

### The Use of Self-Repair Strategies in Classroom Conversations: Does the Teacher's Level of Reflection Make a Difference?

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**Abstract:** To better understand the pattern of language use and classroom interactions, this sequential mixed-methods study investigated the teachers' use of self-repair strategies based on their level of reflection. To this end, 33 Iranian EFL teachers were selected from various institutions in Tehran. Data for the quantitative phase were collected from the reflectivity questionnaire developed by Akbari, Behzadpour, and Dadvand (2010). Regarding the qualitative phase of the study, 70 hours of English instruction and classroom interactions of the 33 teachers were recorded and analyzed, using Fox and Jasperson's (1995) classification of self-repair strategies. The quantitative analyses of the results, employing one-way Analysis of Variance (ANOVA), indicated that there was a significant difference between the reflective groups in terms of the total repair strategy use. Further, the results of Kruskal Wallis analysis revealed that there was a statistically significant difference between high and low reflective teachers in terms of the repair strategies types "H, J, K, and L", which generally refer to the "Replacement, Repetition, and Addition of a lexical item". The results of the qualitative analysis also showed that the most frequent self-repair strategy of high, mid, and low reflective teachers was strategy "A" or "repetition of a lexical item".

**Keywords:** Reflection, Reflection-in-Action, Reflective Teacher, Repair, Self-repair Strategies.

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## **Introduction**

There exist some factors that have been of immense significance in teacher education; one of these factors is reflection. Reflection is the main part of teacher's growth and should be part of their career as it lets teachers think and look at themselves, accept what they have done, and sometimes decide to change it (Jadidi & Keshavarz, 2013). Teachers who teach English in institutions in EFL context should be aware of their pedagogical goal and reflect on the teaching problems. They should ensure that the instruction and message have been conveyed rightly to the students and nothing impedes the communication between themselves and the students. In fact, instructors must know the types of conversation breakdowns and the repair strategies required to make sure that there is a positive interaction in their classrooms. Markee (2008) explained repair as the "self-righting mechanism" of talk that allows individuals to deal with problems that impede shared understanding of classroom interaction.

There are many studies that have focused on the theoretical aspects of reflection and not how to put them into practice (Beauchamp, 2015; Dewey, 1933; Farrell, 2007; Schon, 1983; Zeichner & Liston, 1996). Likewise, the concepts of correction or repair have been ignored despite their large occurrence in language conversations. More significantly, most studies (Rabab'ah, 2013; Simpson, Eisenclas, & Haugh, 2013) have focused on self-initiated self-repair (SISR) from learners' point of view and to the best knowledge of the researchers; there were a few studies on teachers' SISR (Jian-ying, 2015). Teachers' lack of awareness about the use of self-repair strategies is another problem involved. In fact, teachers are required to recognize the importance of reflectivity and take advantage of self-repair strategies in order to diminish their conversation breakdowns.

As self-repair can play an essential role in the teachers' speech in the classrooms, teachers should be aware of the employed repair strategies and the types of conversation breakdowns in order to better teach and improve the students' communication skills. Moreover, according to Jian-ying (2015), "teachers' repair is an important part of classroom repair and means of teaching activities, and an essential part of class teaching. It can achieve preferable teaching outcome, help students consolidate their knowledge, and enhance students' critical thinking" (p. 569). Teachers may also implement various self-repair strategies while speaking, though they do not exactly know what repair strategies are.

This study highlights the important role of teacher reflection in the classroom as they can improve the quality of teaching and learning and improve their students' ability to become reflective (Clark, Hong, & Schoeppach, 1996). Moreover, this study intends to fill

the gaps in the literature and enrich it on issues germane to teachers' level of reflection and their use of self-repair strategies in classroom interactions.

### Literature Review

The term reflection draws back to Dewey (1933) and Schon (1983), both were key theorists who had an essential influence on reflection in teacher education. Dewey (1933) described reflection as an action based on "the active, persistent and careful consideration of any belief or supposed form of knowledge in the light of the grounds that support it" (p. 9). Schon (1983) was another strong supporter of reflective teaching. This can be seen in arguments he had with the traditional methods of teaching that viewed professional action as an applied science or as a technical rationality. He believed that the traditional view of technical rationality is based on a belief that theories are generated only in research and development centers, like universities and practice occurs merely at schools. He indicated that professional action should be seen as a process of reflection-in-action and reflection-on-action that teachers reflect both during and after actions to improve practice.

Richards (1990) claimed that reflection is an answer to past experiences and as an origin for evaluation and decision-making, and as a basis for planning and achievement it requires conscious recall and examination of the experience. Similarly, Bartlett (1990) identified that in order to be a reflective teacher, s/he needs to move beyond a primary concern with instructional techniques and know "how to" questions and "what" and "why" questions that considers instructions and managerial techniques as part of the broader educational purposes not as ends in themselves. Asking "what and why" questions gives teachers a certain power over their teaching. Griffiths (2000) also declared that reflective teachers examine their practices critically. This is what Schon (1983) called the cycle of appreciation, action, and re-appreciation. Further, to better impart the message to the learners and correct their errors in the process of teaching and learning, reflective teachers use high level thinking and problem solving skills. To this end, they use repair strategies and self-repair themselves so that they can enhance the learners' learning and prevent misunderstandings. However, they should know when and how to self-repair themselves.

The emergence of speech repair returns to the time that Jefferson (1974) incepted the research of error correction about a quarter of century ago. As Jefferson indicated, error correction can be considered as a repair strategy in which people change or replace their errors with the correct linguistic forms while speaking; this is the way that they can eliminate

their flawed speech. Afterward, Schegloff et al. (1977) discriminated between error correction and repair. As they noted, one of the possible types of repair is correction that replaces an error with a correct linguistic form. Furthermore, they declared that although the word repair does not limit to the replacement of an error, it deals with some kind of “trouble” in spontaneous speech.

Schegloff Jefferson, and Sacks (1977) observed that repair is universal in all talk. According to Olaoluwakotansibe (2011), the term “repair” is commonly mistaken for “correction of error”, or “replacement of error”. Repair sometimes contains “word search” which occurs when a word is not readily available to the speaker or when there is no hearable error or mistake. Seedhouse (1997) illustrated repair as the treatment of trouble occurring in the interactive language use. Repair initiation and repair outcome are two constituents of repair. Generally, repair is classified into four categories depending on who has initiated the repair and who has taken steps to resolve it: self-initiated self-repair (SISR), other-initiated self-repair (OISR), self-initiated other-repair (SIOR) and other-initiated other-repair (OIOR) (Schegloff, 2000).

