G - Erlebnis und Wissensgewinn

G.1 The Effect of Reflective Audiotaped Journals on Complexity, Accuracy, and Fluency of L2 Oral Performance

Saeedeh Kavoshian 1,2, Thomas Koehler 2, Farzad Mashhadi 3

- ¹ University of Isfahan, Faculty of Foreign Languages
- ² Technische Universität Dresden, Faculty of Education
- ³ Islamic Azad University, Isfahan (Khorasegan)

Abstract: The current study aimed at investigating the impact of implementation of reflective audiotaped journals on complexity, accuracy and fluency of second language (L2) speech in a general English for Specific Purposes (ESP) course. To conduct the study, 30 Iranian advanced English as a Foreign Language (EFL) learners of a private language institute in Hamedan, Iran were selected randomly from among 60 learners to participate in the study. In order to put the effect of audiotaped journals on Complexity, Accuracy and Fluency (CAF triad) under close scrutiny, data were collected through audio-recorded initial lectures, videotaped final lectures, reflective audiotaped journals and focus group interview. It is noteworthy to mention that both quantiative and qualitative analyses were conducted to address our research question. Three Wilcoxon Signed Ranks Tests were then employed to compare the second language learners' oral performance across three measures of CAF, at the beginning and end of the semester. The findings revealed that using reflective audiotaped journals assisted second language (L2) learners to have a better oral performance in terms of complexity (syntactic variety) and accuracy. Further, qualitative analysis indicated that using reflective audiotaped journals assisted L2 learners to reflect on their own learning process, resulting in a better oral performance.

1 Introduction

Recently, there has been a growing interest in the concept of reflective learning. According to a straightforward definition by Moon (2004), "reflective learning as a term, simply emphasizes the intention to learn as a result of reflection" (p. 80).

It is worth mentioning here at the outset that reflective learning is a complicated issue within which room for maneuver is possible and indeed desirable. It has become fashionable over recent years to talk about the value of reflection and reflective learning which are considered as means for students' lifelong learning and professional practice (Rogers, 2001). Previous studies have demonstrated the importance of

reflection and reflective learning on L2 learners' performance in English as a Foreign Language (EFL)/ English as a Second Language (ESL), classes in general (e.g., Dantas-Whitney, 2002; Khatib & Ahmadi, 2012; Ryan & Ryan, 2013) and also in English for Specific Purposes (ESP)/English for Academic Purposes (EAP) contexts (e.g., Elsegood, 2007; Granville & Dison, 2005; Kavaliauskiene, Kaminskiene & Anusiene, 2007), in particular.

However, few studies if any (e.g., Brown, 1996) have investigated the relationship between reflective learning and learners' L2 performance with respect to three areas of complexity, accuracy and fluency. With this lacuna to fill in, this study aims to investigate the benefits of reflective journals for students' oral performance along three dimensions of complexity, accuracy and fluency.

1.1 Critical reflection

The very term reflection is defined as a "complex, rigorous, intellectual, and emotional enterprise that takes time to do well" (Rodgers, 2002, p. 845).

Moon (2006) argues that the following outcomes come out of reflective processes:

- 1. Learning, knowledge and understanding;
- 2. Some form of action;
- 3. A process of critical review;
- 4. Personal and continuing professional development;
- 5. Reflection on the process of learning or personal functioning (metacognition);
- 6. The building of theories from observations in practice situations;
- 7. The making of decisions/resolution of uncertainty, the solving of problems; empowerment and emancipation;
- 8. Unexpected outcomes (e.g., images, ideas that could be solutions to dilemmas or seen as creative activities;
- 9. Emotion (that can be an outcome or can be part of the process;
- Clarification and the recognition that there is a need for further reflection (Moon, 2006, p. 84).

