



# **The Impact of Teaching Shadowing Technique in Enhancing Students' Performance in Simultaneous Interpreting: A Case Study**

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## **Abstract**

This study investigates the impact of shadowing technique on the students' performance in simultaneous interpreting. It focuses on the importance of such technique in teaching such type or interpreting that requires a high degree of accuracy in rendering the source message. Simultaneous Interpreting (SI) students face difficulties while they interpret, but following strategies and techniques they can overcome such difficulties. Applying this technique enhances students' performance positively as they manage the task. Twenty students from department of Translation / College of Arts / University of Tikrit (2018-2019) have been chosen randomly to assess their performance in Simultaneous interpreting. Two tests have been used in this study, the pre-test at the beginning of the course, while the post-test was applied after teaching them this technique. Each test lasts four weeks and the performance has been statistically analyzed by using the T-test program.

***Keywords:*** Simultaneous Interpreting, Shadowing Technique, Performance, Teaching Interpreting.

## 1. Introduction

### 1.1 An overview

Interpreting is a form of translation but it is presented in a different mode through which the time factor is critical to produce the final message in the Target Language (TL). This form of communication is conducted under complicated conditions in which the interpreter requires a special course of training to command such difficult task.

When the interpreter manages this process as a face-face activity s/he needs a special course of training or a program to enhance her/his performance effectively and delivers the Source Message (SM) accurately. This study focuses on one of the most important technique which effects positively to improve his performance and knowledge gradually.

### 1.2 Statement of the Problem

In brief, most of the interpreters and translation students who are studying SI face problems in rendering the SM directly and how to manage such complicated task. This mode of interpreting requires. This study is an attempt to improve that teaching the students according to a specific technique or strategy helps to overcome the interpreting difficulties and problems. A shadowing is one of the pedagogical methods which plays an important role in improving the student's performance.

### 1.3 Aims of the Study

This study aims at:

1. Identifying the problems that interpreters or interpreting students may face in SI.
2. Investigating the impact of Shadowing technique in teaching and learning SI.
3. Clarifying the vital role of teaching methods in developing students' performance.
4. Putting forward recommendations and suggestions for curriculum designers, teachers and students due to improve the teaching and learning processes and overwhelmed the interpreting difficulties.

### 1.4 Questions of the Study

In this study, three important questions have been raised as the researchers see that Shadowing is needed in learning and teaching SI. These questions are:

1. Is the student's performance has been improved as they start to employ this technique?
2. What is the impact of such technique in learning SI?
3. Does this technique is needed in the process of teaching SI?
4. Have the students' memory improved as they practice shadowing.

### 1.5 Hypotheses

In this study, two significant hypotheses are made as follows:

1. The students' performance is low and not satisfied according as they are learning traditionally.
2. Many problems faced by the students as they are learning with no a clear teaching method.
3. Selected teaching methods are important in the educational environment.

### 1.6 Significance of the Study

This study shows the importance of shadowing technique in teaching and learning aspects because:

1. It helps the teachers simplifying the process of teaching.
2. It supports the Students' memory as they retrieve the information when they interpret.
3. It plays a vital role in enhancing the students' self-confidence in interpreting process.

## 2. Interpreting

Interpreting is a form of a highly cognitive communication process which requires exceptional skills and knowledge in order to reformulate the Source Message (SM) in one language into the Target Message(TM) in another language accurately. This process of communication is very restricted with time and the interpreter has no time to think of a certain meaning as s/he interprets, thus this type of communication necessitates a



special course of training or program to improve their proficiency and performance.

Generally speaking, interpreters mediate communication between two participants speak two different languages, so three key aspects must be taken into count in the process of interpreting which include : **mediation** means that interpreter's job is to mediate between two people and bridge the communication gap, **between people speaking** indicates that interpreter manages this process during a real time of communication or sometimes it is called face-to-face activity and finally **two different languages** are spoken. These are the basic requirements of interpreting task in which the interpreter can understanding the meaning of the SM and renders it clearly. For Shuttleworth and Cowie (1999:83-84) interpreting refers to the oral translation activity of a spoken message or text in which the communication skills are required by interpreters and render the final version of the message in a real time without the possibility and going back and making revisions. In this definition, time factor is very critical in reformulating the SM properly and it must be taking into account in this task.