Initially, the study of repair was conducted in the context of L1 speaker interactions. Then, it extended to the analysis of L2 speakers’ interactions. However, the focus of some studies was narrowed on error monitoring, and correction, since speakers tended to use more errors in L2 rather than L1 (Temple, 1992). Other studies worked on linguistic errors and found that errors are incorrect grammatical forms like morphological, syntactic, and lexical errors (Lennon, 1994). Another classification of repair strategies was presented by Cho and Larke (2010), who examined the use of repair strategies by young learners. They came up with 9 types of repair strategies (unspecified, interrogatives, (partial) repeat, partial repeat plus question word, understanding check, requests for repetition, request for definition, translation or explanation, correction, and nonverbal strategies). “These repair strategies are used for communication breakdown from their natural conversation to classroom conversation” (Cho & Larke, 2010, p. 2).

Previous researchers also found that adult language learners utilized nine types of repair strategies. Five of these repair strategies were from Schegloff et al. (1977), which include unspecified, interrogatives, (partial) repeat, partial repeat plus question word, and understanding check. Subsequently, Egbert (1998) added one—request for repetition, and Liebscher and Dailey-O’Cain (2003) provided another, request for definition, translation, or explanation. Afterward, Cho (2008) added correction, and nonverbal strategies.

As for the teachers, several studies (Nakamura, 2008; Razfar, 2005; Terzi, 2010) have also focused on teachers' interaction in classes while they were repairing their students' speech. For instance, Roshan (2014) conducted a study on teachers' use of self-repair and came up with two novel categories of self-repair in teachers' speech. However, to the best knowledge of the researchers, what teachers with various level of reflection do while they are speaking in their classrooms, whether they skip their own errors or self-repair their speech, has not been considered in the research studies. Hence, this study attempted to examine the self-repair strategies of Iranian EFL teachers by taking their level of reflection into account.

In particular, the current study focused on the following research questions.

1. What are the most frequent self-repair strategies employed by high, low, and mid reflective instructors?
2. Is there any statistically significant difference between high, low, and mid reflective teachers in terms of the self-repair strategies they employ?

## **Methodology**

### *Participants and Research Setting*

The participants of the present study were 33 Iranian EFL teachers, selected from among 40 teachers, teaching at various English language institutes in Tehran. All of the teachers had passed TTC courses and have been teaching English at intermediate and advanced levels. Out of 33 participants, 22 teachers were female and 11 were male. Teachers' age ranged from 22 to 58. The teachers were M.A. and B.A holders and their experience in teaching ranged from 2 to 29 years. Based on the teachers' mean score in the reflectivity questionnaire ( $M=99.90$ ), the teachers were classified into three groups of low, mid, and high reflective. It is worth mentioning that for the quantitative phase of the study, whose data were collected through a questionnaire, the participants were selected through convenience sampling (Dornyei, 2007). For the qualitative phase, however, this study utilized purposive sampling which is also known as judgmental, selective, or subjective sampling (Patton, 1990).

### *Corpus*

The purpose of this study was to examine the self-repair strategies employed by reflective teachers during the classroom interactions. The study's 156,299-word corpus was composed of 70 hours of class recordings during four months taken from 33 teachers. It is important to

note that 66 hours of the recordings were transcribed and categorized carefully by the researchers based on Fox and Jasperson's (1995) classification. Fox and Jasperson (1995) categorized self-repair into seven different types. These are repetitions, replacement, repetition of several lexical items, repetition and replacement of a lexical item, repetition of a clause or phrase and addition of new elements before the repetition, repetition and the addition of new elements, and abandoning the portion of talk which is being cut-off. However, 4 hours of the whole were considered as silent moments in the classrooms. The 33 audio files that comprised the classroom interactions corpus varied from 80 to 110 minutes. In order to specify the inter-coder reliability, 20 hours of the recordings that were transcribed and categorized, were selected randomly and checked by two EFL instructors.

### *Instrumentation*

This study was conducted in two phases: quantitative and qualitative. The researchers utilized the reflectivity questionnaire for the quantitative phase of the study. However, as for the qualitative phase of the study, classroom voice recordings were employed. The teacher reflectivity questionnaire, used in this study, was developed by Akbari, Behzadpour, and Dadvand (2010). The questionnaire entails 29 items on a 5-point Likert scale. The scales are numerically coded as 1= never to 5= always. It encompasses five subscales of practical, cognitive, affective, meta-cognitive, and critical reflection. In the questionnaire items, one to six relate to the component of practical, items 7 to 12 relate to the component of cognitive, items 13 to 15 represent the affective component, items 16 to 22 denote the meta-cognitive component, and items 23 to 29 refer to the component of critical. As for its scoring, each item was scored from one to 5 based on the 5-point scales with 'Never', assigning the lowest score '1' and 'Always' the highest score '5'. Thus, the highest score that the participants could obtain in this questionnaire was 145 and the lowest score was 29.

### *Data Collection Procedure*

In order to carry out this study, three steps (i.e., pilot testing, questionnaire administration, and recording EFL teachers' classes) were taken as follows:

Before carrying out the main study, the reflectivity questionnaire was primarily piloted on 20 EFL teachers, whose characteristics were similar to the participants of the study. Moreover, two language testing experts judged and confirmed the questionnaire based on its wording, representativeness, and relevance of the items. To ensure the reliability of the

questionnaire, Cronbach's alpha as a measure of internal consistency was calculated ( $r = .90$ ). As it is shown, the questionnaire enjoys high internal consistency or reliability.

Afterward, the researchers informed the supervisors and teachers of the 11 institutes about the purpose of the study. After getting their consent, 33 EFL teachers were given a questionnaire, entailing a demographic information part along with 29 items on teacher reflectivity. As they did not have sufficient time to answer them at that time, some of them returned the questionnaire to the researchers after one day. After the collection of the questionnaires, the data were entered into the Statistical Packages in Social Sciences (SPSS), version 23 to calculate the scores.

After administrating the questionnaire, the researchers recorded the classes of the above mentioned EFL teachers for 70 hours from April to July (2015) by a Digital Voice Recorder (DVR). The classes were recorded from the beginning to the end which varied from 80 to 110 minutes. The teachers and students were aware of the recordings. Additionally, before the classes started, the researchers notified the students that the focus of the study is on their teacher's voice, and put them at ease in the classes. Subsequently, the researchers asked the teachers to put the recorder on their podiums to record their sessions. The teachers were also assured that the recordings and the results of the study would be used merely for scientific and research purposes. Subsequently, the recordings were transcribed; hence, the recorded materials were examined for several times. Finally, the researchers determined the cases of self-repair one by one and compared the self-repair strategies employed by high, mid, and low reflective teachers according to the research questions.

