of Translation Competence, which has been called differently by different scholars, as *Translational Competence* (Toury, 1995), *Translation Performance* (Wilss, 1989), and even *Translation Skill* (Pardee Lowe, 1987). Seguinot (1991) and Lorscher (1991) among others examined TC acquisition. Ressurreccio, Piorno, and Izquierdo (2008) investigated the impact of textual genre on TCA. However, the role of other factors, such as translation training courses and translation tasks has remained unclear. PACTE group, that is, Process of Acquisition of Translation Competence and Evaluation, (2003) presents the TC model that is the basis for designing the hypotheses of an empirical-experimental study of TC. They describe the theoretical framework and the first models that were designed in 1998; along with the modification introduced in 1998. After the TC model has been established, in 2002, Orozco and Hurtado Albir developed the instruments for measuring the process of acquiring TC in written translation. TC and its process of acquisition were described, and then three measuring instruments specially developed to measure TC acquisition were presented: (a) to measure notions about translation, (b) to measure students' behavior when faced with translation problems, and (c) to measure errors. Pilot studies were carried out for three years to test, improve, and validate the measuring instruments.



*Figure 1.1. PACTE Model of Translation Competence*

*Adapted from PACTE (2002)*

### **Purpose of the Study**

The purpose of this study is to investigate the effect of Pot-luck Flipped Classrooms on the development of translation competence. In other words, we would like to examine how the implementation of pot-luck, as an innovative technique, in an FC affects the development of TC.

### **Research Questions and Hypotheses**

- Q1.** Does PFC have any statistically significant impact on the development of TC?
- Q2.** Does PFC have any statistically significant impact on the development of translation notions?
- Q3.** Does PFC have any statistically significant impact on the development of translation problems?
- Q4.** Does PFC have any statistically significant impact on the development of translation errors?
- H1.** PFC does not have any statistically significant impact on the development of TC.

- H2.** PFC does not have any statistically significant impact on the development of translation notions.
- H3.** PFC does not have any statistically significant impact on the development of translation problems.
- H4.** PFC does not have any statistically significant impact on the development of translation errors.

## Review of the Literature

There is an increasing body of research focusing on the FC design (Albert & Beatty, 2014; O'Flaherty & Phillips, 2015), although the concept has been around for many years (Gilboy, Heinerichs, & Pazzaglia, 2015). FC became popular by two high school chemistry teachers (Bergmann & Sams, 2012) and has been used frequently in different educational levels and disciplines. The rationale for developing this innovative instructional design is in the pursuit of facilitating students' active learning (Bonwell & Eison, 1991) and deep learning (Harlen & James, 1997). In her systematic review, Bond (2020) reported that the flipped learning approach has been growing in popularity in both higher education and K-12, especially for its potential to increase active learning and student engagement.

A flipped classroom, which is learner-centered, is practical for meaningful learning to take place in the classroom (Roehl, Reddy, & Shannon, 2013). Flipped learning has been shown to significantly increase learning performance and achievement (Akçayır & Akçayır, 2018; Tütüncü & Aksu, 2018) and active learning within the classroom (Tütüncü & Aksu, 2018). Zheng and Zhang (2020) reported that during the transition period from traditional lecture-intensive learning to flipped-classroom learning, promoting peer learning and help-seeking could significantly improve students' academic achievement. The FC approach engaged most students in learning and is an emerging learning and teaching approaches appropriate for undergraduate nutrition dietetic education (Burkhart, et al., 2020). Utilizing a flipped classroom, Halasa et al. (2020) showed a statistically significant increase in the students' achievements in blended learning with a flipped classroom.

Additional benefits of the FC point to different aspects of student learning such as better control of the learning process (Bruff, Fisher, McEwen, & Smith, 2013), more active interactions among teachers and students (Adnan, 2017; Bergmann & Sams, 2012), more overall learning time (Chen Hsieh, Wu, & Marek, 2017), and increased class attendance (Prober & Khan, 2013). Stöhr, Demazière, and Adawi. (2020) suggest that one promising pedagogical approach for combining asynchronous and synchronous online learning is the online FC model. A pre-class video of the flipping classroom could act as a medium in providing the pre-requisite knowledge and skills which facilitate the practical work and discussions (Fung, 2020). As video watching is done individually, students can review the video several times without worrying about holding the lesson behind or skipping a particular session they are very familiar with (Roehl et al. 2013) and thus the learning of science becomes more effective.