Pochhacker (2004: 11) defines interpreting as “a form of translation in which a first and final rendition in another language is produced on the basis of a one-time presentation of an utterance in a source language”. The utterances said by the two people in the act of interpreting are produced due to a time constraints which have a clear effect on the interpreter's performance in rendering the SM from one language into the TM in the second language .

Angelelli (2004:8) mentions that a unique feature of interpreting in its origin was that it happened between two parties that did not share the same status. This difference in power and status has characterized the field since its conception, and these power differentials vary from one situation to another, as does the nature of situated practices. Interpreters have always been necessary, not only for bridging communication between individuals from multilingual and highly advanced civilizations, but also in brokering the social differences among them.

While Gillies(2013:3-4) sees interpreting as a skill or, to be more exact, a combination of skills that one can understand quickly and master them in practice. These complex skills can be broken down into their

component parts which can be practiced in isolation. In this definition, the interpreting skills are the backbone of the task through which the interpreters can manage the task successfully, so practicing this complex task requires a sort of mastering such skills in order to interpret the SM accurately in the second language.

However, it is important to focus on developing the training aspect for interpreters because it effects directly on their performance because and increases their awareness to the best level. Interpreting is not easy task to be done in a fixed time but it requires a sort of specialized training courses for enhancing the students' knowledge and proficiency.

### 3.Types of Interpreting

Obviously, there are three main types of interpreting that are classified according to the mode or the settings in which they can be occurred. Each type has its own principles and skills that can be employed by the interpreters in order to reformulate the SM successfully. All of these modes require a certain level of language skills to conduct the interpreting process sufficiently and each one depends on to what extent the interpreter renders the SM for the listener.

#### 3.1.Sight Translation

Sight Translation (SiT) is a process of rendering a written text in one language into an oral output in another language. This mode is regarded as hybrid mode of interpreting and translation because it the input message is written text and the output message is produced orally. This reason is behind naming such type as sight translation but classified as an interpreting mode. This

Zheng *et al.* (2013:4) highlight that SiT encompasses the replacement of a message written in one language into a message conveyed orally in another language which needs the synchronization of reading skill and production competence in reformulating the ST in one language into a TT in another language.

In other words, Sadkhan(2014:9) says that SiT is conducted in three phases starting with (sight reading) when the interpreter reads with his eyes the SL written text, then (comprehension phase) as s/he translates it with

her/his mind, finally (delivering phase) as s/he orally renders this written text into the TL.

### 3.2. Consecutive Interpreting

The main second type of interpreting is consecutive interpreting (CI) which is occasionally used in certain occasions such as ( dinner speech, press conference, round-table meetings). CI requires exceptional skills and good memory to enable the interpreter managing the task of interpreting properly. The most appropriate and operational definition of such type by the researcher as follows " it is a process of rendering a source message by the interpreter and renders it into a target audience within a limited period of time".

Phelan (2001: 9) explains that this mode of interpreting is not a summary; but it is a comprehensive interpretation of the original oral message in another language. Superficially in this types time consuming as the time factor is almost doubled and critical. Some interpreters considered that this extra time is useful because it gives them time to think. This is why CI is regarded as accurate as than SI because there is more time available during the task.

For Pochhacker (2004:19) CI does not assume a specific period of the original act of dialogue, it can be considered of as a scale which ranges from the rendering of utterances as short as one word to the handling of entire speeches, or more or less lengthy portions thereof. Pochhacker also distinguishes between two types of consecutive interpreting "classic consecutive" and "short consecutive". Classic consecutive involves systemic note-taking as developed by pioneers of conference interpreting, in contrast to short consecutive without notes, which usually implies a bidirectional mode in a liaison constellation.

