

Investigating the Problems with Translating Specialized English Texts among Elementary Education Student Teachers

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Abstract

Elementary school teachers should keep pace with the constant changes in educational research, subject knowledge, and teaching strategies. Since Farhangian University plays an essential role in pre-service teacher training, acquainting teacher-students with the specialized language is essential. Therefore, this qualitative cross-sectional study was conducted to investigate translating problems with specialized English texts among elementary education student-teachers. The target population was the elementary education student-teachers of West Azerbaijan Farhangian University. Using random sampling, 30 students were selected and asked to translate an English text of 120 words into Persian. In addition, they were asked to translate a 120-word Persian abstract into English and to calculate how long the translation took. The translation scripts were collected and their content was analyzed and the initial coding was done. Based on the coding, for English to Persian translation, the main identified categories were vocabulary, structure, and comprehension. Moreover, two categories including vocabulary and structure were identified for Persian to English translation. Then, translated scripts were analyzed based on these categories. The results indicated that lack of acquaintance with the necessary grammatical structures and principles of effective writing were major challenges for participants. Furthermore, interviews were conducted to identify the steps taken by participants in the translation process and the problems they faced in this process. The analysis of the conducted interviews indicated that the majority of the participants did not take the proper sequence of steps in the translation process.

1. INTRODUCTION

Education ensures economic growth and development of a country not only by triggering, promoting, and sustaining entrepreneurial and technological developments but also by securing economic and social progress and improving income distribution. The rapid technological change

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and advancement in science encourage all countries to use their capacities and unlock the potential of young people, but this can be achieved by transforming the educational system and replacing it with an effective one (Avesta et al., 2019). The production of knowledge and its optimal application in the process of education will increase the knowledge and ability of students and teachers, which in turn makes the education system more successful in its most important goal, training of capable and efficient human resources (Monfaredi et al., 2015). Therefore, one of the main tasks of the educational system is to equip students with new knowledge (Islamian et al., 2013).

Since 24% of the total population is under 14 years old (<https://worldpopulationreview.com/countries/iran-population>), education plays a vital role in achieving sustainable development in Iran. In a document that was approved in 1998, Supreme Council of Education highlighted that national development is the main goal of education in order to boost productivity, realize social and national integration, and foster social, moral, and spiritual values with putting a strong emphasis on strengthening the faith of Islam. The goals that were approved by this council also highlighted the role of education in human resource development for economic growth (Ministry of Education, 2013); therefore, it can be claimed that education is a priceless investment in the future. It has been argued that primary education is the most important cycle of education. Enabling the students to read and write, improving their numeracy skills, and providing necessary training on appropriate social behaviors are the main objectives of primary education in Iran. It has been proved that qualified teachers are the most crucial factor in any educational system. As teachers should constantly renovate and improve their knowledge and skills, they should remain up-to-date to enhance their expert power (Santelises, et al., 2015).

The Role of English in Today's World and English Language Teaching in Iran's Educational System

English as an international language is accepted as the global business and scientific language in the new commerce-driven world. Nonnative speakers saw it as the new lingua franca that responded to their needs of cross-cultural communication, business doing, and information sharing (Teodorescu, 2010). English is the scientific language of the world and acts as a lingua franca for sharing ideas and discoveries (Mauranen et al., 2016). Today, English has particular importance due to its international nature and its widespread use as a means of communication that can advance other subjects. The beginning of teaching and learning English in Iran dates back to the 1960s and 1970s when the British Cultural Council and the American-Iranian Association were active in offering English language courses (Yarmohammadi, 2005). Iranian Students start learning English in the seventh grade and it continues up to the university levels. But it has been claimed that students are not able to communicate in English in real contexts despite studying English for a long period of time in schools (Mostofi, 2018). Furthermore, since English is a foreign language in Iran, language learners do not have the opportunity to use it in real life. Therefore, English is limited to classrooms and learners have few opportunities to use English outside of the classroom. As Brown (2000) pointed out learning English as a foreign language involves learning it in the context of that language and with the opportunity to use it immediately in that culture.