Flipped learning is an approach that has "great promise" (OECD, 2018, p. 77) to bring technology more into the classroom, help develop students' digital competencies (Kostaris, et al., 2017), and has the potential to enhance both parent and student engagement (Aycicek & Yelken, 2018; Bond, 2020).

With access to learning content outside the class, students can use features such as pause and rewind to privately revisit confounding information (Bergmann & Sams, 2012). The study by Namaziandost and Çakmak (2020) demonstrated a significant increase in the self-efficacy scores of the students in the FC. Flexibility and the ability to adapt the learning pace with differences in individual attention were some of the reasons noted for the observed gains of the FC model (Muldrow, 2013). Additionally, when students make use of their own knowledge in the classroom, they take ownership of their own learning process and can be inspired to want to learn more about a topic because it becomes more personally interesting (Namaziandost & Nasri, 2019). There is a growing body of research on the potential of educational technology to enhance student engagement (e.g. Schindler, Burkholder, Morad, & Marsh, 2017), although the majority of this has been focused on higher education (Henrie, Halverson, & Graham, 2015) and in the area of STEM (e.g. Nikou & Economides, 2018).

Although the online FC seems to be gaining more popularity in higher education, very little research has been done on it. That said, in the realm of FC research in STEM education, most studies have reported a positive impact on student learning (Barba, Kaw, & Le Doux, 2016). Studies show that the teaching and learning effectiveness in science lectures could be enhanced by using flipping (Mzoughi, 2015; Pfennig, 2016). Lundin et al. (2018) found that quantitative methods were the most used and recommended that more qualitative research should be undertaken, alongside increased design-based and longitudinal research (Akçayır & Akçayır, 2018). Van Alten et al. (2019) suggest that more K-12 studies with robust designs, that include control groups, are needed. Lundin et al. (2018) recommended that further research should be undertaken outside of STEM subject areas. Akçayır and Akçayır (2018) recommended that more studies investigating flipped learning across subjects be undertaken.

A learner-centered approach to teaching translation based on constructivism has been deemed effective (Kirlay, 2000; Colina, 2002). Lin (2019) has implemented cooperative experiential learning in a Flipped Translation Classroom reported that flipped translation classroom enables learners to actively engage in the translation process and elevate the learning process from lower-order thinking to higher-order thinking.

Therefore, we believe that similar to language learning, learning translation skills would be more effective through a cooperative, learner-centered approach, and as a result, in the present study, we decided to utilize Pot-luck, as an innovative learning technique, in a flipped learning setting in order to investigate the development of TC.

## Methods

### *Participants*

Participants were selected from B.A. students of English Translation Studies at [Removed to be anonymous]. Fifty-seven students (27 boys and 30 girls) with an age range of 18 to 20 were

selected. Since the participants should not have had any academic translation training experience, students with no academic translation training experience were only selected, that is, translation students of the fifth semester were only chosen.

### ***Instruments***

The instrument was Translation Competence Acquisition Questionnaire (TCAQ) by Alavi and Ghaemi (2013). It includes three sub-instruments as follows:

1. Translation Error Instrument (TEI): measuring errors,
2. Translation Problem Instrument (TPI): measuring behaviors of translators when faced with translation problems,
3. Translation Notions Instrument (TNI): measuring the knowledge of translation,

These instruments were administered twice, once at the beginning and once after the intervention of instruction (PFC).

***Translation Notions Instrument (TNI).*** TNI is a multidimensional questionnaire as it covers seven factors within the "abstract" notion of what translation is (Orozco & Hurtado Albir, 2002). Seven factors like notions about translation, translation problems, translation units, translation equivalences, translation functions, TC, and translation strategies are included in the questionnaire (Orozco, 2000). This questionnaire measures two main constructs of Knowledge about translation, as measured by items 1, 2, 3, 4, 5, 6, 7, 12, 13, and 14, of the TC questionnaire and Strategic sub-competence, which is measured by items 15, 16, 17, 40, 50, 51, 52, 53, 54, 55, and 56.

***Translation Problems Instrument (TPI).*** TPI questionnaire consists of two parts. The first part includes the task of translating a text, and the second one a TPI questionnaire. In the text, students are supposed to translate four translation problems, namely pragmatic, extra-linguistic, transfer, and linguistics. Orozco and Hurtado Albir (2002) mentioned that these four types of translation problems are chosen based on the rationale that in order to solve them, the translator needs to mobilize all the components of TC. After students translated the text, they were asked to answer the TPI questionnaire.