### 3.3. Simultaneous Interpreting (SI)

SI is regarded one of the most challenging type of interpreting which requires a high cognitive process of the information received by the interpreter and renders it precisely. The need for interpreting becomes a critical demand with foundation of the International Organizations, United Nations and European Union. SI will be studied in details in this paper and it is performed and when it has been used for the first time.



Gaiba (1998:29) shows the historical background of SI and invention of the simultaneous interpreting system which was described by Andre Kaminker, one of the first simultaneous interpreters in history. Kaminker was one of the few interpreters working between the two world wars, and interpreted simultaneously Hitler's speech in 1934 for the French radio.<sup>12</sup> Kaminker was also interpreter at the League of Nations and later at the UN.

Moreover, another historical background clarifies the importance of SI and how it was used. In October 1943 the representatives of the 17 Allied nations except the U.S.S.R. met in London and established the United Nations War Crimes Commission (UNWCC). They laid down the general rules for the incrimination and prosecution of war criminals. Based on these rules the representatives of the major Allied powers, Great Britain, the U.S.S.R., the U.S.A. and the provisional government of France, signed the London Agreement on August 8, 1945.

The first official session of the tribunal was held in Berlin in Nuremberg city, on October 18, 1945 and was presided over by the Soviet member under the presidency of Sir Geoffrey Lawrence during which SI used a communication tool to interpret. (ibid)

Setton (1999:5) says that Simultaneous interpretation (SI), a service which allows participants at international meetings to speak and follow proceedings in their own languages, is widely viewed as a particularly impressive form of rapid, instant translation. SI as practiced in professional conditions, in which interpreters in a sound-proof booth with headsets, control consoles and microphones, and a direct view on the meeting room, deliver versions of the discourse in different languages 'on line' with a lag of a few seconds, alternating every 20-30 minutes or as Speakers take turns on the conference floor.

This type has been defined by many scholars and theorists, and one of the most them is Russell (2000:7) who defines SI as a process in which the interpreter interprets the TM in TL at the same time of SM is being delivered. Russell emphasizes on the time factor which is regarded as a decisive factor in the process of SI because there is no time for the interpreter to think or choose the meaning.

Jones (2000:66) affirms that in Simultaneous interpreters should maintain their eye contact as much as possible with delegates and even use



gestures in the booth, even though nobody may be watching those gestures. In simultaneous, the interpreter has to speak and listen at the same time, thus it is important to employ all the her/his skills and capacity in rendering SM.

For Chernov (2004:1) SI is a process whose several aspects are embodied in an observable product: a sequential acoustic and verbal signal (a sequence of speech sounds) unfolding over time and it involves transferring a verbal message in one language into another language. He adds that transformation of the SM is highly related with students' performance and their skills to manage such complicated task with not time frame available for processing the SM.

#### 4. Simultaneity in SI

One of the problematic issues faced by the interpreters especially the novice ones is the simultaneity as they listen and speak at the same time. SI is characterized with this process which is regarded as the key topic in information processing, thus it is important to take such feature into account in SI teaching process.

Barik(1973:273) is one of the scholars who was interested in studying SI claims that there are certain limits on simultaneity, suggesting that speakers' pauses were used by the interpreter for her/his output, and assuming limited flexibility or control over processing and storage, thus he justifies that a pause occurring at an ungrammatical location may be unusable, or may cause the interpreter to act on insufficient information, resulting in inaccurate performance.

Pochhacker (2004: 119) confirms that simultaneity is considered as a vital aspect in the processing-oriented research and it is a form of "overlapping talk" and the interpreter's ability to involve interactively in the discourse. This refers to the interpreter's ability to involve in the conversation and play a significant role in the dialogue.

In contrary, Kochkina (1963;cited in Chernov (2004:1) emphasizes his doubts as to whether SI is actually simultaneous (with concurrent listening and speaking), due to the widely belief in psychology that the interpreter's attention could not be instantaneously directed to these two distinct processes. On the basis of his Kochkina suggestion that SI only *seems* to be 'simultaneous', and that 'simultaneity' is in fact only achieved

‘through two conditions (1) *contraction of the message*, and (2) *a faster rate of the interpreter’s speech as compared with the speaker*’.