English for Specific Purposes

During the 1960s, changes in the world's markets resulted in the rising of English for specific purposes as a discipline. It has been argued that English for specific purposes has grown into a trend in English language teaching and research (Bracaj, 2014). Hutchinson and Waters (1987) stated that the early origins of English for Specific Purposes (ESP) date back to the end of the

Second World War. It can be claimed that ESP emerged due to the development of the world's economy, which included the progress of technology, the economic power of oil-rich countries, and the increasing number of overseas students in English-speaking countries (Hutchinson & Waters, 1987). Johns and Dudley-Evans (1991) stated that the international community recognized the importance of learning English not only as a means to achieve the transmission of knowledge and communication but also as a neutral language to be used in international communication. Dudley-Evans (2001) stated that English for specific purposes has three variables: "English for specific purposes has to be related to specific disciplines; use a different methodology from the one used in General English and be aimed at intermediate to advanced adult learners" (p. 131). As a branch of applied linguistics, English for specific purposes focuses on the relationship of the teaching and learning process to the needs of learners and it is based on the fact that we use language to achieve specific goals and to communicate with members of a particular social group (Hyland, 2009).

Farhangian University as the largest and most comprehensive teacher-training center in the country, was established after the approval of the Supreme Cultural Revolution Council and the merging of all teacher-training colleges in 2011. It includes about 100 branches and 78,022 enrolled student-teachers throughout the country. Its curriculum focuses specifically on teacher education. One of the obligatory courses at Farhangian University is English for Specific Purposes which aims to enhance student-teachers' English knowledge to meet their academic and occupational needs. Therefore, this study aimed to investigate the problems with translating specialized English texts among elementary education student-teachers.

Review of Literature

Although translation was recognized as the reason for the Grammar-Translation Method's failure in meeting the needs of language learners, some scholars have turned attention to the role of translation in language teaching in general and in English for Specific Purposes in particular since the last decade of the twentieth century (Mažeikienė, 2019; Ziyaei & Gharaei, 2022). Moreover, Chirobocea (2018) stated that using translation activities as a language-learning device has been gaining ground for many years.

Translation is sometimes referred to as the fifth language skill alongside the other four basic skills of listening, speaking, reading, and writing. Furthermore, translation from L1 to L2 and L2 to L1 is recognized as the most important social skill since it promotes communication and understanding between strangers (Ross, 2000). Kavaliauskienė and Kaminskienė (2009) believed that practicing all language skills (reading, writing, speaking, and listening) and developing communicative competence, accuracy, clarity, and flexibility are the benefits of translation activities. They argued that the ability to translate from L2 into L1 and from L1 into L2 is a skill that is closely related to reading and writing. Furthermore, they stated that individual strengths and weaknesses in the use of the languages may be identified by translating activities. Furthermore, some studies demonstrated that two skills of reading and writing are closely related to translation ability (Kavaliauskienė & Kaminskienė, 2009). Kovács (2018) also pointed out that the reading level influences the ability to translate the texts.

Duff (1989) argued that teachers and students utilize translation to learn. Translation entails two languages and differences in the system and structure of the source language and the target language are the most essential obstacles in the translation process (Wu, 2008). Furthermore, Newmark (1988) stated that translation methods and translation procedures are not the same, since translation procedures are related to sentences and the smaller units of language, whereas translation methods focus on whole texts.

It is noteworthy that learners' determination and interest in language learning may be enhanced by motivation. According to the Oxford Learner's dictionary, motivation means the feeling of wanting to do something, especially something that involves hard work and effort. Oxford and Shearin (1994) believed that motivation plays a significant role in L2 learning. They argued that "Motivation determines the extent of active and personal involvement in L2 learning." (Oxford & Shearin, 1994, p.12). In addition, they pointed out that contributions from many aspects of psychology, including general, industrial, educational, and cognitive-developmental, are beneficial for an extended vision of L2 learning motivation. Furthermore, Gardner and Lambert (1959, 1972) introduced the notions of instrumental and integrative motivation. While instrumental motivation is defined as the learner's desire to learn a language for practical purposes, integrative motivation refers to the desire to learn a language in order to be incorporated into the social structure of the target language community. It can be concluded that instrumental motivation plays a more important role than integrative motivation in teaching English for specific purposes to teacher-students. Furthermore, Liao (2006) believed that translation can help reduce learning anxiety and enhance motivation to learn L2.

Studies have shown that translation may promote foreign language learning. For example, the findings of a study conducted by Soleimani and Heidarikia (2017) showed that the use of literal translation promotes the noticing and learning of the participial phrases and absolute constructions of EFL students. The findings of another study conducted by Ghaiyoomian and Zarei (2015) showed that using translation from Persian to English affects language accuracy in intended grammatical structures. Furthermore, Perkin (1985) pointed out that linguistic awareness of contrast between first and second languages' grammatical structures may be facilitated by the use of translation. Calis and Dikilitaş (2012) also conducted a seven-week classroom-based research on the use of translation as an L2 learning practice and found out that the participants believed that their reading comprehension and target vocabulary memorizing improved by using translation. It should be mentioned that it has been argued that translation may facilitate learning, especially with regard to English for specific purposes. For instance, Kavaliauskienė and Kaminskienė (2007) argued that all learners rely on their mother tongue in learning English for Specific Purposes. Mažeikienė (2019) also analyzed the selected academic publications in order to investigate the use of translation in the teaching as well as learning of English for specific purposes and found out that translation-based activities will be useful for the ESP learners, on condition that the amount of the translation that is used in the teaching-learning process is well-balanced and activities are well-planned.