An extension of the area regarding reflective learning and critical reflection has been the development of different strategies or activities to foster reflection in learners, increasing their learning capacities and professional practice (Ryan & Ryan, 2013). To put it differently, according to Murphy (2001), different tools such as questionnaires, student focus group, audio recordings, video recordings, and stimulus recall and dialogue journals are implemented to foster critical reflection. This list is sure to be incomplete. Within this broad area, as related to the purpose of the current study, reflective dialogue journals or reflective journaling will be put under close scrutiny.

In this regard, Ryan and Ryan (2013) have identified three main evidence-based strategies of "reflective journaling— unstructured and structured (more explicitly guided), formal reflection papers, interviewing and group memory work" for fostering learners' reflection (p. 246). Several studies with respect to journalizing and different types of journals are discussed in the coming section.

1.2 Reflective audiotaped journals

Reflective journaling raises an issue of considerable importance in the field of reflective learning. In much of the literature on reflective learning, written reflective journal has been implemented as a tool to increase students' learning in the classroom, to foster their critical thinking and to develop their writing skills (Peyton & Staton, 2000). According to Peyton and Staton (2000), Written Dialogue Journal (WDJ), is a written conversation in which

A learner and teacher communicate regularly. Learners write as much as they choose on a wide range of topics and in a variety of genres and styles. The teacher writes back regularly responding to questions and comments, introducing new topics, or asking questions (p. 3).

It is worth mentioning here that there is a substantial research base, acknowledging the importance of written journals as a valuable tool for fostering critical reflection (e.g., Burton & Carroll, 2001; Hatton & Smith, 1995; Lee, 2004; Liao & Wong, 2010; Richards & Ho, 1998). For instance, Richards and Ho (1998) argue that journal writing is regarded as a good strategy to foster reflective thinking in in-service teachers. In their small-scale study, the effect of using written journals on development of critical reflection in teachers has been investigated. The result of this study revealed a positive relationship between fostering critical reflection and keeping written journals.

Furthermore, Liao and Wong (2010) examined the efficacy of using English dialogue journal writing (DJW) on forty-one 10th-grade students' writing fluency, intrinsic motivation, anxiety, reflections and students' responses to journal writing. The data consisting of 984 students' journal entries, interviews and questionnaires were analyzed. The findings indicated that the students' writing fluency, their reflective awareness of writing, writing performance on three levels of content, organization, and vocabulary and their intrinsic motivation improved by implementation of dialogue journal writing (DJW).

Another variation of reflective journals that has been a surge of recent interest in the research literature is reflective audiotaped journals. As Ho (2003) puts it quite aptly, "audio-taped dialogue journal is a variation of the written dialogue journal" (p. 269). According to Peyton and Reed (1990, pp. 3–4), there are a number of benefits to both teachers and students with respect to using audio dialog journals. They are as follows:

- Providing increased opportunities for communication between students and teachers
- Allowing the teacher to individualize language and content learning
- Allowing the teacher to gain information that can assist in lesson planning
- Enabling students to have the opportunity to use writing for genuine communication
- Providing students with an additional opportunity for reading
- Providing students with an additional opportunity for listening and speaking
- Offering an opportunity of speaking FL for the students who are anxious to talk in front of a class and build self-confidence
- Helping students reduce the anxiety of speaking FL
- Helping students reduce the anxiety of interacting with the teachers
- Helping students be more fluent and develop some strategies to speak more fluently
- Raising consciousness of the student's common pronunciation, grammar, structure and vocabulary mistakes.

It is noteworthy to mention that implementation of audiotaped journals has not been used extensively and it has gained momentum just recently (Gough & Wedum, 2000). Therefore, more work in the area of the use of audiotaped journals as a tool for critical reflection would be welcome. To put it differently, in contrast to the number of studies employing written reflective journals, there have been very few studies of implementing audiotaped reflective journals (e.g., Brown, 1996; Khatib, Marefat, & Ahmadi, 2012; Siyli & Kafes, 2012). For instance, Khatib, Marefat and Ahmadi (2012) examined the efficacy of written and audiotaped dialogue journals on enhancing critical thinking abilities in 33 Iranian EFL learners. The findings showed that keeping journals, in both written and audiotaped forms, can enhance learners' critical thinking abilities significantly.