In order to measure the inter-rater reliability of the recordings, in addition to the researchers' ratings, two EFL instructors were invited to rate 20 hours of the recordings which were transcribed and coded by the researchers. Before rating the transcriptions, the raters were informed about the purpose of the study and received Fox and Jasperson's framework. It is worth mentioning that 20 hours of the recordings were selected out of 70 hours randomly. Spearman rho correlations were used to test inter-rater reliability to see the degree of agreement between the two raters. Both of the raters came up with the total number of 256 repaired errors which were made by reflective EFL teachers. In the analysis, none of them had found unrepaired errors. However, one of the raters had found two mis-repaired errors and another one found 4 mis-repaired errors. In addition, after coming up with a final pattern, the classifications and samples of self-repair strategies were submitted to two language experts, and based on their suggestions, minor modifications were made.

## Results

### *Results for the First Research Question*

The first research question explored the frequency of each self-repair strategy that high, low, and mid reflective teachers employed. As for the analysis of the data, Fox and Jasperson's (1995) classification of self-repair strategies was employed. More importantly, since there were several repair strategies, to avoid confusion, letter codes were considered for each strategy and these letter codes were used in the tables in all the analyses. Table 1 demonstrates what repair strategy each letter code stands for.

**Table 1.** *Codes for Repairs*

Letter Codes	Repair full name
A	St1: Repetition of a lexical item
B	S2: Replacement of a cut-off word
C	S3: Repetition of a several lexical items
D	S4: Repetition and replacement of one lexical item
E	S5: Repetition of a clause or phrase and the addition of new elements before the repetition
F	S6: Repetition plus the addition of new elements
G	S7: Abandoning the portion of talk that is being cut-off and restart
H	S8: Replacement of a lexical word and the repetition of the correct sentence
I	S9: Repetition and Completing or continuing the cut of word or the portion of talk that is being cut-off
J	S10: Replacement of a lexical item, clause or phrase by another lexical item, clause or phrase
K	S11: Repetition and addition of a lexical item, phrase or clause then abandoning the error
L	S12: Repetition and the addition of a lexical item, phrase or clause then replacement of error with correct elements
M	S13: Repetition of the exact lexical item, phrase or clause then deletion of the error

In addition, during analysis of the data, the researchers came up with six new types that were not mentioned in Fox and Jasperson's (1995) classification. In this grouping, seven types of self-repair strategies have been provided, arranged from "A" to "G". Similarly, the researchers named the new six strategies and presented them in alphabetic order as follows:

- Strategy H: Replacement of a lexical word and the repetition of the correct sentence.
- Strategy I: Repeating and Completing or continuing the cut off word or the portion of talk that is being cut-off.



- Strategy J: Replacement of a lexical item, clause, or phrase by another lexical item, clause or phrase.
- Strategy K: Repetition and addition of a lexical item, phrase, or clause then discarding the error.
- Strategy L: Repetition and the addition of a lexical item, phrase, or clause then replacement of error with correct elements.
- Strategy M: Repetition of an exact lexical item, phrase, or clause then deletion of the error.

Table 2 demonstrates the type, frequency, and percentage of the strategies which were employed by high reflective teachers to self-repair themselves.

**Table 2.** Type, Frequency, and Percentage of the Strategies Applied by High Reflective Teachers

	St A	St B	St C	St D	St E	St F	St G	St H	St I	St J	St K	St L	St M
High reflective Teachers	55	6	18	11	4	13	1	7	6	26	1	0	3
Percent	50	5	16	10	4	12	1	6	5	24	1	0	3

The description and percentage of use of self-repair types are provided hereunder.

According to the results presented in Table 2, high reflective teachers employed 12 types of self-repair strategies. Strategy “A” (repetition of a lexical item) has had the highest frequency with the occurrences of 55 cases. Some examples of this strategy are provided as follows:

**Strategy A:** Repetition of a lexical item

Or we, we say that honesty is the best part. But, but I guess honesty is not the best part.

Why we use “are there at the first? Because your your sentence is question sentence

What, what did you write, Could you just tell your words?

Because all, all the places are full of paper.

How, how does it take you to paint it?

Now, let’s go to the, the reading part

Parents live with the, the older boy, or son

As, as this is a presentation you will have to talk about it.

Sorry, what, what kind of terror you mean?

Moreover, some of the high reflective teachers employed strategies “C” (repetition of a several lexical items), and “J” (replacement of a lexical item, clause or phrase by another lexical item, clause, or phrase) with the frequencies of 18, and 26, respectively, which had the average level of frequency. The excerpts of them are presented as follows:

**Strategy C:** Repetition of several lexical items

*Continue page 65 listening. Here we have, here we have three questions*

*Please go a, go a little further, up.*

*Yeah, great. Then u have to do, to do check in*

*Who is crying? Who is crying in the corner?*

**Strategy J:** Replacement of a lexical item, clause or phrase by another lexical item, clause or phrase.

*My aunt husband was, I mean that for example you should just go for baptism before you married.*

*Chase away means make them go for, far.*

*Look at these sentences. it's a, they are divided by this comma.*

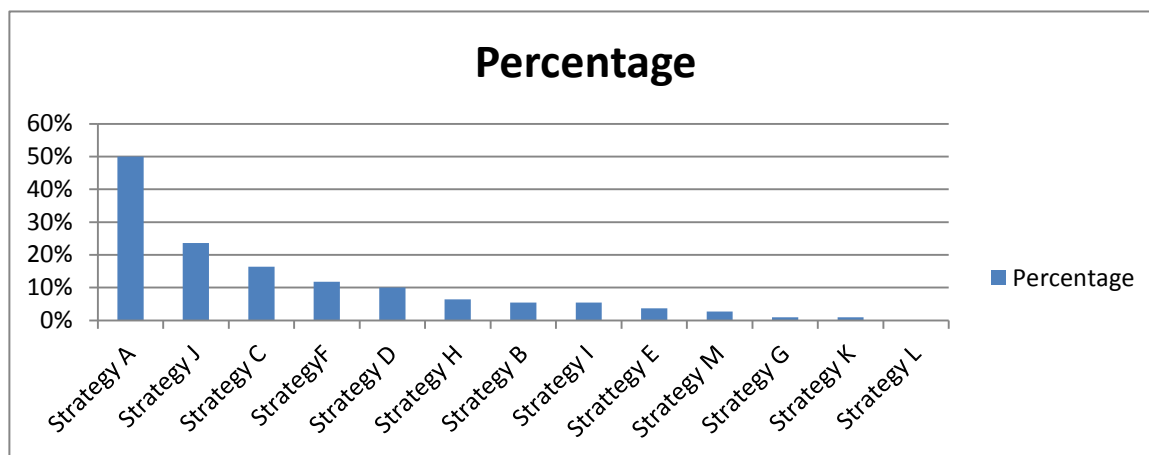
*For example, I will, you are in the store and you have 2 options here.*