Needs Analysis

Richards (2012) defines needs analysis as "the procedures used to collect information about learners' needs" (p. 51) whereas according to Tudor (1996) needs analysis refers to the research of the learners' conceptual and expressive agendas. While West (1994) believes that needs analysis is done for practical purposes; in other words, the educators investigate the learners' target situation needs to design their course syllabus. Long (2005) argues that "needs analysis is a precondition for effectual course design" (p. 1).

Needs analysis is one of the indicators of specialized language courses that can have an important role in the development of its curriculum (Sarafini, 2015). It is a process that is done to determine the curriculum planning requirements. Needs analysis is especially important due to its role as a starting point or a guide for lesson planning, curriculum development, and selection of textbooks which is the first step in curriculum design and lesson planning. The results provide evidence on what the learners need to be able to perform effectively and appropriately which in turn leads to improvements in learners' performance and accomplishment. Considering this

evidence in relation to the current state of learners' language knowledge, as well as the practical possibilities and limitations of the field of education can help to determine and improve the content and method of specialized language courses (Basturkmen, 2010).

Brindley (1986) identified three types of needs: "language proficiency needs (the level of language knowledge that the learners need to achieve), psychological-humanistic needs (learners' psychological condition regarding the language learning process), and specific purpose needs (linguistic items that the learners need to master for vocational use)" (p. 66).

Several models are introduced for needs analysis. John Munby's Communicative Syllabus Design (1978) is the most well-known model of needs analysis. He identified a set of procedures for discovering target situation needs. He called this set of procedures the Communication Needs Processor. The Communication Needs Processor entails a group of questions that are related to key communication variables (topic, participants, medium, etc.) and are utilized to identify the target language needs of any group of learners. Tarone and Yule (1996) introduced a model for needs analysis. They believed that there are four levels in which learners would need to use the language: the global level, the rhetorical level, the grammatical-rhetorical level, and the grammatical level.

It should be mentioned that questionnaires, pilot student and staff questionnaires, interviews, tests, case studies, authentic data collection, participatory needs analysis collection, and consultation of qualified informants are the most commonly used techniques that have been proposed for conducting needs analysis (Richards, 2012; Tudor, 1996).

Some studies tried to investigate the needs of general and specialized language. For example, Liu et al. (2011) examined the general and specialized language needs of students in six Taiwanese universities and the results showed that students had different understandings of their perceptions of necessities, wants, and lacks in the different language skills taught in English for General Purposes and English for Specific/Academic Purposes courses. In another study, Evans and Green (2007) investigated the language problems of 152 medical science students and found out that general English courses are not enough to meet the students' English language needs. In Iran, Moslemi et al. (2011) investigated the language needs of graduate students in biology, psychology, physical education, accounting, and western philosophy and their findings showed that students do not have enough contact with English. They believe that teaching English in the Iranian education system needs to be reviewed and that students are not sufficiently exposed to specific English. In another study that is conducted in Iran, Dobakhti and Zohrabi (2018) studied the need for specialized English language teaching for carpet design students of Tabriz University of Arts. The results showed that the hours and number of units allocated to this course were not enough and students did not have enough knowledge.

The study of research literature showed that very few studies have been conducted to assess the need for the specialized language of student-teachers, especially in the field of elementary education at Farhangian University. As Farhangian University plays an essential role in pre-service teacher training, acquainting teacher-students with the specialized language is very important. Elementary education student-teachers, like students of other fields of study, are required to use English texts related to this field and attend international conferences and competitions during and after their studies. Furthermore, student-teachers need to be skillful in the selection and use of reference materials written in English so that they can answer their students' questions accurately in the future and help themselves improve their knowledge and work (Dobakhti & Zohrabi, 2018). Therefore, the present study was conducted to investigate the translation ability of elementary education student-teachers in two parts: elementary education textbooks and Persian academic text. Furthermore, the study aimed to identify the steps taken by students in the translation process

and the problems faced in this process. Hence, it aimed to identify the students' problems in translating specialized texts in education, the following research questions were formulated:

1. What are the common errors made by elementary education student-teachers in the translation of specialized English texts into Persian?
2. What are the common errors made by elementary education student-teachers in the translation of Persian texts into English?
3. What are the steps taken by the elementary education student-teachers in the translation process?
4. What are the major problems faced by the elementary education student-teachers in the translation process?