Additionally, Siyli and Kafes (2012) conducted a descriptive study to explore the effect of audio dialog journals on students' speaking skills. The data consisting of student and teacher audio dialog journals, student written feedbacks, teacher observations and interviews with the students were analyzed. The results of the study highlighted different cognitive, linguistic, pedagogical, psychological and social benefits of audio dialog journals.

In much the same vein, using reflective audiotaped journals in a university content-based English as a second language (ESL) course has been put under close scrutiny by Dantas-Whitney (2002) with the findings indicating the beneficial effects of "the journals as valuable opportunities for oral language practice and self-assessment" (Dantas-Whitney, 2002, p. 543).

Taking complexity, accuracy and fluency into account particularly, to the best of the researcher's knowledge, very few studies if any (e.g., Akef & Nossratpour; 2010; Brown, 1996) have cast light on the impact of audiotaped journals as a tool for critical reflection on learners' L2 oral performance across three levels of complexity, accuracy and fluency. In this connection, the effect of keeping oral dialogue journals on EFL learners' oral fluency has been investigated by Akef and Nossratpour (2010). The results of this study substantiated the positive effects of keeping oral dialogue journals on increasing L2 learners' oral fluency. Allan (1991) argues that feedback has been provided on students' oral skills by implementing audiotaped journals.

In addition to the scarcity of the studies on the impact of audiotaped journals on learners' L2 oral performance across three levels of complexity, accuracy and fluency, to make the matters worse, this research gap is greatly felt when we focus on the investigation of such an issue in an Iranian context. Thus, it warrants further exploration in the current study.

1.3 Complexity, accuracy and fluency

According to Ahmadian and Tavakoli (2011), one of the general goals of many language learners pertains to achieving native-like speaking ability. In this regard, Skehan (1996) argues that this native-like speaking ability can be achieved by improving three main areas of complexity, accuracy and fluency. Complexity is defined as related to "the stage and elaboration of the underlying interlanguage system" (Skehan, 1996, p. 46). Furthermore, complexity is identified as the learners' desire to try out new linguistic items in their L2 speech (Ellis & Barkhuizen, 2005). Regarding accuracy, Skehan defines it as "a learner's capacity to handle whatever level of interlanguage complexity she has currently attained" (1996, p. 46). Fluency "concerns the learner's capacity to mobilize an interlanguage system to communicate meaning in real time" (1996, p. 46). Further, fluency has got to do with prioritizing meanings of the language over forms (Ellis & Barkhuizen, 2005).

Considering the importance of complexity, accuracy and fluency (henceforward CAF), there is a growing conceptual and empirical body of literature focusing on the effect of different task design features and implementation conditions on complexity, accuracy and fluency of L2 oral speech (e.g., Ahmadian & Tavakoli, 2011, Ahmadian, 2011; Ellis, 2009a; Tavakoli & Foster, 2008). For instance, Ahmadian and Tavakoli (2011) sought to investigate the effects of simultaneous online planning and task repetition on EFL learners' complexity, accuracy, and fluency. The effects of different task repetition conditions and four types of planning (careful online planning with and without task repetition) were put under close scrutiny. The results of their study demonstrated that simultaneous engagement in careful online planning and task repetition has positive effects on learners' complexity, accuracy and fluency.

In an insightful study, Ahmadian, Tavakoli and Vahid Dastjerdi (2012a) examined the combined effects of online planning and the storyline structure of a task on L2 oral performance. As they concluded, the appropriate selection of task design features and task-based implementation conditions can increase the learners' complexity, accuracy and fluency of their oral speech significantly.

In a related strain of research, the impact of repeating two different kinds of narrative tasks on complexity, accuracy, and fluency (CAF) of sixty Iranian intermediate-level learners has been explored by Saeedi and Rahimi Kazerooni (2013). The findings add support to the view that task repetition has beneficial effects on learners' complexity, accuracy and fluency of L2 oral performance.