While Pinter (1994; cited in Setton 1999:28) presents a clear effect of training program in the simple way to improve the ability to talk and listen at the same time: experienced interpreters and last-year SI students performed much better than beginners and other students in repeating and answering questions about heard sentences in the condition involving simultaneity.

## 5. Golden Rules in SI

Clearly, SI is regarded as the most difficult and complicated type because of the cognitive processing of information the interpreter has to do in order to interpret sufficiently. The students' performance can be developed as they accustomed with settings SI performed in it. Thus, it is important to train them the basic principles of SI and how they overcome the interpreting difficulties in order to interpret successfully. Jones (2002:72) sets some basic ideas or in other words as principles through which the interpreter can develop her/his performance. He adds that if the interpreter follows these ideas or as he calls them "Golden Rules" s/h will be in a much more better position so based on these rules the simultaneous interpreters must:

- *Remember they are communicating;*
- *Make the best possible use of the technical facilities;*
- *Ensure they can hear both the speaker and themselves clearly;*
- *Never attempt to interpret something they have not heard or acoustically understood;*
- *Maximize concentration;*
- *Not be distracted by focusing attention on individual problematic words;*
- *Cultivate split attention, with active, analytical listening to the speaker and critical monitoring of their own output;*
- *Use, where possible, short, simple sentences;*
- *Be grammatical;*
- *Make sense in every single sentence;*
- *Always finish their sentences.*

## 6. SI Settings and Constraints

This type of interpreting is totally different other than interpreting types because it is performed in a different settings where the interpreter sits in an isolated place in order to focus and comprehend the SM precisely. SI requires exceptional conditions in which the interpreter can receive the SM and renders in into TM with the help of highly advanced technology. The message is transmitted from the speaker into the interpreter then the interpreter conveys the meaning into the audience at the same time simultaneously.

### 6.1. SI Optimal Settings

SI always is used during United Nations gatherings, presidential speeches, and large international conferences. It is the process in which an interpreter interprets what a presenter is saying at the same time as they are speaking so that listeners receive the interpretation without delay. If the interpreter pauses, it is usually no more than a couple of words behind the speaker, and it is done in order to give the interpreter time to both process the speech and provide the interpretation. For more detailed explanation, read our 6-part blog series on Simultaneous interpretation.

SI is practiced in very specialized placed called booth for interpreting. This booth is always shared between two interpreters. In this context , Setton and Dawrant(2016:265) describes how the booth is designed for practicing SI. This booth has a direct view of the room, soundproofing, fresh air exchange, temperature control, spacious desktop, comfortable chairs that roll silently, room for documents, desktop lamps with dimmers, and light on-ear headphones. Moreover, they add that the interpreter can learn how to use the microphone, cough button, volume control, tone dials, input and output channel buttons and how to optimize sound reception and visibility (there may also be a video screen), minimize spurious noise for users, and work comfortably and effectively in a team. See Picture(1) Booth inside a meeting hall of EU which shows how the interpreters sit together inside the booth and manage the interpreting task.





Picture(1): An Overview from the Booth inside the European Union Meeting Hall ( taken from aiic website)

## 6.2. Time Constraint

Time constraint is one of the most effective factor in information processing especially in SI because the communicative activity is directly related to the time when the speaker has said the utterance and the interpreter hears it. This time is estimated in seconds (2-3s) to render the SM and send it to the listeners. Therefore, the time is taken into account in the interpreting training program because the interpreters need to train carefully how to manage such process in a very critical demand to accomplish the task precisely.

Cokely(1986:2) emphasizes that because of the cognitive demands of the interpreting process, interpreters cannot instantaneously initiate interpreting when the speaker utters the source language (SL) message. They must wait until they have heard a sufficient portion of the SL message before beginning to produce the target language (TL) rendition. This period of time between the SL utterance and the TL rendition is the interpreter's lag time or decalage.