2. METHODOLOGY

The study aimed to examine translation problems with specialized English texts among elementary education student-teachers. Hutchinson and Waters (1987) emphasize the importance of differentiating target needs from learning needs. While target needs are what the learner needs to do in the target situation, learning needs are what the learner needs to do in order to learn.

The present study was designed to investigate the learning needs of the participants; therefore, the errors made by them were studied. The learners' errors show their underlying knowledge and the nature of the errors will influence the solution; therefore, this study investigated what sort of mistakes the student-teachers would make. Considering the purpose of this research, the content analysis was select to respond to the research questions. The data were collected from the translated texts and the occurrence of the errors was identified by using content analysis. To analyze, the errors of the translated texts were coded; then, the codes were categorized into code categories. Furthermore, the interviews were conducted to identify the major steps taken by the participants in the English into Persian translation process.

Participants

The target population covered all elementary education student-teachers of West Azerbaijan Farhangian University in Iran. The sample size consisted of 30 student-teachers of elementary education in West Azerbaijan province in Iran with an average age of 21 that were selected through simple random sampling. About 36% of the participants (N=11) were male and the rest (N=19, 64%) were female. The criteria that were considered for the participants include: studying at least four semesters at West Azerbaijan Farhangian University in Iran, passing the General English course at the Farhangian University, and not using Google Translator to translate the whole text or sentences. The participants were informed about the objectives of the study and informed consent was obtained.

Instruments

To address the main purpose of the current study which was to analyze the problems with translating specialized texts among student-teachers majoring in elementary education, the instrument included demographic questions and two texts in English and Persian. The first part consisted of the demographic questions (including gender, the experience of attending English language classes outside the university or school), using a dictionary for translation, and the duration of the translation process. The second part consisted of two texts that were provided to students to assess their language and translation ability. English text was a specialized text of 120 words from the book entitled "Curriculum and Instructional Methods for the Elementary and Middle School, 7th Edition" which consisted of 60 general words, 40 specialized words, and 16 complete sentences. Persian text was a piece of an abstract in the education field which contained 120 words.

For improving the construct validity of the study instruments, English text was selected from the approved textbook of this course, and Persian text was the abstract of the article published in a Scopus-indexed journal (Sage Open).

Furthermore, the semi-structured interviews were conducted. The interview contained three open-ended questions. These questions were used to indicate major steps taken by the participants in the English into Persian translation process: “(1) What steps did you take to translate the English text into Persian?” and major steps taken in Persian into English translation process: (2) “What steps did you take to translate Persian text into English”; and major problems faced in this process “What problems did you face in the translating process?”. The data were collected qualitatively through cyberspace (web) within 7 working days and analyzed using frequencies, percentages, and averages.

3. RESULTS

Analysis of the demographic data showed that all participants have attended English courses outside the formal education system for at least 2 semesters. English to Persian translations were collected, a table was created, and a number was assigned to each participant in the table. The following steps have been taken for analyzing the translated texts:

- The errors were identified and labeled (Open coding);
- Connection between codes was identified; in other words, the codes were organized (Axial coding); and
- The codes were grouped into categories.
- After the above-mentioned steps, three categories were extracted:
- Vocabulary that consisted of two subcategories: general and specialized terms;
- Sentence structure that consisted of three subcategories: use of appropriate conjunctions, recognizing reduced adjective clauses, and tense recognition; and
- Comprehension included two subcategories: fluent translation and familiarity with academic terms.

Some of the identified errors were:

Example 1:

Source text: The core of the proposed theory

Translation:

- هسته نظریه پیشنهادی

Student's translation:

- هسته نظریه را پیشنهاد کرد

(Structure and comprehension problems)

Example 2:

Source text: The true ‘window of opportunity’ is fully used and strengthened to ensure long-term benefits

Translation:

- پنجره واقعی فرصت برای تضمین فواید دراز مدت، به طور کامل مورد استفاده قرار گرفته و تقویت می‌شود

Student's translation:

- واقعیت برای اطمینان از سود بلندمدت استفاده می‌کند

(Vocabulary, structure, and comprehension problems)

Example 3:

Source text: In a recent study, the researchers designed an experiment in which some children were coached in an imaginative play

Translation:

- در یک مطالعه جدید، پژوهشگران آزمایشی را طراحی نمودند که در آن تعدادی از کودکان در یک بازی تخیلی آموزش دیدند.

