TEACHING ENGLISH AS A FOREIGN LANGUAGE TO STUDENTS WITH SPECIAL NEEDS THROUGH INTERSEMIOTIC TRANSLATION: AN EXPERIENCE WITH DEAF LEARNERS

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This study aims at examining the effectiveness of using intersemiotic translation in teaching English as a Foreign Language (EFL) to deaf students. The participants included six (one female and five male) EFL deaf students studying in an elementary public school in Iran. Taking an action research design, we tried to teach EFL to these students for four months and track their development during this period. Having adopted the principles of intersemiotic translation, we used pictures, animations and body language to teach EFL to the participants. For evaluating the students' understanding of the presented materials, they were asked to draw pictures and answer to matching questions. The findings indicated that the use of intersemiotic translation and visual aids is very useful for teaching English to deaf learners especially in contexts where few teachers know American Sign Language (ASL).

Keywords: Students with special needs, deaf students, intersemiotic translation, English language teaching

Receiving enough 'comprehensible input' is a quintessential factor in learning a second/foreign language (Bochner & Albertini, 1988). The paucity of input makes learning English very difficult in foreign language contexts, as EFL learners are not exposed to enough real language use (authentic input) outside the classroom. This difficulty can be even more for learners with hearing impairment as they cannot benefit from the audio input easily and should rely only on visual input.

Vaněk (2009) stated that the greatest challenge that all deaf learners encounter is the fact that "they do not receive direct input in a language the written system of which they are supposed to master" (p. 43). As he puts it, the problem of linguistic development is influenced by two factors which are "age and intake of language input" (p. 17). Similarly, Bochner and Albertini (1988) maintained that deaf children who have hearing parents and have access to sufficient amount of language input can learn a new language better than deaf children who have deaf parents and are deprived of language input.

It is obvious that the deaf students as well as the hearing ones need to be educated and there are two possibilities for them to proceed with that in the Iranian context. The first possibility is to attend the schools specialized for teaching students with hearing impairments, and the second one is to attend the mainstream schools and be educated with the typical students. For teaching to the students at the mainstream schools, a teacher and an interpreter adept in Farsi Sign Language (FSL) cooperate to manage the class. Interpreters translate information through FSL for the students to see.

However, in the Iranian context, there are very few specialized English language institutes/schools for teaching EFL to deaf students. Also, the high schools which are exclusive for deaf students are located in Iran's large cities, not in undeveloped and small ones, and consequently many of the deaf students have to go to the mainstream high schools for learning EFL and other subjects together. In these schools, the curriculum for teaching English to deaf students is the same as that for typical children. However, the main problem is that hearing students for whom the teaching materials are designed can benefit from the audio-visual input presented by the teacher and in the books while the deaf students cannot. So the question is what can be done in order to help the deaf students going to schools in places where they do not have access to skillful interpreters in American Sign Language (ASL) learn EFL. One method that the present study aims to examine its effectiveness is using intersemiotic translation as a non-verbal translation method to teaching EFL to deaf students.

INTERSEMIOTIC TRANSLATION

Intersemiotic translation is one of the three categories of translation described by Jacobson (1959/2000). He suggests three translation categories: The first category is Intralingual Translation which involves interpretation of verbal signs by other signs in the same language. The second one is Interlingual Translation which involves the interpretation of verbal signs in one language by verbal signs in a different language. The third one, which is the main focus of this study, is intersemiotic translation which means the interpretation of verbal signs by non-verbal signs and vice-versa, i.e., the interpretation of an image, painting, sound, and so on, in a written or oral text, or the interpretation of a song in a play or film (Jacobson, 1959/2000).

Nowadays, we see the use of the Intersemiotic category of translation as a creative tool that facilitates the process of EFL learning. Branco (2014) maintains that by using this category of translation in foreign language classrooms, we can influence learning in a positive way. He also claims that it can provide more interaction between the students and the teacher. Similarly, Zainurrahman (2009) stated that "visual activities maximize the foreign language development, helping students to memorize language and helping teachers to manage, organize and

present their classes" (cited in Branco, 2014, p. 2). Furthermore, Wright (1990) stated that "verbal translation might often provide meaning quickly but it does not develop this essential learning strategy which the students can continue to draw on long after they have left the classroom" (p. 137).

Furthermore, it has been shown that using visual aids, and watching authentic films can also facilitate the process of language learning (Hekmati, Ghahremani Ghajar, & Navidinia, 2018; Hekmati & Navidinia, 2016; Navidinia, Bidaki & Hekmati, 2016). Thornbury (2004) for example, believed that for teaching a new word, teachers can use pictures, or link abstract words with some mental images. When students observe the meanings of the words visually, they draw their own images which can facilitate learning.