*You tell me, When, what do you usually do on the weekend?*

*How do u usually, u know in different examinations like final examinations.*

Additionally, the level of frequency of strategies “B” (replacement of a cut-off word), “D” (repetition and replacement of one lexical item), “E” (repetition of a clause or phrase and the addition of new elements before the repetition), “F” (repetition plus the addition of new elements), “G” (abandoning the portion of talk that is being cut-off and restart), “H” (replacement of a lexical word and the repetition of the correct sentence), “I” (repeating, and completing, or continuing the cut of word or the portion of talk that is being cut-off), “K” (repetition and addition of a lexical item, phrase or clause then discarding the error), and “M” (repetition of the exact lexical item, phrase or clause then deletion of the error), which were found in 6, 11, 6, 4, 13, 1, 7, 6, 1, and 3 cases, respectively, were less than other strategies. It is worth mentioning that the frequency of the strategies “B” and “I”, and strategies “G” and “K” which were employed by high reflective teachers were the same.

However, none of the participants applied strategy “L” (repetition and the addition of a lexical item, phrase or clause then replacement of error with correct elements) for self-repairing. Distribution of the percentages from the largest to the smallest frequency of each self-repair strategy is presented in Figure 1.



**Figure 1.** *Distribution of Percentages in Total Frequency of Self-Repair Strategies*

Moreover, the most frequent self-repair strategies employed by low reflective teachers were determined and measured. Table 3 below shows the type and frequency of strategies which were employed by low reflective teachers to self-repair themselves.

**Table 3.** *Type, Frequency, and Percentage of the Strategies Applied by Low Reflective Teachers*

	St A	St B	St C	St D	St E	St F	St G	St H	St I	St J	St K	St L	St M
Low reflective Teachers	91	7	28	36	12	24	0	1	17	54	8	0	1
Percent	83	6	25.5	33	11	22	0	1	15.5	49	7	0	1

According to the results presented in Table 3, low reflective teachers employed 11 types of self-repair strategies. Strategies “A” (repetition of a lexical item), and “J” (replacement of a lexical item, clause or phrase by another lexical item, clause or phrase) had the highest frequency of use, 91 and 54, respectively. The samples of this strategy are presented as follows:

**Strategy A:** Repetition of a lexical item

*There is a place that, that when you want to ask information*

*It, it was a game on computers*

*So let's wait for few, few minutes to late comers.*

*Keep an eye on, on sth means exactly watch them.*

**Strategy J:** Replacement of a lexical item, clause or phrase by another lexical item, clause, or phrase.

*So, stress is, there are some general rules about the stress that where should you put the stress*

*Now it's a, describing a friend. And there are some highlighted words.*

*Light colors become righter, lighter.*

*But generally the, not in front of sth but close to*

*Or I, it is not that much fit*

*With the, you know about passive voice ha?*

*If something, you're running suddenly you slip, u skied and you fell down*

Furthermore, strategies "C" (repetition of a several lexical items), "D" (repetition and replacement of one lexical item), and "F" (repetition plus the addition of new elements) had the average frequency of use which are 28, 36, and 24 respectively. The instances of these strategies employed by low reflective teachers are as follows:

**Strategy C:** Repetition of several lexical items

*What was the thing what was the thing that I told you to search for it?*

*But one of them, one of them is information desk*

*How is it, how is it served?*

*Do you, do you really know something about that? Professionally?*

**Strategy D:** Repetition and replacement of one lexical item

*If you set a big do, big goal*

*The performer is the noun, the passive*

*We are, we were warned not to go out alone*

*She betrayed his husband. Betrayed her husband.*

*You know his wife died alive burnt alive actually, but it was interesting.*

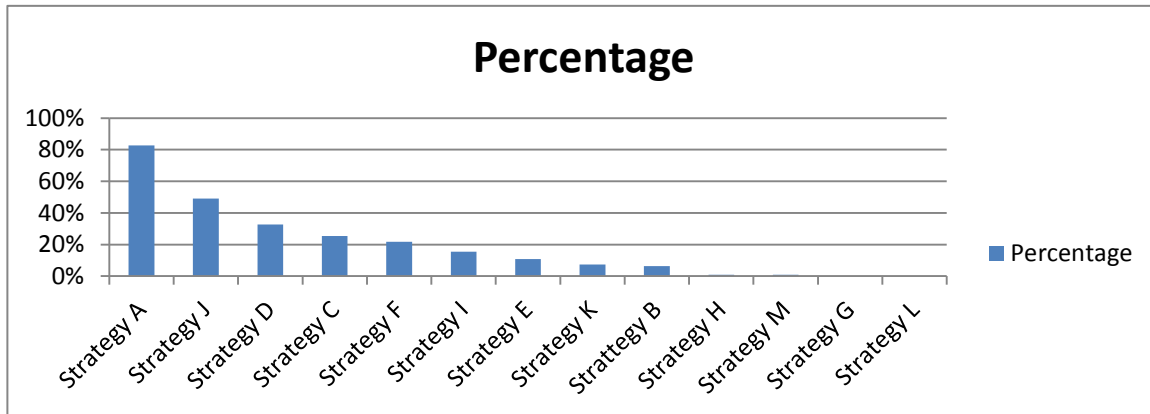
**Strategy F:** Repetition and the addition of new elements

*what is goin, what's going to happen in future*

Come on! I have the pic, I saw the pictures of that man.

According to the results presented in Table 3, low reflective teachers employed some strategies less than others which are strategies types “B” (replacement of a cut-off word), “E” (repetition of a clause or phrase and the addition of new elements before the repetition), “H” (replacement of a lexical word and the repetition of the correct sentence), “I” (repeating and completing or continuing the cut of word or the portion of talk that is being cut-off), “K” (repetition and addition of a lexical item, phrase or clause then discarding the error), “M” (repetition of an exact lexical item, phrase or clause then deletion of the error) with the frequencies of 7, 12, 1, 17, 8, 1 respectively. It is important to note that strategies “G”, and “L” and strategies “H” and “M” had the same frequency of use.

However, low reflective teachers did not employ strategies “G” (abandoning the portion of talk that is being cut-off and a restart) and “L” (repetition and the addition of a lexical item, phrase or clause then replacement of error with correct elements). Distribution of the percentages from the largest to the smallest frequency of each self-repair strategy employed by low reflective teachers is presented in Figure 2 below.