Student's translation:

- در مطالعه اخیر، محققان یک آزمایش طراحی کردند که تعدادی بچه مربی یک بازی خیالی هستند.

(Structure problem)

Example 4:

Source text: In a recent study, the researchers designed an experiment in which some children were coached in an imaginative play

Translation:

- در یک مطالعه جدید، پژوهشگران آزمایشی را طراحی نمودند که در آن تعدادی از کودکان در یک بازی تخیلی آموزش دیدند.

Student's translation

- در مطالعات اخیر، جستجوگران یک آزمایش طراحی کردند که در آن بعضی از بچه‌ها بازی مصور را مربی‌گری می‌کردند.

(Vocabulary and structure problems)

Example 5:

Source text: The most important theory published in 1916

Translation:

- مهم‌ترین نظریه که در سال ۱۹۱۶ منتشر گردید

Student's translation:

- بیشتر انتشارات مهمی که در ۱۹۱۶ تولید شد

(Vocabulary, structure and comprehension problem)

Then, frequencies and percentages of the items chosen incorrectly or not translated at all were calculated and listed in Table 1. Finally, the period of time that each student had spent on translation was entered in the table. The total number of each subcategory (number of words, sentences, and terms) was calculated separately in order to get the percentage. Table 1 demonstrates the analysis of the English to Persian scripts according to identified categories and subcategories. In each section, the frequency and percentage of mistakes or the items that had not been translated were reported. The mean of mistakes in the specialized vocabulary subcategory was 21 and general vocabulary was 10.44, respectively. The mean of mistakes in the category of the structure was ($\bar{x} = 25.44$), in which sub-category of recognizing reduced adjective clauses was the highest ($\bar{x}=30/15$) and the subcategory of using appropriate conjunctions was the lowest ($\bar{x}=20/60$) mistakes. The mean of mistakes in comprehension category was 46.33. The average time required to translate a 120-word specialized text was 32.13 minutes, with a minimum of 15 minutes and a maximum of 65 minutes.

Table 1: Frequency, Percent, and Mean for the Mistake Categories of English to Persian Translation

Participant	Vocabulary		Structure			Comprehension		Duration min
	Specialized	General	Use of conjunctions	Adjective clause recognition	Tense recognition	Fluent translation	Academic terms	
1	F=3 P=9.09	F=1 P=1.9	F=2 P=12.5	F=1 P=6.2	F=4 P=25	F=0 P=0	F=1 P=100	35
2	F=2 P=6.06	F=3 P=5.7	F=2 P=12.5	F=0 P=0	F=4 P=25	F=3 P=18.7	F=0 P=0	65
3	F=12 P=36	F=12 P=23.07	F=2 P=12.5	F=1 P=6.2	F=4 P=25	F=5 P=31.2	F=0 P=0	35
4	F=2 P=6.06	F=4 P=7.6	F=2 P=12.5	F=4 P=25	F=3 P=18.7	F=1 P=6.2	F=0 P=0	25
5	F=4 P=11.11	F=2 P=3.8	F=1 P=6.2	F=3 P=18.7	F=3 P=18.7	F=10 P=62.5	F=0 P=0	40
6	F=12 P=36.36	F=4 P=7.6	F=5 P=31.2	F=8 P=50	F=10 P=62.5	F=4 P=25	F=0 P=0	25
7	F=3 P=9.09	F=1 P=1.9	F=1 P=6.2	F=1 P=6.2	F=2 P=12.5	F=1 P=6.2	F=1 P=100	35
8	F=2 P=6.06	F=1 P=1.9	F=2 P=12.5	F=4 P=25	F=2 P=12.5	F=1 P=6.2	F=0 P=0	45
9	F=2 P=6.06	F=2 P=3.8	F=2 P=12.5	F=4 P=25	F=1 P=6.2	F=0 P=0	F=0 P=0	35
10	F=4 P=12.12	F=2 P=3.8	F=2 P=12.5	F=7 P=43.7	F=3 P=18.7	F=4 P=25	F=0 P=0	40
11	F=3 P=9.09	F=5 P=9.6	F=3 P=18.7	F=3 P=18.7	F=1 P=6.2	F=8 P=50	F=1 P=100	38
12	F=4 P=12.12	F=2 P=3.8	F=2 P=12.5	F=0 P=0	F=1 P=6.2	F=0 P=0	F=0 P=0	25
13	F=1 P=3.03	F=0 P=0	F=1 P=6.2	F=0 P=0	F=0 P=0	F=0 P=0	F=0 P=0	30
14	F=2 P=6.06	F=1 P=1.9	F=2 P=12.5	F=1 P=6.2	F=2 P=12.5	F=2 P=12.5	F=1 P=100	45
15	F=0 P=0	F=0 P=0	F=5 P=31.2	F=2 P=12.5	F=6 P=37.5	F=1 P=6.2	F=1 P=100	15
16	F=12 P=36.3	F=0 P=0	F=1 P=6.2	F=1 P=6.2	F=1 P=6.2	F=0 P=0	F=1 P=100	40
17	F=12 P=36.3	F=4 P=12.12	F=3 P=18.7	F=4 P=25	F=3 P=18.7	F=1 P=6.2	F=1 P=100	15
18	F=3 P=9.09	F=0 P=0	F=2 P=12.5	F=3 P=18.7	F=3 P=18.7	F=1 P=6.2	F=1 P=100	20
19	F=14 P=42.4	F=9 P=17.3	F=6 P=37.5	F=9 P=56.2	F=4 P=25	F=4 P=25	F=1 P=100	55
20	F=1 P=3.03	F=0 P=0	F=0 P=0	F=0 P=0	F=1 P=6.2	F=0 P=0	F=1 P=100	25
21	F=1 P=3.03	F=1 P=1.9	F=1 P=6.2	F=2 P=12.5	F=1 P=6.2	F=0 P=0	F=1 P=100	50
22	F=0 P=0	F=0 P=0	F=1 P=6.2	F=1 P=6.2	F=1 P=6.2	F=0 P=0	F=1 P=100	40
23	F=1	F=0	F=2	F=3	F=2	F=3	F=1	40