Similarly, Hekmati et al. (2018) investigated the effectiveness of using films in EFL classes to develop students' writing skill. The findings of their study indicated that using films and visual aids can help students develop their writing skill more effectively and help them to be independent learners. Besides it can make the classroom environment more interesting.

Berk (2009) stated that by using videos, teachers can "grab students' attention, generate interest in class and increase memory of content" (p. 2). Combining both audio and visual aspects makes a film a comprehensive tool for language teaching. Also, according to Branco (2014), films can make learners be aware of other cultures while learning a foreign language.

Having known the problems of teaching EFL to deaf learners in EFL contexts, and considering the paucity of research in teaching English to students with special needs in EFL contexts, the present study aims at investigating the effect of using intersemiotic translation as a method for teaching EFL to deaf students which can shed some light on how to teach EFL to deaf learners in the contexts where there are not teachers knowing ASL.

TEACHING ENGLISH TO STUDENTS WITH SPECIAL NEEDS

Although many studies have been done on deaf education in general, few comprehensive studies have addressed EFL deaf education. According to Abrams (2008), studies on how students with physical impairments (e.g., deafness, blindness, or motor—developmental disabilities) learn a new language are extremely limited. Also very few studies exist on teaching EFL to students who are hard of hearing or deaf in the Iranian context.

Identifying how students with physical disabilities learn a second language has been one of the controversial issues in the literature. Giddens (2009) stated that deaf and hard of hearing children have different access to sound and if this access is in some way impaired, then the matter of spoken language would also be affected. She stated that the impediment of access to spoken language influences the development of written language too.

Through assessing deaf learners' grammar development, Berent (2001) claimed that deviation from expected Subject-Verb-Object word order causes a challenge for the students in their reading comprehension and written expression. He stated that "the number of teachers of English teaching to deaf students (and the number of students) is, relatively speaking, extremely small" (p. 7).

Furthermore, Iran-Nejad, Ortony, and Rittenhouse (1981) tried to examine if children with hearing impairment could comprehend metaphor. The children were given some short stories and asked to complete the stories with the best choice from the list of four alternatives. The findings indicated that students with hearing impairment could understand novel metaphors. These finding were further substantiated by another study conducted by Wolgemuth, Kamhi, and Lee (1998) showing that a large number of children with hearing impairment have this language ability.

In spite of the abovementioned studies, one can see the paucity of researches addressing the issue of teaching EFL to deaf students especially in unprivileged contexts where there are very few, if any, teachers knowing ASL. In such contexts, teaching EFL to deaf students should be either ignored or new methods must be applied to help learners develop their language proficiency. Banking on the personal experience of teaching EFL to a group of deaf students in an unprivileged context, we tried to examine the effectiveness of using intersemiotic translation in teaching EFL to deaf students.

METHODOLOGY

This study examined the effectiveness of using intersemiotic translation in teaching EFL to six hard of hearing students. The methodology used in this study is classified as action-research, because the researchers were teaching and observing the students' learning process. According to Ferrance (2000), action research is conducted in the school contexts and "refers to a disciplined inquiry done by a teacher with the intent that the research will inform and change his or her practices in the future" (p. 1). In fact by doing action research, teachers are trying to find solutions to the problems they encounter at school in order to improve the effectiveness of their instruction and students' learning (Ferrance, 2000). The problem facing us in this study was how to teach EFL to hard of hearing students in the contexts where there are no teachers conversant in ASL. Therefore, we wanted to examine the effectiveness of using intersemiotic translation in teaching EFL to students.

Participants

The participants of this study were six (one female, and five male) deaf students studying in an elementary public school during the 2014-2015 school year in

Birjand City, Iran. In the school being studied, just these students had hearing impairments and they participated in the class to learn EFL; therefore, they were selected as the participants of the study. The subjects ranged in age from 12 to 15 years and had no background knowledge about English language. They had different levels of deafness. While the level of hearing for normal people is 0-20 decibels, as shown in Table 1, the hearing level of the participants in this study was 100 or above 100 decibels. As indicated in Table 1, R means the right ear and L means the left ear and "No Response" means absolute deafness of the ear. According to guidelines in working with deaf students in the teaching environment, persons with the level of hearing above 90 decibels have profound deafness.

Table 1
The Characteristics of the Deaf Students Participated in this Study

Age	Years (at school)	Decibel Loss	Gender
12	Year 5	R: 100 L: No	Female
13	Year 6	R: 100 L:100	Male
13	Year 3	R: 100 L: 100	Male
14	Year 5	R: 100 L:105	Male
15	Year 6	R: 110 L:110	Male
13	Year 4	R: 110 L: 120	Male

The duration of Elementary school in Iran is six years. The deaf students in our sample did not have the capability to pass Elementary school in six years like the normal students. As a consequence, their age range when studying in the elementary school was between 12 and 16 (as indicated in Table 1). Furthermore, five of the students in this sample were learning English as L2, but one of them who was an immigrant from Afghanistan was learning English as L3 as his first language was Pashto.