Moreover, Lee (2002:596) sees time tag between the moment a received message is perceived by a simultaneous interpreter and the moment the interpreter produces his translation of the segment, is one of the observable variables in SI study. Lag time is regarded as a significant variable that it can be easily measured for research on SI processing. Thus, it has been one of the most outstanding variables for corpus analysis and time management of SI.



Hansen *et al.* (2011:121) define time lag in interpreting as a temporal delay between SM input and the TM output and consider it as variable reflecting temporal characteristics of processing and cognitive load. For them the average of the time lag in SI is roughly between (2-5 seconds), and extending up to around 10 seconds, but the optimal time lag other scholars concerning the interpreters' performance is (2-4 seconds). Additionally, they assert that there are external and internal factors which highly related to the time lag and determine it. The external factors include speech delivery rate and text type while the internal factors are strategies and segmentation of the input.

However, Rojo (2015) explains that in the case of SI, time stress becomes an intrinsic feature of the task and, thus, a constant in the interpreter's work. For this reason, studies on interpreting have mainly focused on measuring the effect of pressure and anxiety on performance. Thus, time constraint is taken into account by many scholars because it is related into the performance and methodology of SI for its potential effect on the final output of the task. Such variable reflects the cognitive processing and the ability of the interpreters by which they can manage this complicated task.

## 7. Teaching of Shadowing Technique

Interpreters face difficulties as they render the SM into the TM in the other language because the task of interpreting requires a highly cognitive processing of the information s/her receives from the speaker. To overcome these difficulties, there should be a sort of technique that can be employed by the teacher to train the interpreters on managing such complicated process. One of these important techniques is the shadowing which is used in teaching SI.

Lambert (1992:266) defines shadowing as a paced, parrot-style auditory tracking task, conducted with headphones, however, it is an active and highly cognitive activity in which learners track the heard speech and vocalize it as clearly as possible at the same time that they hear it. SI necessitates that the interpreters need a special types of training in order to enhance their performance gradually because SI demands attention and accuracy as they interpret the SM.

Fortis (2011:2) mentions that in shadowing it is important to experiment with differing levels of time lag or 'recol' (say from 0.5 to 5 seconds), introducing a certain elasticity to reflect the fluctuating demands imposed by the speaker and to train the brain to cope with larger or smaller linguistic buffer spaces in the language combination being employed. The prime goal of the exercise is to accustom brain, ears and mouth to the flawless and (eventually) effortless production of the sounds and cadences of what may be a foreign language.

In broader sense, Hamada (2012:17) also says that shadowing was originally used for training interpreters. it has also long been used explicitly as an exercise to improve simultaneous interpreters' timing, listening, and short-term memory skills before they even start interpreting. It is clear that this technique is very important in the aspect of interpreter's training program because it supports her/his memory and listening skills in managing this task.

For Zakeri(2014:1) shadowing is one of the technique which has been used to enhance listening comprehension and oral performance lately. It was not until the current decade that shadowing captured language instructors' attention and was merged into teaching foreign languages. Zakeri ( ibid) shadowing as one of thirteen techniques used for interpreter training, affirming that shadowing is effective in developing a "good ear" for language, particularly in regards to accent and intonation, as well as improving overall listening ability.

Generally speaking, shadowing was originally established as a training technique for SI in Europe and has received much interest among language educators in improving the listening and speaking competence of learners as 'shadowing' requires competence in both listening and speaking. This technique is very important in developing the performance of the students because it increases their self-confidence in managing the task of interpreting which requires a highly cognitive processing for the information.

## 8.Data Analysis:

In this paper the data have been analyzed statistically by using T-test for analyzing the performance of the 20 students who have been selected randomly from the fourth year class / Department of Translation / College

of Arts / University of Tikrit . These students have produced individual differences in their performance when they interpret simultaneously specific paragraphs of journalistic texts about the ongoing events in Iraq.

The students have studied a course of intensive SI during which certain strategies and techniques have been explained by the researcher to help the students using those techniques when they interpret simultaneously.