Participant	Vocabulary		Structure		Comprehension			Duration min
24	P=3.03	P=0	P=12.5	P=18.7	P=12.5	P=18.7	P=100	20
	F=26	F=27	F=10	F=15	F=15	F=11	F=1	
	P=78.78	P=51.9	P=62.5	P=93.77	P=93.7	P=68.7	P=100	
25	F=0	F=0	F=0	F=2	F=1	F=10	F=1	30
	P=0	P=0	P=0	P=12.5	P=6.2	P=62.5	P=100	
26	F=17	F=20	F=8	F=11	F=10	F=9	F=1	15
	P=51.51	P=38.4	P=50	P=68.7	P=62.5	P=56.2	P=100	
27	F=26	F=25	F=15	F=15	F=14	F=11	F=1	18
	P=78.78	P=48.07	P=93.7	P=93.7	P=87.5	P=68.7	P=100	
28	F=17	F=12	F=6	F=12	F=7	F=9	F=1	20
	P=51.51	P=23.07	P=37.5	P=75	P=43.7	P=56.2	P=100	
29	F=16	F=9	F=5	F=14	F=7	F=15	F=1	18
	P=48.48	P=17.3	P=31.2	P=87	P=43.7	P=93.7	P=100	
30	F=15	F=14	F=7	F=14	F=6	F=11	F=1	25
	P=45.45	P=26.9	P=43.7	P=87	P=37.5	P=68.7	P=100	
	\bar{x} =21.87	\bar{x} =10.44	\bar{x} = 20.60	\bar{x} =30.15	\bar{x} = 25.37	\bar{x} = 26.01	\bar{x} = 66.66	\bar{x} = 32.13

The Persian text was part of the abstract of a research article that included 120 words and 10 complete sentences.

Translations were collected and a number was assigned to each participant. Unfortunately, ten participants stated that they were not able to translate the Persian text into English at all. The following categories were identified after taking the steps mentioned earlier:

- Vocabulary
- Structure and grammatical accuracy consisted of three subcategories: use of conjunctions and articles, tense recognition, and using parallel structures

Some of the identified errors were:

Example 1:

Source text:

- نقش‌های بسیاری بر آنها تحمیل شده است تا انتظارات دانش‌آموزان، والدین و اجتماع مدرسه را برآورده سازند

Translation: A lot of roles are imposed on them in order to meet the expectations of the students, parents, and school community.

Student's translation: a lot of role impose them to supply expectations of student, parents, and school society

(Vocabulary and structure problem)

Example 2:

Source text:

- خودکارآمدی و رضایت، دو متغیری هستند که تأثیر مهمی بر عملکرد معلمان دارند

Translation: Self-efficacy and satisfaction are two variables that have a remarkable impact on teachers' performance.