The evaluator read the translated text and the TPI questionnaire. Therefore, the translation of each student was checked to see whether each problem had been solved or not.

This questionnaire measures two main constructs of Bilingualism and Instrument sub-competences. Bilingual sub-competence was measured through items 21, 22, 23, 24, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 43, 44, and 45. Also, Instrumental sub-competence was measured through items 8, 9, 10, 11, 18, 19, 20, 28, 41, and 42 of the TC questionnaire.

### *Design*

We used a quasi-experimental study design with experimental (PFC) and control (traditional learning) groups in the pre-test/ post-test method. Quantitative data were collected via TCAQ which includes three sub-instruments. It took around two weeks to collect the data.

### *Procedure*

The procedure of the Pot-luck implemented FC (PFC) for the experimental group (EG) was as follows:

Before the start of the instruction, the students completed the pre-test (TCAQ). A short video was provided to students, outlining the FC and Pot-luck technique, the syllabus, and time commitment required for the course- approximately 10 hours per week. Since it was the students' first experience, they received a brief instruction about a flipped classroom and the rationale behind it at the start of the instruction. In addition, students received instructions on how to access the materials at home. Instructional content, including audio-visual lectures, teaching slides, and educational materials were provided in advance in their online learning platform. As suggested by Bergmann and Sams (2012), audio-visual lectures were provided between 10-12 minutes which was an appropriate screen viewing time. A text in English was provided as an assignment for participants to translate into Persian. The participants were supposed to study the lecture information, translate the text into Farsi, and upload the translation to the learning platform two days before the class.

By translating the text, students were given the chance to experience the task of translation and its complications on their own and demonstrate their translation strategies. The instructor evaluated the students' translations and selected some challenging sections with different translation approaches for the discussion in the class. In addition, students were divided into several study groups, and for each session, they were assigned one translation task to be done as a group. They could discuss the topic and the division of the task before the class and in the class. They exchanged their translations with other groups to be evaluated. Every session was a learning Pot-luck, in which all students needed to come prepared, meaning that

they were supposed to have prepared their sections of the whole task in order to be ready to discuss issues and to feel responsible in collaborative tasks.

To spice up the learning experience with fun and make it more enjoyable, Pot-luck was used metaphorically in different ways. For instance, there were pot-luck tables for every group to have their round-table discussions and knowledge-sharing moments. There were pot-luck boards, where every group could pin their knowledge-sharing piece or different pieces of collaborative tasks. Students have developed some jargons related to Pot-luck as well. For example, when they pinned their share on the pot-luck board, they cheered POT-LUCK similar to a bingo moment. Every session, the participants worked on two major tasks, including the instructor's selected sections, and the study group task. Regarding the selected sections, they could have access to the selected translation options by others in the class, compare them with their own, reflect upon them, discuss the appropriateness and meaning maintenance in sample translations, and finally, report their decision to the class.

For the other cooperative translation task, first, in their Pot-luck group, they wrote up the final translation that they had already done cooperatively. Then, they exchanged their works to be evaluated by other groups in terms of the lexicon choice, structures, meaning, and overall cohesion. After the instructor confirmed the evaluation, they gave them back for revisions. The instructor kept monitoring the students peripherally and provided some feedback in case needed. After students' tasks, a complementary lecture of approximately 10 minutes was given by the instructor to elaborate more on unclear and complicated parts and to emphasize the important points. At the end of each session, group members took notes of their takeaway points of their discussions and kept the drafts, the revised version, and their notes in a portfolio for further reflection and the implementation of them in future works.

In the control group (CG), the class was teacher-centered, and students received instructions in a traditional way of teaching. They received the content in the lecture format via the presentations of power-point slides. The instructor introduced new subjects in every lecture during class time, and sometimes, students did practice during the class, otherwise, they were assigned some homework to be done individually at home. Students handed in their works in class or emailed them to the instructor. The students' translations were evaluated and graded by the instructor. Since the lectures were delivered during class time, no time was left for the cooperative pair work or group work in the class, and students' level of interaction was low.

After the completion of the course, students in both CG and EG completed the posttest (TCAQ).

## Data Analysis

As stated earlier, the TCAQ was developed and validated by Alavi and Ghaemi (2013). The reliability index of the questionnaire was reported to be .807.