In the light of the foregoing theoretical and empirical discussions, suffice it here to say that much research has been devoted to the importance of CAF by manipulating different tasks, task design features and task-based implementation conditions. However, no study has cast light on the investigation of the impact of critical reflection tools such as reflective journals in general, and reflective audiotaped journals in particular, on complexity, accuracy and fluency of Iranian L2 learners' oral performance. As such, this paper makes an attempt to fill this felt gap and contribute to the existing literature on CAF, on one hand, and critical reflection, on the other hand.

Based on the theoretical and empirical rationales expounded on so far, the following research question was investigated in this study:

What is the effect of reflective audiotaped journals on complexity, accuracy and fluency of Iranian L2 learners' oral performance?

2 Method

2.1 Participants

The participants of the study were 30 Iranian advanced EFL learners of a private language institute in Hamedan, Iran who were selected randomly from among 60 learners. All of them were female learners with a mean age of 18 years old (M=18.4). It is worth mentioning here that the 30 participants enrolled in a general ESP course, a high-advanced CAE (Certificate in Advanced English) course taught by the researcher. They all were supposed to present a final lecture as the partial fulfilment of the requirements of the course. They all agreed to participate in the study and signed informed consent forms.

In order to make sure of the homogeneity of the participants, they all took Oxford Placement Test with the obtained scores of 87–93 out of 100, substantiating their homogeneity.

The class met every other day for a total of 5 hours per week during an 8-week summer term. Two main purposes of the course consisted of firstly, making students ready for the CAE exam which is an international English language examination developed by Cambridge English Language Assessment and secondly, preparing students to present their final lectures in front of a group of audience consisting of the manager of language institute, supervisors, teachers and students.

2.2 Data collection

The data for the current study came from audio-recorded initial lectures, videotaped final lectures, reflective audiotaped journals and focus group interview. In the following section, different types of data are explained elaborately.

Audiotaped initial lectures

In order to fulfil the requirements of the course, students were supposed to deliver lectures during the term in order to make preparations for their final lectures. Under the instructor's supervision, each student selected a topic of her interest, searched for relevant information, prepared a lecture and delivered it in the classroom. Each lecture took about 15 minutes and was recorded for further analysis. After each presentation, the lecture was audiotaped and copied on a CD and given to both teacher and lecturer herself.

Reflective audiotaped journals

There were two reflective audiotaped journals for each learner. Firstly, having delivered and recorded the initial class lectures, the instructor (researcher), the students and lecturer herself listened to the lecture and commented on the oral performance by considering different levels of complexity, accuracy and fluency. Their suggestions and recommendations were recorded and saved as the first group reflective journal. It is worth mentioning here that the students were well-informed in advance regarding different aspects of complexity including syntactic complexity and variety, different aspects of accuracy consisting of error-free clauses and correct verb forms, and different aspects of fluency (Ahmadian et al., 2012).

Secondly, after an interval of two weeks, each student was supposed to listen to her own audiotaped lecture and group reflective journal. Thereafter, the learners used an informal style and recorded a short talk (about 15 minutes) on their instructor and classmates' comments, different aspects of their oral performance (CAF triad),

necessary modifications and corrections. Finally, they saved it as the second reflective journal and turned it back to the instructor to record her comments on it and give it back to them to reflect on.

Videotaped final lectures

After preparing two reflective journals, focusing and reflecting on, analyzing their own class lectures, using their instructor and classmates' comments regarding their oral performance across CAF triad, students presented their final lecture (same as the initial lecture) in front of a group of audience. It is worth mentioning here that each final lecture was the same as the first lecture with necessary corrections and changes applied. These lectures were videotaped to be analyzed later by the researcher.

Group interview

In order to shed more light on the contribution of reflective audiotaped journals to complexity, accuracy, and fluency of L2 oral performance, 20 language learners agreed to participate in the focus group interview. It is noteworthy to mention that one main question guided the interview session: What were your reflections on the benefits and limitations of audiotaped reflective journals for your L2 oral performance? During the interview session, 20 language learners and instructor discussed some issues with regard to the advantages and disadvantages associated with combination of audiorecorded lectures, videotaped lectures and reflective audiotaped journals. Follow-up discussions and further conversations were also encouraged. It is worth emphasizing that the interviews were conducted in Farsi and thereafter translated into English. The interviews were also recorded for further analyses by the researchers.