Student's translation: Self-performance and acceptance are two variables that have an important on teacher's performance.

(*Vocabulary and structure problem*)

Example 3:

Source text:

- نتایج نشان دادند بین خودکارآمدی و رضایت شغلی ارتباط مثبت و معنی داری وجود دارد

Translation: The results showed that there is a positive and significant relationship between self-efficacy and job satisfaction.

Student's translation: The results showed that between shoghli's self-efficacy and satisfaction have a positive.

(*Vocabulary and structure problem*)

Example 4:

Source text:

- مشارکت کنندگان این مطالعه

Translation: The participants of this study

Student's translation: contributors of this work

(*Vocabulary and structure problem*)

The results are depicted in Table 2. In each section, the frequency and percentage of incorrect or untranslated items were included. Table 2 illustrates that the mean of mistakes in the vocabulary category was approximately eight, probably due to the dictionary use. While in the structure and grammar category, the mean was about 43, in the subcategories of the use of conjunctions and articles ($\bar{x} = 42$), observing parallel structures ($\bar{x} = 44.51$) and tense recognition ($\bar{x} = 42.71$). Furthermore, the percentage of mistakes of each participant in the structure and vocabulary categories was very close to each other, indicating that the abilities in these two categories are related. Also, the average translation time of this text was about 46 minutes, which shows that the participants spent almost a lot of time translating 120 words.

Table 2: Frequency, Percent, and Mean for the Mistake Categories of Persian to English Translation

Participant	Vocabulary	Structure			Duration min
		Tense recognition	Parallel structures	Using conjunctions and articles	
1	F=5 P=3.8	F=2 P=20	F=3 P=27.27	F=3 P=27.27	50
2	-	-	-	-	-
3	F=16 P=12.3	F=9 P=90	F=10 p=90.9	F=1 P=9.09	30
4	F=3 P=2.3	F=2 P=20	F=1 P=9.09	F=1 P=9.09	30
5	F=5	F=3	F=4	F=4	45

Participant	Vocabulary	Structure			Duration min
	P=3.8	P=30	P=36.36	P=36.36	
6	F=14 P=10.7	F=5 P=50	F=8 P=72.7	F=4 P=36.3	40
7	-	-	-	-	-
8	F=7 P=5.3	F=2 P=20	F=9 P=81.8	F=9 P=81.8	70
9	F=3 P=2.3	F=1 P=10	F=2 P=18.1	F=0 P=0	40
10	F=3 P=2.3	F=1 P=10	F=3 P=27.2	F=3 P=27.2	70
11	-	-	-	-	-
12	F=12 P=9.2	F=5 P=50	F=4 P=36.3	F=3 P=27.27	40
13	F=18 P=13.8	F=7 P=70	F=8 P=72.7	F=5 P=45.4	34
14	F=1 P=0.7	F=2 P=20	F=0 P=0	F=1 P=9.09	50
15	-	-	-	-	-
16	F=8 P=6.1	F=4 P=40	F=4 P=36.3	F=3 P=27.27	100
17	F=4 P=3.07	F=3 P=30	F=2 P=18.1	F=3 P=27.27	35
18	F=8 P=6.1	F=3 P=30	F=5 P=45.4	F=4 P=36.3	-
19	F=40 P=30.7	F=9 P=90	F=11 P=100	F=10 P=90.9	60
20	F=5 P=3.84	F=4 P=40	F=3 P=27.27	F=4 P=36.36	40
21	-	-	-	-	-
22	F=5 P=3.84	F=4 P=40	F=5 P=45.4	F=3 P=27.27	40
23	-	-	-	-	-
24	F=33 P=25.3	F=8 P=80	F=11 P=100	F=11 P=100	50
25	F=7 P=5.3	F=4 P=40	F=5 P=45.4	F=3 P=27.27	55
26	F=19 P=14.6	F=6 P=60	F=10 P=90.9	F=11 P=100	20
27	-	-	-	-	-
28	-	-	-	-	-
29	-	-	-	-	-
30	-	-	-	-	-
	$\bar{x}=8.229$	$\bar{x}=42$	$\bar{x}=44.51$	$\bar{x}=42.71$	$\bar{x}=45.95$

Moreover, the interviews were conducted in order to identify the steps taken and the main problems they faced in the translation process. The participants were asked to list the steps they took in the translation process. 19 participants listed the following steps:

- Finding the definition of unfamiliar words
- Translating the title
- Putting the words together to make the sentences.