During this course, the basic techniques that can be used during interpreting have been explained in details. One of these techniques is shadowing by which the process of SI will be performed easily and efficiently . The test had been divided into pre-test and post-test and each one lasted 4 weeks. In both tests, the performance of the students has been analyzed statistically according to the T-test which gives us the mean of their performance of each week. The T-test showed significant difference in the mean for each week according to the point each students got during each week of the pre-test and post-test.

In such comparison, the differences are shown based on the performance of the students during the interpreting process while they are using the technique in order to improve their performance and train how to manage SI process. This result encourages the lecturer to focus on teaching and explaining the impact of shadowing to improve the students' performance in SI. The results of the students' performance in pre-test and post-test have been summarized in appendix (B).

### 7.1. Pre-test analysis

This test has been conducted to see to what extent the students will interpret without using of shadowing during the first two weeks. The data of this test that consists of four weeks which have been analyzed by T-test so as to find the mean .

$$X_1 + X_2 + X_3 + X_4 + \dots + X_{20}$$

$$\text{Mean} = \frac{\dots}{20}$$

20

Table (1) Mean of the Pre-test

| Weeks of Pre-test | Week1 | Week2 | Week3 | Week4 |
|-------------------|-------|-------|-------|-------|
| Mean              | 1.000 | 1.000 | 1.150 | 1.400 |



In this table, we can see how the performance of the students has improved during the last two weeks of pre-test according to the mean of all weeks respectively. According to the results above, the performance of the students during the first two weeks was the same because they had the necessary knowledge to what extent this strategy is important in the interpreting process. While in the third week there was a total difference because they realized the importance of shadowing, but the fourth week the performance was clear according to the mean of this week for the whole students. This comparison is very useful to start teaching the vital technique that can be used by the students to help his / her memory in order to produce at least a clear message for the target audience. This level of the performance in the pre-test is regarded because of lack of the theoretical background and the ignorance of the techniques that can be used in the interpreting training courses.

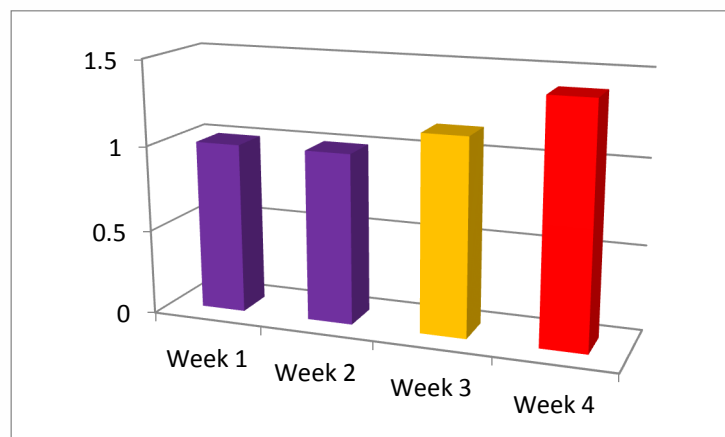


Figure ( 2) **Mean of the Pre-test**

## 7.2. Post-test analysis

During the last four weeks of the post-test, the students' performance is significantly different comparing with the pre-test.

The basic reason behind this progress in the performance is the use of shadowing as a technique as they train how to manage the SI task and to overcome the difficulties they face during the task. This tactical support to the interpreter's memory plays a very essential role in reducing the cognitive load of the interpreter while s/he interprets. Table (2) shows how this strategy impacts the student's performance positively.



Table (2) Mean of the Post-test

| Weeks of Post-test | Week1 | Week2 | Week3 | Week4 |
|--------------------|-------|-------|-------|-------|
| Mean               | 2.150 | 2.650 | 2.800 | 2.900 |

In this test, there is a significant change in the performance of all the students during the four weeks. The last two weeks have shown a clear progress in conducting SI because the students have mastered all the guidelines of shadowing technique and reducing the cognitive load. It is important to highlight the impact of these guidelines and its influence to what extent they are important to improve the students' performance in SI. It is important to shed light on the vital role of the two weeks for practicing SI without shadowing for the students in advance in order to enhance their memory and prepare it for the next stage which includes training with this technique. The last two weeks showed significant improvement in their performance when they are compared with the other weeks.