2.3 Data Analysis

It is notwworthy to mention that both quantitative and qualitative analyses were conducted to address our research question. All the initial audiotaped and final videotaped lectures and focus group interviews were transcribed, segmented, coded and scored according to the Measurement of the CAF triad by Ahmadian et al. (2012).

In order to ensure the reliability of scoring, 30 % of the data were segmented, coded and scored by another coder who was an external reviewer (one of the researchers' colleagues). The inter-coder agreement rate was above +0.86 which is deemed to be a high degree of agreement. Thereafter, the data were fed into the computer and then analyzed by The Statistical Package for the Social Sciences (SPSS 19.0). All the assumptions for using t-test including sample size of 30+ and normality (based on kurtosis and skewness values and the normality test) were checked to make sure of the plausibility of parametric statistics. However, the results of normality tests showed deviations from normality. In order to compensate for the lack of normality and increase the robustness of findings, the nonparametric counterpart of Paired-samples

t-test was used to analyze the data. To put it differently, three Wilcoxon Signed Ranks Tests were then employed to compare the learners' L2 oral performance across three measures of CAF, at the beginning of term (their initial audiotaped lectures) with their oral performance (videotaped lectures) at the end of the term to investigate the effect of reflective audiotaped journals on their performance.

3 Results and Discussion

3.1 Quantitative analysis

In what follows, readers are provided with both descriptive statistics and inferential statistics relating to L2 oral performance across measures of complexity, accuracy and fluency.

Complexity

Regarding the complexity of L2 oral performance across two measures of syntactic complexity and syntactic variety, descriptive statistics presented in Table 1 indicate that there is a difference between L2 learners' oral performance with respect to complexity measures at the beginning and end of the semester. Inspections of the mean ranks for the group suggest that the students' complexity scores on syntactic variety at the end of the term had the higher scores (M = 14.35), with the scores at the beginning of the term reporting the lower (M = 13.10). On the contrary, students' complexity scores on syntactic complexity at the end of the term had the lower scores (M = 4.40), with the scores at the beginning of the term reporting the higher (M = 4.45).

Table 1

Descriptive Statistics for two measures of complexity (syntactic complexity and syntactic variety) at time 1 and time 2

	N	Mean	Std. Deviation	Minimum	Maximum		
Syntactic complexity 1	30	4.4550	.93092	3.10	8.00		
Syntactic variety 1	30	13.1000	4.11348	9.00	32.00		
Syntactic complexity 2	30	4.4040	.71542	3.12	6.00		
Syntactic variety 2	30	14.3500	4.82656	10.00	37.00		

To see whether the differences depicted in Table 1 are significant or not, a Wilcoxon Signed Ranks Test was used. In the output below (Table 3), the z value for syntactic complexity is -.86 (rounded) with a significance level of p = .39. The probability value is more than .05. Therefore, the result is not significant, meaning that the L2 learners' oral performance with respect to syntactic complexity did not differ significantly before and after using audiotaped reflective journals. However, a significant difference was found for the syntactic variety with large effect size based on Cohen (1988), meaning that learners used more grammatical verb forms

in their oral performance after the implementation of audiotaped journals.