**Figure 2.** Distributions of Percentages in Total Frequency of Self-Repair Strategies

Similarly, the most frequent self-repair strategies employed by mid reflective teachers were identified and calculated. Table 4 demonstrates the type and frequency of strategies which were employed by mid reflective teachers to conduct self-repair.

**Table 4.** Type, Frequency, and Percentage of the Strategies Applied by Mid Reflective Teachers

	St A	St B	St C	St D	St E	St F	St G	St H	St I	St J	St K	St L	St M
Mid reflective Teachers	57	8	17	24	11	11	1	6	17	41	0	6	0
Percent	52	7	15.5	22	10	10	1	5	15.5	37	0	5	0

Based on the findings presented in Table 4, mid reflective teachers utilized 11 self-repair strategies. As it can be seen, strategies “A” (repetition of a lexical item), and “J” (replacement of a lexical item, clause, or phrase, by another lexical item, clause or phrase) had the highest frequency of use, 57 and 41, respectively. The following excerpts represent these strategies employed by mid reflective teachers.

**Strategy A:** Repetition of a lexical item

*Check it and let, let me know*

*Yes, we, we are going to take it up*

*because sometimes changes, changes are not good*

*you know I told you we were in Tabriz, Tabriz last week, and again it was dusty*

*I think they, they force you to buy*

**Strategy J:** Replacement of a lexical item, clause, or phrase, by another lexical item, clause or phrase.

*In the pair of aa I, I mean group of three and a group, aa, no, no, no. you two.*

*you know it's a, now we are going to do a lot of thing*

*Words that have, there are you know if they are*

*Now, I want to make, use them in a sentence*

*But it is, both of them have the same meaning*

Moreover, mid reflective teachers employed strategy “D” (Repetition and replacement of one lexical item) with the average level of frequency 24. It is important to note that unlike high reflective teachers, mid and low reflective teachers utilized strategy “D” with the average level of frequency. Samples of this strategy are provided as follows:

**Strategy D:** Repetition and replacement of one lexical item

*which movies do you pre, do u suggest, I think that was the name*

*As I said before unfortunately we have to p, we have to put particular word to that grammar.*

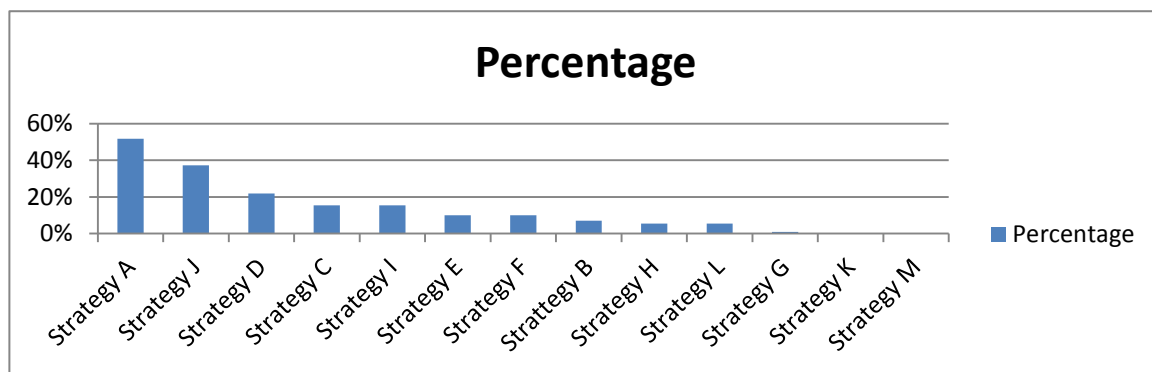
*Can u see the man? What's wrong with it? With him?*

*when we, when you are afraid of the teachers*

Based on the findings presented in Table 4, strategies “B” (replacement of a cut-off word), “C” (repetition of a several lexical items), “E” (repetition of a clause or phrase and the

addition of new elements before the repetition), “F” (repetition plus the addition of new elements), “G” (abandoning the portion of talk that is being cut-off and restart), “H” (replacement of a lexical word and the repetition of the correct sentence), “I” (repeating and completing or continuing the cut of word or the portion of talk that is being cut-off), and “L” (repetition and the addition of a lexical item, phrase or clause then replacement of error with correct elements) with the lowest frequency of use of 8, 17, 11, 11, 1, 6, 17, and 6 respectively were employed by mid reflective teachers.

As Table 4 indicates, mid reflective teachers did not employ strategies “K” (repetition and addition of a lexical item, phrase or clause then discarding the error), and “M” (repetition of an exact lexical item, phrase or clause then deletion of the error). Distribution of the percentages from the largest to the smallest frequency of each self-repair strategy employed by mid reflective teachers is presented in Figure 3.



**Figure 3.** Distributions of Percentages in Total Frequency of Self-Repair Strategies

*Results for the Second Research Question*

The second research question was designed to determine if there is any statistically significant difference between high, mid, and low reflective teachers in terms of the self-repair strategy they employ. To this end, the questionnaire was administered to 33 EFL teachers in the main phase of the study, i.e. the quantitative phase. Descriptive statistics of the reflectivity levels across the total repair types are presented in Table 5.

**Table 5.** Descriptive Statistics (Reflective. Levels\*Repair. Types)

Repair Types	Reflective. Levels	Mean	Std. Deviation	N
Total.Repair	low	25.36	11.25	11
	mid	18.09	5.48	11
	high	13.72	10.98	11
	Total	19.06	10.50	33

As the results in Table 5 reveal, the mean of the total repair for high reflective teachers is 13.72, for mid reflective teachers is 18.09, and for low reflective teachers is 25.36. In other words, high reflective teachers have the lowest total repair strategies.

In order to test the research hypothesis, the collected data were analyzed through one-way Analysis of Variance (ANOVA) for the total self-repair strategies and Kruskal Wallis for individual self-repair strategies since the results of normality tests demonstrated that only the data for the total repair strategy use are not significantly deviant from normal distribution ( $p > .05$ ). Table 6 presents the main ANOVA results, which is indicative of the fact that somewhere between the reflectivity groups, there is a significant difference in terms of the total repair strategy use ( $p < .05$ ). In other words, the null hypothesis to do with the first research question of this study was partially rejected. That is to say, there is a statistically significant difference between high and low reflective teachers in terms of the total self-repair strategy they employ. In particular, low reflective group had the highest total self-repair strategy use, which was significantly different from the high reflective group, which had the lowest total repair strategy use.