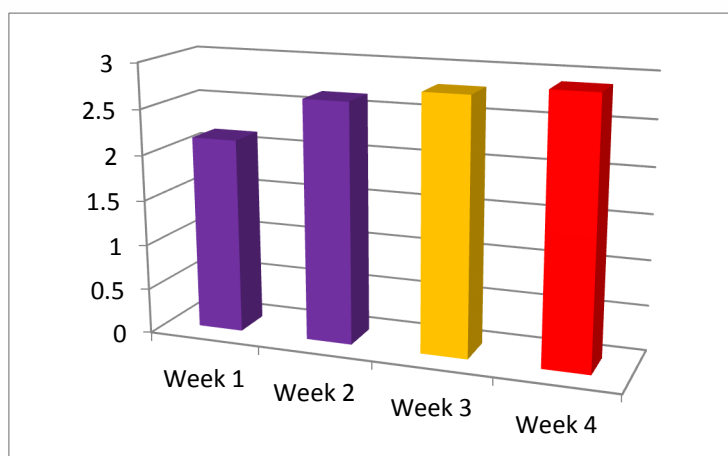


Figure ( 3) Mean of the Post-test

## 8. Discussion:

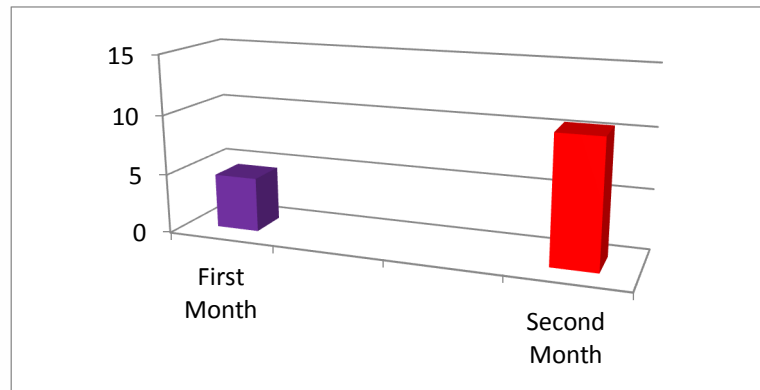
The performance of the students has been analyzed according to the data collected during both tests. The analysis proves that interpreting training is essential for the students to improve their performance and the way to overcome the difficulties of interpreting. During the pre-test, the students' performance was unsatisfied because of the low level of the performance that resulted from their ignorance of the basic strategies that can be employed during the interpreting process.

**Table ( 3) Comparison of the mean between two months of performance**

| Months | First Month | Second Month |
|--------|-------------|--------------|
| Mean   | 4.55        | 10.5         |

There was a significant improvement as they start to enhance their memory which is not enough to interpret perfectly without notes. Shadowing is crucial for the interpreter training it makes them be familiar with process that requires high level of attention. As the students used this technique, their comprehension, analysis and memory are supported by the notes taken during the process in order to recall the content of the message said by the speaker.

During the post-test, there is important development in the students' performance because of the perfect use of this technique and the adequate output of interpreting process. The students realized the value of this technique as a supportive to their memory so as to render the SL easily and properly.



**Figure (4) Comparison of Mean between first and second Month**

The comparison between the performance of the students during the two months refers to the importance of explaining the technique for the students and to what extent they are very helpful in teaching SI.

## Conclusion

Shadowing, in SI, has very central role in the process of interpreting because it facilitates crucial aspects for making interpreting successful. These two tests showed to what extent is important and basic to teach the technique that is considered as support for the students. shadowing is not an easy task for the students because they need be accustomed with repeating what has been said at once .

Memory exercises are not enough in the process of interpreting because the students are not always ready to remember what has been said by the speaker or to remember some words which will affect the idea that can be extracted from the final message. Most of the students have a very limited processing capacity that absolutely needs a backup to retrieve some of the SL and render it into the TL properly.