Four research questions of the present study focus on whether PFC has any statistically significant effect on the participants' development of TC and its components. The experimental group consisted of 33 participants who received the TCAQ before and after the treatment. Then, the subcomponents of TCAQ were analyzed to find the answer to the research questions. To investigate the first research question, a T-test for TC scores was run. The results of the T-test for TC scores are as follow:

**Table 1.** *Descriptive Statistics for TC Score*

	Experimental Group	N	Mean	Std. Deviation	Std. Error Mean
TC score	Pretest	33	2.4342	.17497	.01767
	posttest	33	3.8581	.17577	.01787

The mean for TC score in the Pretest group ( $M = 2.43$ ,  $SD = .174$ ) was 2.43. The TC score for Posttest ( $M = 3.85$ ;  $SD = .175$ ,  $SE = .0178$ ) was greater than that of pretest.

**Table 2.** *Independent Sample Test for TC Score*

Levene's Test for Equality of Variances		t-test for Equality of Means			
		F	Sig.	t	df
TC score	Equal variances assumed	5.100	.034	-62.764	158
	Equal variances not assumed			-62.764	154.654

There was a significant difference in the scores for TC posttest ( $M=3.85$ ,  $SD= .175$ ) and TC pretest ( $M=2.43$ ,  $SD= .174$ ) conditions;  $t(158) = -62.764$ ,  $p = 0.05$ .

**Table 3.** *T-Test for Equality of Means for TC Score*

t-test for Equality of Means

		Sig. (2-tailed)	Mean Difference	Std. Error Difference
TC score	Equal variances assumed	** .00001	-1.52683	.03255
	Equal variances not assumed	** .00001	-1.55683	.03233

**Table 4.** *T-Test for Equality of Means for TC Score (Cont.)*

		t-test for Equality of Means	
		95% Confidence Interval of the Difference	
		Lower	Upper
TC score	Equal variances assumed	-1.57056	-1.67271
	Equal variances not assumed	-1.57056	-1.67270

Levene's test for equality of variances was not found to be violated for the present analysis,  $F(53) = 1.570$ ,  $p = 0.000 < 0.05$ . Therefore, the first null hypothesis is rejected and there is a significant difference between TC scores in pretest and posttest, meaning Pot-luck Flipped Classroom had a statistically significant impact on the development of TC.

Having analyzed the overall effect of PFC on the development of TC, now the impact of PFC on the development of TC components (i.e. translation notions, translation problems, and translation errors) was investigated. Each of the TC components has its own sub-components.

To answer the second research question (translation notions), only two sub-components of Knowledge about translation and Strategic components were investigated.

**Table 5.** *Group Statistics for Translation Notions*

Experimental_Group	N	Mean	Std. Deviation	Std. Error Mean	
Knowledge about translation	Pretest	33	2.336	.2728	.0476
	Posttest	33	3.989	.2760	.0490
Strategic sub-	Pretest	33	2.377	.4596	.0709

competence	posttest	33	3.996	.3751	.0686
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**Table 6. . Independent Samples Test for Translation Notions**

		Levene's Test for Equality of Variances		t-test for Equality of Means
		F	Sig.	t
Knowledge about translation	Equal variances assumed	.018	.887	-32.352
	Equal variances not assumed			-32.352
Strategic sub-competence	Equal variances assumed	9.008	.006	-22.452
	Equal variances not assumed			-27.452

As Table 6 shows,  $t(22.452) = 9.008$   $P > 0.05$ , indicating a rejection of the second null hypothesis. That is, the PFC had a statistically significant impact on the development of translation notions.

The third research question asked for the impact of PFC on the development of translation problems. To answer the third research question (translation problems), only two sub-components of Bilingualism and Instrument was investigated.

**Table 7. Group Statistics for Translation Problems**

	Experimental Group	N	Mean	Std. Deviation	Std. Error Mean
Bilingualism	Pretest	33	3.434	.2653	.0426
	Posttest	33	4.283	.2613	.0480
Instrument	Pretest	33	3.334	.4781	.0719

posttest	33	4.986	.3469	.0699
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**Table 8.** *Independent Samples Test for Translation Problems*

		Levene's Test for Equality of Variances		t-test for Equality of Means
		F	Sig.	t
Bilingualism	Equal variances assumed	.019	.893	-37.396
	Equal variances not assumed			-37.396
Instrument	Equal variances assumed	8.063	.005	-21.331
	Equal variances not assumed			-21.331