**Table 6. ANOVA Results**

Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
832.809	2	416.40	4.47	.02	.23

As for individual repair strategies, Kruskal Wallis test was run. Table 7 presents the results of Kruskal Wallis test.

**Table 7. Kruskal Wallis Test**

	A	B	C	D	E	F	G	H	I	J	K	L	M
<b>Chi-Square</b>	4.39	.85	1.92	5.42	4.51	4.61	.93	7.34	2.85	7.36	7.06	6.10	3.70
<b>df</b>	2	2	2	2	2	2	2	2	2	2	2	2	2
<b>Asymp. Sig.</b>	.11	.65	.38	.06	.10	.09	.62	.02	.24	.02	.02	.04	.15

a. Kruskal Wallis Test

b. Grouping Variable: reflective. Levels

The results of Kruskal Wallis test are indicative of the fact that somewhere between the reflectivity groups, there is a significant difference in terms of the repair strategy types “H” (Replacement of a lexical word and the repetition of the correct sentence), “J” (Replacement of a lexical item, clause or phrase by another lexical item, clause or phrase), “k” (Repetition



and addition of a lexical item, phrase or clause then discarding the error), and “L” (Repetition and the addition of a lexical item, phrase or clause then replacement of error with correct elements) ( $p < .05$ ).

## Discussion

Researching on teachers' level of reflection, classroom discourse, and interactions provides invaluable information in the field of teacher education. To this end, the present study was carried out to explore EFL teachers' use of self-repair strategies according to their level of reflection. The overall results revealed that there was a significant difference between the three groups of teachers in terms of their use of self-repair strategies, which could be attributed to their various levels and forms of reflection required based on the course objective, task type, their pedagogical planning and practices, and the learners' level of proficiency. The results obtained from the data analysis are discussed hereunder in order of the research questions.

As for the most frequent self-repair strategies utilized by high, low, and mid reflective teachers, which was the focus of the first research question of the study, the results of the analysis revealed that strategy “A” (repetition of a lexical item), was the most frequent strategy employed by these three groups of teachers to self-repair. Hoekje (1984, as cited in Roshan, 2014, p. 10) states “Repetition is the most effective strategy that a speaker can use for promoting comprehension”. With respect to the results, Strategy “J” (replacement of a lexical item, clause or phrase by another lexical item, clause, or phrase) had the highest frequency subsequent to strategy “A” as the vast majority of the teachers (36%) employed strategy “J”. Similarly, in strategy “J”, the low reflective teachers employed this strategy more than the two groups.

However, mid reflective teachers (5.5%) were the only group that employed strategy “L” (repetition and the addition of a lexical item, phrase or clause then replacement of error with correct elements). It can be implied that high and low reflective teachers did not employ strategy “L” at all. It is important to note that strategy “G” (abandoning the portion of talk that is being cut-off and restart) had the lowest level of frequency among other types (0.5%), and low reflective teachers did not utilize this strategy. It is worthy of note that the frequency of strategy “A” in high reflective teachers (50%) was lower than mid, and low reflective teachers. It can be implied that high reflective teachers reflect on what they want to say in the class more than mid and low reflective teachers. In fact, as their total frequency of self-repair

is low, they know what is going to happen in their classes better than other groups. On the other hand, low reflective teachers employed strategy “A” more than other groups.

More significantly, mid reflective teachers did not employ strategies “K” (repetition and addition of a lexical item, phrase or clause then discarding the error) and “M” (repetition of an exact lexical item, phrase or clause then deletion of the error), which could be related to their speech planning and that such repairs might require various cognitive, linguistic, and communicative skills. According to the results, low reflective teachers (7%) used strategy “K” more than high reflective teachers (1%), and on the other hand, high reflective teachers (3%) utilized strategy “M” more than low reflective teachers (1%).

The findings of this study seem to be consistent with other studies. For instance, in a study conducted by Roshan (2014), it was found that repetition or type “A” was the most frequent strategy used by teachers to conduct self-repair. It is worth mentioning that Roshan (2014) came up with two new strategies that were not provided by Fox and Jasperson (1995). She named them as strategy ‘8’ and strategy ‘9’ which resemble strategy ‘J’ and strategy ‘L’ in this study. Consequently, this study approves Roshan’s (2014) self-repair strategies which were added. In the same vein, Jian-ying (2015) found that teachers prefer to use repetition more than other strategies to perform self-initiated self-repair (SISR). Hence, the findings seem to be consistent with other studies carried out by Bada (2010) and Rieger (2003); who found that speakers apply repetition more than other strategies to self-repair. Moreover, Rabab’ah (2013) found that both German and Jordanian non-native speakers of English used repetition more frequently to do self-repair. Alternatively, in another study by Salimian Dastjerdi and Shahrokhi (2015), repetition was used more frequently by male and female EFL participants.

However, the results of the study are not consistent with that of Chalak, Talebi Khodaeian, Pourakbari, and Danesh (2015) as in their study, replacement which resembles type “J” in this study was employed more to self-repair; nevertheless, in this study, the frequency of use of type “A” was higher than other types. Similarly, in another study carried out by Tang (2011), the highest level of frequency was assigned to replacement. Such contrast can be attributed to the difference between the participants’ level of language knowledge in these three studies. Since the participants in this study were EFL teachers, who were expected to have high levels of language knowledge. On the other hand, in Chalak et al.’s (2015) and Tang’s (2011) study, the participants had different levels of language knowledge. Accordingly, the participants who had lower levels of language knowledge could

not identify these types and replaced the words more than repeating. Likewise, in the study conducted by Mehrabi (2011), it was found that replacement had the highest frequency in self-repairing.

As for the second research question the results, reported from teachers' levels of reflection, their total repair types, and the comparison of the groups' mean scores, revealed that there was a statistically significant difference between high, mid, and low reflective teachers in terms of the total self-repair strategies they employed. In other words, the null hypothesis pertaining to this research question was rejected. In particular, low reflective group had the highest total self-repair strategy use, which was significantly different from the high reflective group, which had the lowest total repair strategy use. It can be implied that, as high reflective teachers are more dominant on what they intend to talk about and teach, they employ fewer self-repair strategies since they can easily and successfully convey the message to the learners with no point of confusion and misinterpretations. Accordingly, they do not employ self-repair strategies much.

All in all, the findings of the study denote that repetition, which is type "A", is much more commonly used among EFL teachers to self-repair; more than other strategies like replacement. Further, the instructors' level of reflectivity plays a central role in teachers' use of self-repair strategies. In other words, high reflective teachers employ fewer self-repair strategies than mid and low reflective teachers.