According to the results of both tests, the researchers find that it is important to start with theoretical foundation in order to explain all the basic parts of the SI and how it could be taught and what are the basic technique. Teaching SI must start with theoretical foundation to make the students have a clear idea of how to manage the interpreting process and overcome the interpreting difficulties faced by the interpreter.

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## Appendix A: Scores of the Students' Performance

| Post-test  |              |        |        |        |        | Pre-test   |              |        |        |        |        | Samples  |
|------------|--------------|--------|--------|--------|--------|------------|--------------|--------|--------|--------|--------|----------|
| Percentage | Total Points | Week 4 | Week 3 | Week 2 | Week 1 | Percentage | Total points | Week 4 | Week 3 | Week 2 | Week 1 |          |
| 3          | 12           | ٤      | ٣      | ٣      | ٢      | 1.75       | 7            | ٢      | ٢      | ١      | ٢      | Sample1  |
| 3.25       | 13           | ٣      | ٤      | ٣      | ٣      | 1.5        | 6            | ٢      | ١      | ٢      | ١      | Sample2  |
| 4          | 16           | ٥      | ٣      | ٤      | ٤      | 1.75       | 7            | ٣      | ٢      | ١      | ١      | Sample3  |
| 2          | 8            | ٣      | ٣      | ١      | ١      | 1          | 4            | ١      | ١      | ٢      | ٠      | Sample4  |
| 2.25       | 9            | ٢      | ٣      | ٢      | ٢      | 1          | 4            | ١      | ٢      | ٠      | ١      | Sample5  |
| 2.5        | 10           | ٣      | ٣      | ٣      | ١      | 0.5        | 2            | ١      | ٠      | ١      | ٠      | Sample6  |
| 2.25       | 9            | ٣      | ٢      | ٢      | ٢      | 0.5        | 2            | ١      | ١      | ٠      | ٠      | Sample7  |
| 3.5        | 14           | ٣      | ٤      | ٤      | ٣      | 1.5        | 6            | ٢      | ١      | ١      | ٢      | Sample8  |
| 3          | 12           | ٤      | ٣      | ٣      | ٢      | 1.75       | 7            | ٢      | ٢      | ٢      | ١      | Sample9  |
| 1.75       | 7            | ٢      | ٢      | ١      | ٢      | 1          | 4            | ١      | ٠      | ٢      | ١      | Sample10 |
| 1.5        | 6            | ١      | ٢      | ٢      | ١      | 0.75       | 3            | ١      | ٠      | ١      | ١      | Sample11 |
| 2.75       | 11           | ٣      | ٢      | ٣      | ٣      | 1.25       | 5            | ٢      | ٢      | ٠      | ١      | Sample12 |
| 1.5        | 6            | ١      | ٢      | ٢      | ١      | 0.75       | 3            | ٠      | ١      | ٢      | ٠      | Sample13 |
| 3          | 12           | ٣      | ٢      | ٤      | ٣      | 1          | 4            | ١      | ٢      | ١      | ٠      | Sample14 |
| 1.5        | 6            | ١      | ٢      | ٢      | ١      | 0.75       | 3            | ١      | ٠      | ٠      | ٢      | Sample15 |
| 4          | 16           | ٥      | ٤      | ٤      | ٣      | 1.75       | 7            | ٢      | ٢      | ١      | ٢      | Sample16 |
| 3          | 12           | ٤      | ٣      | ٣      | ٢      | 1.25       | 5            | ٢      | ١      | ١      | ١      | Sample17 |
| 2          | 8            | ٢      | ٢      | ٣      | ١      | 0.75       | 3            | ١      | ٠      | ٠      | ٢      | Sample18 |
| 2          | 8            | ٢      | ٣      | ١      | ٢      | 0.5        | 2            | ٠      | ١      | ١      | ٠      | Sample19 |
| 3.75       | 15           | ٤      | ٤      | ٣      | ٤      | 1.75       | 7            | ٢      | ٢      | ١      | ٢      | Sample20 |