**Table 9.** *Group Statistics for Translation Errors*

	Experimental Group	N	Mean	Std. Deviation	Std. Error Mean
Extralinguistic	Pretest	33	2.514	.3113	.0116
	Posttest	33	4.113	.3783	.0182
Psychophysiology	Pretest	33	2.311	.3111	.0152
	posttest	33	4.216	.4129	.0239

**Table 10.** *Independent Samples Test for Translation Problems*

		Levene's Test for Equality of Variances		t-test for Equality of Means
		F	Sig.	t

Extralinguistic	Equal variances assumed	.013	.813	-29.771
	Equal variances not assumed			-29.771
Psychophysiology	Equal variances assumed	6.913	.005	-27.261
	Equal variances not assumed			-27.261

As Table 10 shows,  $t(27.261) = 6.913$   $P > 0.05$ . That is, PFC had a statistically significant impact on the development of translation errors.

Now, considering the results in the above tables, we can conclude that there was a statistically significant difference in all TC components in the PFC group between pre- and posttests at 0.05. Since the mean score increased in the posttest, we can draw the conclusion that for all TC components in the PFC group, there was considerable and statistically meaningful growth from the pretest to the posttest.

**Table 11.** Comparison of TC Components in Experimental and Control Groups

	Group	Mean for Exp.	Mean for Cont.	Difference For Exp.	Difference For Cont.	More Increase
Bilingual sub-competence	pretest	2.52	2.49	1.80	1.45	Exp.
	posttest	4.23	3.84			
Extra-Linguistic sub-competence	pretest	2.33	2.21	1.69	1.13	Exp.
	posttest	3.92	4.24			
Knowledge about translation	pretest	2.52	2.56	1.43	1.29	Exp.
	posttest	3.85	4.25			
Instrumental sub-competence	pretest	2.35	2.49	1.96	1.68	Exp.
	posttest	4.28	3.87			
Strategic sub-competence	pretest	2.35	2.50	1.96	1.44	Exp.
	posttest	3.86	4.25			
Psycho-Physiological component	pretest	2.99	2.55	1.99	1.26	Exp.
	posttest	3.84	4.21			

Comparing the results of PFC and control group CG, we can conclude that there was a statistically significant difference in all TC components in PFC between pre- and posttests, while there was not such a statistically significant difference in CG. Since the mean score

increased in the posttest, we can draw the conclusion that for all TC components in PFC, there was considerable and statistically meaningful growth from the pretest to the posttest.

## Discussion

The present study set out to investigate the efficacy of the implementation of the PFC on the process of developing TC. Since pot-luck as an innovative teaching technique was in great harmony with FC, we combined them to boost their efficacy. We developed 4 research questions. The first research question concerned the effect of PFC on the development of TC in general and the 3 other questions regarded the effect of PFC on the development of 3 components of TC, including translation notions, problems, and errors. Overall, the findings are suggestive of the notion that intervention of the PFC increased the development of TC and its components significantly in EG compared with CG. The findings of the present study are consistent with Lundin et al. (2018) and Tütüncü and Aksu (2018) among others because these studies have also found that the FC enhances the learning outcomes of the students. However, the present study is somehow different since it is the only study that initiated the investigation of a pot-luck-utilized FC (PFC) on the development of TC. Even though the gains and efficacy of FC on have been investigated and proved in many studies, this study indicated that the integration of the Pot-luck technique in FC could even make the experience and performance more enjoyable and effective.

### *Explanation of the Difference in the Results of EG Compared with CG*

The significant enhancement of TC and its components in EG is attributed to the following reasons.

***Accountability and Autonomy.*** One of the most important differences of a PFC with traditional classrooms is that PFC is learner-centered and the authority shifts from teachers to learners; therefore, learners are accountable for their learning. Since PFC is inspired by pot-luck gatherings, it has adopted the concept of sharing and caring in the classroom environment, in which students in a learning pot-luck share knowledge and learning experience instead of food. In PFC, by combining FC with Pot-luck, we highlighted this accountability even more by putting more emphasis on the notion of preparedness, autonomy, and sharing. Therefore, we believe that giving the students the opportunity to study the material in advance, experience the task of translation, and prepare themselves for the complications in a PFC, made learners

more accountable for their learning to take initiative and to get engaged actively in the process of learning.