Teaching Materials

We used, by authorization, the syllabus designed for teaching to deaf students at the Department of Education of the University of Oxford. In addition to teaching the materials in the syllabus by using pictures, flashcards, and body language, we taught the students some abstract and concrete words extracted from different sources too. The selection of teaching materials and classroom activities were based on our teaching approach which was teaching through pictures and by the use of intersemiotic translation. It was tried to help students learn the new words by showing them pictures, or using body language.

Procedure

Before starting the first phase of study, it was necessary to spend some time interacting with the deaf students to be familiar with them. We spent two weeks observing them in different classes (Math, Literature, etc.). According to the guidelines, there were plenty of tasks to attract the deaf students' attention, for example, gentle tapping and waving. During the first session, we attracted their attention by using colorful flashcards and playing an animation. After that, we wrote on the blackboard and talked to them to familiarize them with communicating without using sign language.

For the participants of this study who were severely or profoundly deaf students, lip-reading (speech-reading) was the most effective means of communicating. During teaching, maintaining eye contact and standing in the right place were two important factors that we took into consideration. By the right place, we mean that the teachers should be clearly observable. Their face must not be silhouetted or in the shadow and their mouth should be visible.

As we knew that teaching the deaf could take a longer time than planned, we did not rush to avoid confusion. We taught abstract and concrete words during each session of the class by showing pictures and animations. The following steps were taken in each session of the class: first, we wrote the words in English on the board, and read them more than 4 times, then we ask students to look at the related pictures and guess the meaning of the words. At this stage, apart from pointing to the related pictures, we used body language to make the meaning of the words clear for the students. Testing students' comprehension was the final stage of each class. Through writing the meanings of the words in their native language, using body language, and drawing pictures, the students showed that they understood the meaning

Teaching the abstract words was more difficult compared with teaching the concrete ones. We did not translate the abstract words into Farsi language as far as we could. Instead, we tried to convey the meanings of the words by using pictures and animations. For example, we played the selected scenes extracted from A Christmas Carol for showing the meaning of some words such as, a ghost, to die, to behead. The students made some comments about the words shown in the scenes. Then, the meaning of the words were given by using body language and pictures. When asked to draw the meanings, they related the words not only to the pictures or scenes which were shown, but also to their own context. They were asked to remember the meaning of the words at the end of the class and answer the questions. We got feedback after every lesson to ensure that they understood the right meaning.

RESULTS AND DISCUSSION

The aim of this study was to examine the effectiveness of using intersemiotic translation in teaching EFL to deaf learners. In this part, the main findings of the study were presented all substantiating the potentiality of hard of hearing students for learning EFL.

Relating Words and Pictures

Observing the images produced by the students made it clear that students understood the words which were shown to them through the pictures. They sometimes drew something related to the word to show the meaning of the word based on its picture. For example, they drew a flower to demonstrate their understanding of the word "Smell" (Figure 1). Through making relationship between the words and pictures, they could learn the words easily.



Figure 1. Making relationship between the words and the pictures.

The More the Deaf Learners Could Hear, the Better They Could Write

We noticed that the students' writing in Farsi was poor. According to Giddens (2009), the development of spoken and written language depends on the sound exposure. If the amount of exposure to sound was imperfect during language development in childhood, the process of speaking and writing would also be affected. This impairment eclipses their capability in writing. As shown in Figure 2, the dictation of the word "envy" meaning "hesadat" in Farsi language must be "حسانت", but the student wrote "ehsad" instead which makes no sense in Farsi language. It is noteworthy to mention that "Ehsad" comes from the same root "hasad" in Farsi which means that the learners had partially understood the meaning of the word.

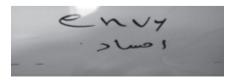


Figure 2. The wrong dictation.

The Capability of Deaf Students in English Writing

During this process, we found something noteworthy showing the potentiality of the deaf students for learning a new language like the typical learners. We did not teach them the English alphabet and did not expect them to write the English letters but we found out that they could write the English letters. Figure 3 shows the word "Madar" (Mother) in Farsi that we wrote and asked the student to transliterate it into English. Farsi is a right-left language and the student wrote the letter from right to left because he did not know the rule in English writing but he transliterated the word.



Figure 3. The transliteration of the word "mother" (The "M" letter for the "c" letter, "A" for "i", "D" for "c" and "R" for "C")

Some of the students tended to write the meanings of the new words in their native language and had less tendency for showing the meanings through drawing. Through analyzing their drawings, we noticed that most of the time they tended to show the meanings of the concrete words through drawing. However, the meanings of the abstract words were mostly shown through writing them in the students' native language.