Wilcoxon Signed Ranks Test for students' scores on complexity measure at time 1 and time 2

wheeled is stated is stated as the state of stated is stated at time is and time 2						
Syntactic complexity 2 – Syntactic variety 2 –						
	Syntactic complexity 1	Syntactic variety 1				
Z	855a	-3.647a				
Asymp. Sig. (2-tailed)	.393	.000				

- a. Based on negative ranks.
- b. Wilcoxon Signed Ranks Test

Accuracy

Table 2

Regarding the accuracy of L2 oral performance across two measures of error-free clauses and correct verb forms, descriptive statistics presented in Table 2 suggest that there is a difference between L2 learners' oral performance with respect to accuracy at the beginning and end of the semester. Inspections of the mean ranks for the group indicate that the students' accuracy scores on error-free clauses at the end of the term had the higher scores (M = 90.77), with the scores at the beginning of the term reporting the lower (M = 71.31). Similarly, students' accuracy scores on correct verb forms at the beginning of the semester had the lower scores (M = 81.45), with the scores at the end of the semester reporting the higher (M = 84.61).

Table 3

Descriptive Statistics for two measures of accuracy (error-free clauses and correct verb forms) at time 1 and time 2

	N	Mean	Std. Deviation	Minimum	Maximum
Error free 1	30	71.3117	6.23243	62.00	86.66
Correct verb1	30	81.4513	8.37093	66.00	100.00
Error free2	30	90.7733	6.77142	80.00	100.00
Correct verb2	30	84.6127	9.85922	66.00	100.00

Then, a Wilcoxon Signed Ranks Test was used to test whether the difference depicted in Table 3 is significant or not. In the following Table (Table 4), the z value for error-free clauses is -4.80 (rounded) with a significance level of p = .000. The probability value is less than .05. Therefore, the result is significant, meaning that the L2 learners' oral performance with respect to producing error-free clauses increased at the end of the semester. Additionally, a significant difference was also found for the correct verb forms substantiating the beneficial effects of audiotaped journals on producing more

Table 4

correct verb forms at the end of the semester.

Wilcoxon Signed Ranks Test fo	r students' scores	on accuracy	y measure at time 1 and time 2
	Error free? Error	free1	Correct verb2 Correct verb1

	Error free2 Error free1	Correct verb2 Correct verb1
Z	-4.789a	-3.253a
Asymp. Sig. (2-tailed)	.000	.001

a. Based on negative ranks.

Fluency

Taking the fluency of L2 oral performance across two measures (Rate A and Rate B) into consideration, descriptive statistics presented in Table 5 show a difference between L2 learners' oral performance with respect to fluency at the beginning and end of the semester. Inspections of the mean ranks for the group suggest that the students' fluency scores on Rate A at the end of the term had the higher scores (M = 126.96), with the scores at the beginning of the term reporting the lower (M = 126.73). Likewise, students' fluency scores on Rate B at the beginning of the semester had the lower scores (M = 124.63), with the scores at the end of the semester reporting the higher (M = 125.20).

Table 5
Descriptive Statistics for two measures of fluency (Rate A and Rate B) at time 1 and time 2

	N	Mean	Std. Deviation	Minimum	Maximum
RateA1	30	126.7333	19.82324	100.00	174.00
RateB1	30	124.6333	20.29860	99.00	173.00
RateA2	30	126.9667	21.22049	100.00	174.00
RateB2	30	125.2000	21.77217	99.00	173.00

To check whether the differences showed in Table 5 are significant or not, a Wilcoxon Signed Ranks Test was employed. In the output below (Table 6), the z values for Rate A and Rate B are -.422 and -.890 respectively with significance levels of p=.673 and p=.373. The probability values are more than .05. Therefore, the results are not significant, meaning that the L2 learners' oral performance with respect to fluency did not differ significantly before and after using audiotaped reflective journals.

b. Wilcoxon Signed Ranks Test

Table 6

Wilcoxon	Signed	Ranks	Test fo	or students'	scores	on fluency	measure at time	1 and time 2
WILCOVOIL	Digited	ranks	I CSL IC	n students	SCUICS	on muchey	measure at time	i and time 2

	RateA2	RateB2	
	RateA1	RateB1	
Z	422a	890a	
Asymp. Sig. (2-tailed)	.673	.373	

- a. Based on negative ranks.
- b. Wilcoxon Signed Ranks Test

3.2 Qualitative analysis

In the ensuing sections, readers are provided with salient categories emerged from the data analysis based on our research question relating to L2 oral performance across measures of complexity, accuracy and fluency. Additionally, the findings are discussed to the extent to which they might have relevance to review of literature.