### **Conclusions and Implications**

This study shed light on the differences between high, low, and mid-reflective teachers in terms of self-repair strategy they employed; hence, filling the gap in the literature. In particular, "repetition of a lexical item" or strategy "A" was the most frequent self-repair strategy used by the three groups of EFL teachers. Moreover, the level of total frequency of strategies utilized by high reflective teachers was the lowest in contrast with low reflective teachers. It can be implied that high reflective teachers convey the message to the learners better without misunderstandings rather than mid and low reflective teachers and reflect more on their interactions in the classroom. In addition, only mid reflective teachers employed strategy "L" (repetition and the addition of a lexical item, phrase or clause then replacement of error with correct elements). It is worthy of note that since the results of both quantitative and qualitative data analyses of the current study are in line with each other, it can be declared that teachers' level of reflectivity affected their frequency of use of self-repair

strategies. Another finding of this study was the expansion of Fox and Jasperson's (1995) framework by introducing six new types of self-repair. However, a lot of variations are noticed in the pattern of teachers' self-repair strategies; as an example, Fox and Jasperson (1995) identified 7 types of self-repair strategies, Roshan (2014) added two new types to this framework and this study found 6 new types. It is important to note that two of them were the same as types found in Roshan's (2014) study.

The findings of this study have some implications for language policy makers, Teacher Training Course (TTC) educators, administrators, and supervisors. For instance, teachers should be encouraged to practice reflection and self-repair strategies, and be given chances to teach to become more aware of what to do in the classroom. In other words, reflection helps them to become more conscious of their own actions and feelings in and outside the classrooms (Farrell, 2004). Reflection helps teachers to review on what they do in the class; if not, they have to obey the routines without any reflection on their practices and instructions (Farrell, 2007). Moreover, teacher educators in teacher training courses (TTCs) have to educate their teachers as trainees to use reflection-in-action while they are teaching and employ self-repair strategies like repetition and replacement in cases that they make errors.

Therefore, it seems to be a need for TTC educators to train teachers about reflection and various repair strategies and provide them enough information about its advantages and help them to make connections between the theories which they learnt in their TTC and the actual application of them in their own classrooms. In other words, teachers need to be aware of the differences between repair strategies in order to respond to the communication problems of the students more effectively and become more successful. Alternatively, teachers are expected to become well acquainted with the concept to enhance their knowledge of reflection and repair strategies so that they can encourage their students to use self-repair strategies as well. Furthermore, if the teachers and students recognize their errors and mistakes, they can promote the quality of classroom interactions and the level of educational system with regard to how to better implement self-repair strategies.

Reflection and repair strategies can be useful in language testing as well. Language test examiners can ask the examinees to use self-repair strategies in speaking tests to assess their ability in repairing communication breakdowns and to see how familiar they are with repair strategies, and which types they employ more frequently to maintain conversations. Moreover, test takers can use techniques to elicit self-repair strategies like think-aloud interviews, so that they can gain insight into the self-repair strategies employed by the

teachers (Ekbatani & Pierson, 2000). In the same vein, these techniques can be used by teachers in their classes to assess their students.

Despite substantial contribution of the results, this study suffered from some limitations like instructors' self-flattery syndrome, which means that the participants in this study, as EFL instructors; would try to select the right and best answer to present themselves favorably. Moreover, the researchers had no control on other variables like instructors' topical knowledge, sociocultural factors, their ethnic and culture background. In addition, before the classes started, instructors were informed that their speech would be recorded; hence, their awareness that their voices have been recorded could have influenced their normal interaction in the class. The researchers did the study on a small sample of participants due to the constraints which include the time, financial, and human factors. If the study was conducted with a larger sample in other regions of Tehran, and other provinces, the results would be more generalizable.

Moreover, this study was delimited to the district of institutes where the study took place. The researchers had just access to the institutes that were located just in Tehran; hence, convenience sampling (Dornyei, 2007) was used in the study. Furthermore, the study was carried out on Iranian EFL teachers of English institutes, and teachers who were teaching at schools and universities were not considered. In addition, the analysis of the data was restricted to Fox and Jasperson's (1995) model of self-repair strategies; if different models were employed, the results would be different. Likewise, the participants of this study were teachers of intermediate and advanced levels; hence, the results could not be generalized to the other levels like starter and elementary.

The findings of the current study shed light on the type of self-repair strategies employed by Iranian EFL instructors considering their level of reflection. Similar studies can be conducted, focusing on the level of education, experience, and major of the teachers with English (English language teaching, English language translation, and English language literature) or non-English background. Moreover, the participants of the study can be university lecturers or teachers who teach at schools. Future research studies can also examine the relationship between other variables like teachers' pedagogical style, personality trait, motivation to teach, level of pragmatic competence and teachers' use of self-repair strategies. This study also focused on self-initiated self-repair of EFL teachers; however, further studies can be carried out on other categories of repair. It would be also beneficial to include reflective teachers' content and linguistic errors while they are conducting self-repair.

Finally, to further examine classroom interactions and the learning process, it is hoped that this study can act as a platform for further investigation on the repair strategies used by reflective teachers involved in the domain of EFL, English as a Second Language (ESL), and English for Specific Purposes (ESP).

## References

- Akbari, R., Behzadpoor, F., & Dadvand, B. (2010). Development of English language teaching reflection inventory. *System*, 38(2), 211-227. <http://dx.doi.org/10.1016/j.system.2010.03.003>
- Bada, E. (2010). Repetition as vocalized fillers and self-repairs in English and French interlanguages. *Journal of Pragmatics*, 42(3), 1680-1688. <http://dx.doi.org/10.1016/j.pragma.2009.10.008>
- Bartlett, L. (1990). Teacher development through reflective teaching. In J. C. Richards & D. Nunan (Eds.), *Second Language Teacher* (pp. 202-214). New York: Cambridge University Press.
- Beauchamp, C. (2015). Reflection in teacher education: Issues emerging from a review of current literature. *Reflective Practice*, 16(1), 123-141. <https://doi.org/10.1080/14623943.2014.982525>
- Chalak, A., Talebi, A., Khodaeian, N., Pourakbari, A., & Danesh J. (2015). Replacement operation in self-initiated repair practices in oral reproduction of short stories. *International Journal of Language Learning and Applied Linguistics World*, 8(1), 237-246.
- Cho, E. (2008). *An examination of the use of repair strategies of elementary English as a second language (ESL) students*. Unpublished PhD Thesis. Texas A & M University, College Station.
- Cho, E., & Larke, P. (2010). Repair strategies usage of primary elementary ESL students: Implications for ESL teachers. *Journal for English as a Second Language*, 14(3), 1-18.
- Clark, R. W., Hong, L. K., & Schoeppach, M. R. (1996). Teacher empowerment and site based management. In J. Sikula, T. J. Buttery, & E. Guyton (Eds.) *Handbook of research on teacher education* (pp. 595-616). New York: Macmillan.
- Dewey, J. (1933). *How we think: A restatement of the relation of reflective thinking to the educative process*. Boston: Houghton Mifflin.