And 11 participants mentioned the following steps:

- Reading the whole sentence
- Finding the meaning of unfamiliar words
- Translating the title
- Putting the words together to make the sentences

The results showed that the participants did not read the whole text or whole paragraph to understand the main idea of the text which in turn caused the use of equivalents that were not suitable for the target language. Moreover, since they translated word for word, they were not able to observe the structural consistency of the text.

Second, the participants were asked to mention the problems they faced in the translation process. The most frequent answers were:

- There are no Persian equivalents for some English words.
- There are no English equivalents for some Persian words.
- I knew the meaning of the text, but wording is too difficult.
- I am not familiar with some grammatical structures.

4. DISCUSSION

English for specific purposes has become a viable and vigorous movement within the field of TEFL/TESL over the past three decades (Johns & Dudley-Evans, 1991). As a learner-centered approach, it mainly aims to fulfill the specific needs of target learners in order to satisfy either their professional or vocational demands (Ramírez, 2015). As pointed out by Mohan (1986) in content-based language courses, the target language is a medium of learning across the curriculum.

The present study was conducted to investigate the problems with Persian-English and English-Persian translation among student-teachers majoring in elementary education. The results of the English-to-Persian translation showed that the percentages of mistakes of each participant in the structure, comprehension, and vocabulary categories were very close to each other and this indicates that the ability in these three categories is interrelated. The results showed that the average of mistakes was higher in the specialized vocabulary subcategory. Also, the averages of mistakes in the subcategories of comprehension and structure were high, too. This indicates that the participants in the section of structure and comprehension of English are not capable enough. Similarly, the results of the Persian-to-English translation analysis showed that the percentages of mistakes of each participant in the structure and vocabulary categories were very close to each other and it shows that the abilities in these two categories are related. Moreover, the results showed that the average of mistakes in structure was very high which indicates that the participants are not familiar or are less familiar with the essential structural and grammatical points of English. The average translation time of this text was about 46 minutes which shows that the participants relatively spent a long time on translation.

It should be mentioned that the participants did well in the vocabulary category in comparison to the comprehension and structure categories. Additionally, Persian-to-English translation was very difficult for the students so some of the participants refused to translate it.

The analysis of the interviews indicated that the participants had problems with finding efficient equivalents for the Persian words and structures and the proper sequence of steps was not taken in

the translation process. Therefore, it is a good idea to teach basic reading strategies and translation strategies to the students.

The following steps are recommended to have a more efficient and comprehensible translation:

- Initial reading of the whole section to get the main idea
- Reading paragraph by paragraph to get the main idea
- Reading each paragraph
- Finding the meaning of unfamiliar words
- Translating sentence by sentence
- Reviewing the accuracy of each paragraph translation
- Refine translation wording
- In case of Persian into English translating, back translation is helpful.

It can be concluded that in order to meet the needs of the specialized language of student-teachers, the necessary changes should be made to the content and goals of the specialized language. Indeed, it can be claimed that the weakness of the specialized language course lies in the weakness of the general English.

5. IMPLICATION

Based on the results, the following recommendations are offered to improve student-teacher translation skills: first, writing is the most difficult skill among the four basic language skills because the learners should consider many elements including content, sentence structure, vocabulary, and punctuation. The results of the present study showed that students face more challenges in translating Persian to English; therefore, it is recommended that the basics of writing an article in English and writing each section of the article be taught in a specialized language course. In addition, the principles of writing in English, especially the structures such as describing, comparing, explaining and exemplifying be taught in specialized language courses.

Second, the teaching materials should cover the learning objectives mentioned in the specialized language curriculum and can be selected from texts written by English-speaking authors. These educational materials can be part of textbooks in English-speaking countries, part of authoritative English language resources, lesson plans, part of scientific articles published in prestigious journals, etc. Authenticity should be the main reason for selecting the learning materials. Authentic materials can increase the student's interest and curiosity in learning by considering that they have the real and valuable language input that they need for their current goals of learning and work field after graduation.

Third, grammatical functions, acquisition skills, terminology, and specific functions of discipline content are crucial parts of the ESP course (Jianjing, 2007). The results showed that student-teachers had higher mistakes in grammar, especially in recognizing the tenses, passive structures, and reduced adjective clauses. Therefore, these structures should be included in the general and specialized language courses.

There are some important limitations to this work. It should be mentioned that the sample was too small to make a safe generalization. Furthermore, this research was conducted at the West Azerbaijan Farhangian University; therefore, the results cannot be necessarily generalized to students in other universities. Consequently, future studies need to include samples from various universities to verify the authenticity of these results.

Conflict of Interest:

None.

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