**Collaboration.** Another highlighted feature in PFC was collaboration before, during, and after the class. In PFC, students had the opportunity to work in small groups in which they could discuss the topic, exchange ideas, share linguistic knowledge, and demonstrate their translation strategies. The analysis of the results indicated that students' works have improved significantly during reflection in collaborative tasks.

**Comparison and Evaluation.** The improved performance of the students in EG compared with CG is also attributed to the process in which students did the judgment of their own works and their friends' works. Through comparison and evaluation, students had the opportunity to see different approaches and styles to a single translation. In addition, seeing different lexicons or structures helped students activate their passive language knowledge, build new knowledge, and develop TC.

**Fun, Friendly, and Stress-free Atmosphere.** Combining the pot-luck technique with FC in PFC added more fun to the whole learning experience. The idea of the comparison of sharing/caring in learning to sharing/caring in a pot-luck party provided a friendly and stress-free atmosphere in which everybody was willing to share, and all cared. Furthermore, the fact that the teacher gave students' heads up on all the activities, and they had ample time to work on the tasks individually and cooperatively reduced stress and enhanced learning. Moreover, they could share problems and complexities of translation tasks and their struggle with two language systems with their friends to evaluate each other's work before the teacher did. This gave them time for reflection and self/peer correction hence more confidence and satisfaction.

**Active Involvement.** In PFC, social interaction and active involvement through collaboration, evaluation, and constant feedback provided novel opportunities for the students to enhance effective and practical learning. Getting involved actively in the process of translation, meaning generation, reflection on their own translation as well as their peers' helped students to develop TC. The efficacy of this factor could partially be related to the cultural features of Iranian students who love to learn in friendly environments with a high level of interaction.

### *Limitations and Suggestions for Further Studies*

The main limitation of this study was the small sample size. Therefore, future studies with a larger sample size will undoubtedly be more representative to generalize the findings. Another limitation was the cultural context of the study in Iran. Since Iranian students love a high level of social interaction in their classes, PFC could become a good model of instruction; however, we suggest that further studies investigate the efficacy of PFC in other contexts as well. Additionally, learners' age was another limitation in this study. PFC was implemented in a translation course for university students with an age range of 18 to 20. Since in a learner-centered classroom with a high level of interaction, social and metacognitive skills play an important role in learning involvement and cognitive development, we suggest further investigation on younger learners because some of the younger students might lack certain social and metacognitive skills. We especially encourage the combination of the pot-luck technique and FC (PFC) for further investigation in other contexts and other disciplines. Specifically, we recommend investigating the efficacy of online PFC on the development of translation or other disciplines to examine whether or not similar results could be obtained.

### **Conclusion and Implications**

Although FCs have been used widely in different areas, there are few studies on the implementation of translation instruction via FC and none on combining the pot-luck technique on FC to the best of our knowledge. The present study has therefore investigated the effect of PFC with developing the TC to add to the current body of research on FC. The findings revealed that PFC significantly improved TC, and this efficacy was attributed to several factors. First, students felt more autonomous and accountable for their learning because they had to come to class prepared. They also needed to share their knowledge and learning experience in a knowledge pot-luck, which made them feel responsible for other peers as well. Second, PFC provided students with the opportunity to collaborate in groups, build new knowledge, and develop TC via interaction during discussion and knowledge sharing. Third, PFC enabled students to engage actively in the learning process through evaluating and comparing their own works with others and selecting the best alternatives for their translations. Fourth, the PFC atmosphere was friendly and stress-free since students had time to finish the tasks collaboratively and could seek help; therefore, they never felt frustrated and overwhelmed when they faced complications. PFC was a pot-luck gathering for learning and sharing knowledge and experience. Thus, it was enjoyable and fun. Finally, students were involved

actively in the learning process through preparation and collaboration in PFC. This active engagement was very important in building new knowledge and developing TC.

Overall, the comparison of the findings from EG and CG suggests that either from a process-oriented or a product-oriented perspective, PFC proved to be efficient. Thus, the combination of pot-luck innovative technique and FC could enhance the development of TC significantly. The findings of this research provide pedagogical implications by suggesting PFC as a boosted version of FC and a learner-centered method in developing TC. We hope these findings help teachers and policymakers in designing curriculum and developing materials in such a way to be learner-centered and involve learners actively in the learning process in order to enhance the efficacy of the teaching-learning process.

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### **Conflict of Interest**

The authors declare no conflict of interest to report.

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