- Dörnyei, Z. (2007). *Research Methods in Applied Linguistics*. Oxford: Oxford University Press.
- Egbert, M. (1998). Miscommunication in language proficiency interviews of first-year German students: A comparison with natural conversation. In R. Young & W. He (Eds.), *Talking and testing: Discourse approaches to the assessment of oral proficiency* (pp. 147-169). Amsterdam, PA: John Benjamins Publishing Company.
- Ekbatani, G. & Pierson, H. (2000). Learner-directed assessment in ESL. In G. Ekbatani & H. Pierson (Eds.), *Learner-directed assessment in ESL* (pp. 75-88). Mahwah, NJ: Lawrence Erlbaum Associates.
- Farrell, T. S. C. (2004). *Reflective practice in action: 80 reflection breaks for busy teachers*. California: Corwin Press.
- Farrell, T. S. C. (2007). *Reflective language teaching: From research to practice*. London: Continuum Press.
- Fox, B., & Jasperson, R. (1995). A syntactic exploration of repair in English conversation. In P. W. DAVIS (Ed.), *Alternative linguistics: Descriptive and theoretical modes* (pp. 77-134). Amsterdam: J. Benjamins.
- Griffiths, V. (2000). The reflective dimension in teacher education. *International Journal of Educational Research*, 33(2), 539-555. [http://dx.doi.org/10.1016/S0883-0355\(00\)00033-1](http://dx.doi.org/10.1016/S0883-0355(00)00033-1)
- Hoekje, B. (1984). *Processes of repair in non-native speakers of English*. In 18th Annual Meeting of Teachers of English to Speakers of Other Languages. Houston, TX.
- Jadidi, E., & Keshavarz, Z. (2013). The impact of Iranian EFL teachers' reflection on their incorporation of strategy-based instruction. *International Journal of Language Learning and Applied Linguistics World*, 4(3), 140-148.
- Jefferson, G. (1974). Error correction as an interactional resource. *Language in Society*, 3(2), 181-99. <http://dx.doi.org/10.1017/S0047404500004334>
- Jian-ying, Y. (2015). Teachers' initiated repair patterns in content based instruction class. *US-China Foreign Language*, 13(8), 568-572.
- Lennon, P. (1994). Self-correction and error in advanced learner spoken narrative. In G. Bartelt (Ed), *The dynamics of language processes* (pp. 85-103). *Essays in honor of Hans W. Dechert*. Tübingen: Gunter Narr Verlag.

- Liebscher, G., & Dailey-O’Cain, J. (2003). Conversational repair as a role-defining mechanism in classroom interaction. *The Modern Language Journal*, 87(3), 375-390. <http://dx.doi.org/10.1111/1540-4781.00196>
- Markee, N. (2008). Towards a learning behavior tracking methodology for CA-for-SLA. *Applied Linguistics*, 29(3), 1-24. <http://dx.doi.org/10.1093/applin/amm052>
- Mehrabi, A. (2011). Self-repair in Persian conversation. *International Proceedings of Economics Development & Research*, 26, 476-480.
- Nakamura, I. (2008). Understanding how teacher and student talk with each other: An Exploration of how “repair” displays the co-management of talk-in-interaction. *Language Teaching Research*, 12(2), 265-283. <http://dx.doi.org/10.1177/1362168807086295>
- Olaoluwakotansibe, A. (2011). Promoting students’ participation: Communicative functions of repair in a Nigerian computer science classroom. *International Journal of Business and Social Science*, 2(15), 290-295.
- Patton, M. Q. (1990). *Qualitative Evaluation and Research Methods*. Thousand Oaks, CA: Sage.
- Rabab’ah, G. (2013). Strategies of repair in EFL learners’ oral discourse. *English Language Teaching*, 6(6), 123-131.
- Razfar, A. (2005) Language ideologies in practice: Repair & classroom discourse. *Linguistics and Education*, 16(4), 404-424. <http://dx.doi.org/10.1016/j.linged.2006.04.001>
- Richards, J. C. (1990). The teacher as self-observer. In J. C. Richards (Ed.), *The language teaching matrix* (pp. 118-143). New York: Cambridge University Press.
- Rieger, C. L. (2003). Repetitions as self-repair strategies in English and German conversations. *Journal of Pragmatics*, 35(1), 47-69. [http://dx.doi.org/10.1016/S0378-2166\(01\)00060-1](http://dx.doi.org/10.1016/S0378-2166(01)00060-1)
- Roshan, G. (2014). *A study of categories of self-repair in Iranian EFL teachers’ speech*. Unpublished Master’s Thesis. Allameh Tabataba’i University, Tehran, Iran.
- Salimian Dastjerdi, M. & Shahrokhi, M. (2015). Repair strategies in Iranian EFL learners’ oral discourse. *International Journal of Language Learning and Applied Linguistics World (IJLLALW)*, 8(4), 237-246.
- Schegloff, E. A. (2000). Overlapping talk and the organization of turn-taking for conversation. *Language in Society*, 29(1), 1-63. <http://dx.doi.org/10.1017/S0047404500001019>



- Schegloff, E. A., Jefferson, G., & Sacks, H. (1977). The preference for self-correction in the organization of repair in conversation. *Language*, 53(1), 361-382. <http://dx.doi.org/10.1353/lan.1977.0041>
- Schön, D. A. (1983). *The reflective practitioner: How professionals think in action*. New York: Basic Books Inc.
- Seedhouse, P. (1997). The case of the missing "NO": The relationship between pedagogy and interaction. *Language Learning*, 4(3), 547-583.
- Simpson, R., Eisenclas, S., & Haugh, M. (2013). The function of self-initiated self-repair in the Chinese second language classroom. *International Journal of Applied Linguistics*, 23(2), 144-165.
- Tang, Ch. (2011). Self-repair devices in classroom monologue discourse. *Studies in Linguistics*, 37(1), 93-120.
- Temple, L. (1992). Disfluencies in learner speech. *Australian Review of Applied Linguistics*, 15(2), 29-44.
- Terzi, L. (2010). *Justice and equality in education: A capability perspective on disability and special educational needs* (1st ed.). New York: Continuum.
- Zeichner, K. M., & Liston, D. P. (1996). *Reflective teaching: An introduction*. Mahwah, N.J: Lawrence Erlbaum Associates.