Drawings as Manifestation of Understanding the Word Meanings

By scrutinizing the students' drawing, we found that their drawings (as the manifestation of their understanding of the meanings of the words) were often the same as the pictures or the scenes that they had already seen. For example, when they were asked to draw the meaning of the word "to die", their drawings were exactly the same scene that was selected to show the word "to die" from "Christmas Carol" animation (Figure 4).



Figure 4. Meaning of 'to die.'

However, sometimes their drawings were not the same as what were shown to them before. For instance, we presented the image of the word "Freedom" but their drawings were different indicating the fact that they had a different image for this word in their minds. While the image shown to the students from the animation was a woman who set free a bird from the cage which means freedom, the student showed the meaning of this word through drawing a man who is freed from the prison (Figure 5).



Figure 5. A man who is freed from the prison.

Besides asking them to draw pictures, they were asked to answer the matching questions. After a while, they preferred to answer the matching questions than drawing pictures since it was easier for them. Lip-reading the words for the students during the matching exams was necessary so they could understand and remember the words.

We used antonyms to teach the abstract words. For example, the words "hard" and "easy", "to love" and "to hate" were taught accordingly (Figure 6). The opposition mark was a good solution to avoid translating the words verbally. The students were asked to answer the matching questions besides drawing pictures.

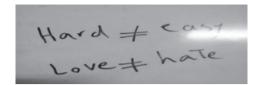


Figure 6. Teaching through the opposition mark

In order to avoid verbal translation, we used Intersemiotic Translation as a means for teaching English through non-verbal translation. This process, along with the principles of Total Physical Response (TPR) method, was used to help plan appropriate method for teaching L2 to the deaf students. As Larsen-Freeman and Anderson (2011) stated, TPR is a method in which "meaning is made clear through body movements" (p. 110). For teaching the meanings of some words such as "to wait", we had to mix using pictures with the body language because the picture showed someone who sat on the bench at the bus station and the students thought that the word means "to sit".

When abstract words such as "freedom", "pain", and "happiness" were taught by using both pictures and the body language, students also followed suit. They were laughing when asked to show the meaning of "happiness". TPR helped them to remember the meanings by physical gestures that were created by them as the Chinese saying says: "I hear I forget, I see I remember, I do I understand".

One of the important problems in the teaching process was the teaching of the word spelling. The students could not write the meaning of the words in their mother tongue because of their poor writing skill in their mother tongue. Giddens (2009) stated that "history has shown that students who are deaf or hard of hearing have difficulty with written language and develop writing skills at a slower pace than their hearing peers" (p. 2). When the students knew the answer but were unable to write the meaning of the word in Farsi, they refused to answer and frequently preferred to sit and show no more action.

Another problem was the quality of participants' speech. When we taught and asked them to tell the meaning, they tried to give the meaning but we could not understand their speech clearly. They were asked to write but sometimes they refused because their writing was poor. In this situation, we had to translate but after that we found out that they knew the meaning but they just could not express it. For example, the word "gossip" was the hardest word taught to the students without translating. One of the learners explained the meaning of gossip as follows: "we backbite about someone and tell that a person is a bad guy". The student could not write what it means in Farsi and when we translated it, he said that "it is exactly what I meant". We can claim that they learned the words just through the pictures and TPR even if the words had not been translated.

Apart from the formative evaluation of student learning progress during the term, at the end of the 16th session of instruction, they were asked to answer some matching questions. Although all six students were taught the same syllabus, their learning outcome was different. Two of the students had hearing aids for their right and left ears but the rest just had hearing aid for one of their ears; this affected their learning process. The words "cook" and "book" as concrete words were not distinguishable by the latter students but the former ones could distinguish them. The students who had hearing aids for both ears showed more progress in spelling the words than the others. Although their speech was vague they could distinguish between the words beginning with similar letters.

CONCLUSION

The present study tried to bring the issue of teaching EFL to deaf learners to the forefront of academic discussion by teaching English through intersemiotic translation to six deaf learners. After 16 sessions of instructions based on the principles of intersemiotic translation, the findings indicated that this method can provide direct input for deaf language learners and help them learn the language through visual aids. Considering the large number of deaf EFL learners who lack access to ASL and the paucity of studies on alternative ways of teaching language to them, more studies are needed in this area.

This study supported the use of intersemiotic translation in teaching EFL to deaf learners. The findings indicated that teachers without ASL knowledge can teach English to deaf learners. Considering that in many EFL contexts such as Iran, few EFL teachers know ASL well, applying the principles of intersemiotic translation can help teachers to teach deaf students foreign languages. This paper does not intend to undermine the role of ASL in teaching English. Educational systems should train and recruit more teachers adept in ASL for teaching English to EFL deaf students. When hearing impaired students "are given the right support and provided with positive learning experiences, their potential is unlimited" (Knuckey, 2005, p. 1). Hence, other researchers need to continue this line of research in order to identify effective ways of teaching foreign languages to deaf learners, especially in underprivileged areas.

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