Complexity

Regarding the complexity of L2 oral performance across two measures of syntactic complexity and syntactic variety, implementation of different types of medium (video & audio), in general, and audio-taped reflective journals, in particular, enabled language learners to produce more various syntactic structures by using different grammatical verb forms in different tenses. That is to say, having reflected on their lectures through listening to audio records and receiving comments from teachers and peers, language learners were provided with opportunities to have more syntactic variety in their final lectures. However, they did not focus much on producing complex syntactic structures.

Taking learners' reflections into account, they argued that before participation in the course they were not confident enough to use various syntactic forms that they have already learnt. Listening to their own voice helped them to pay attention to their own strengths and became more confident language learners. This finding is in the same line with Allen's idea (1991) with regard to the positive effects of dialogue journals on increasing learners' confidence. Therefore, language learners felt free to use different verbs with more difficult tenses such as past perfect and present perfect which were quite uncommon in their oral speech before participation in the project. In this connection, one of the language learners asserted that

The implementation of new technology such as videotaping and audio recording was a unique experience for me, since I have never listened to my own speech or watched my own public lecture while speaking in a second language. With our

teacher's guidance with respect to producing complex language structures, I paid close attention to each and every word and tried to improve my performance in the next audio-recording.

It is noteworthy to mention that reflective audiotaped journals provided learners with opportunities to overcome the fear of expressing themselves in English, making mistakes and being judged. This finding corroborates one of the findings of Liao and Wong's study (2010), in which they argued that Dialogue Journal Writing (DJW) project helped students to be "less afraid of expressing ideas in English" (p. 154).

Accuracy

With respect to the accuracy of L2 oral performance across two measures of error-free clauses and correct verb forms, the results of data analysis pointed to the positive effects of reflective audiotaped journals on producing more error-free clauses and correct verb forms in the students' final lectures. Having presented their first lectures in the classroom and listened to the follow-up audio records in presence of their peers and teacher, language learners reflected on the errors and mistakes and became aware of their own strengths and weaknesses. This finding aligns with one of the results of Liao and Wong's study (2010) in which they argued that Dialogue Journal Writing (DJW) project helped learners to become more aware of their own needs, strengths and weaknesses.

Moreover, learners received a number of corrections from their peers and teacher on wrong clauses and verb forms after their presentation. In this regard, one of the language learners said that

Generally, I am a shy and reserved language learner who is afraid of making mistakes particularly in speaking tasks. The use of media changed the classroom atmosphere into a friendly one and provided me with opportunities to be more interested to participate in peer correction and self-correction processes.

Fluency

Taking the fluency of L2 oral performance across two measures (Rate A & Rate B) into consideration, the results of constant-comparison method (Dantas-Whitney, 2002) of data analysis indicated that learners became more fluent and rapid speakers at the end of the project by producing less repetitions, reformulations and replacements in their speech. This finding aligns with one of the merits of dialogue journals enumerated by Klug and Taylor (2000) who argued that dialogue journals enable students to develop real fluency in English language. Additionally, learners did not linger on their own

mistakes anymore, helping them to be fluent enough without worrying too much about their mistakes preventing them from speaking in a second language. In this connection, one of the learners argued that

Audiotaped reflective journals provided me with several opportunities to evaluate myself. Before participation in the project, I was not aware that I could not speak English fluently. Having understood that I am not fluent enough to express myself fluently in English, I recorded myself repeatedly during the course and I consulted with my teacher after each recording and received her feedbacks on the audiotaped journals, leading to some improvements in my fluency.

Further, privacy of recording encouraged shy and reserved learners to speak aloud in a stress-free environment resulting in more fluent speech at the end of the project.

4 Conclusion

The findings of this study, based upon quantitative and qualitative analyses of audiorecorded initial lectures, videotaped final lectures, reflective audiotaped journals and focus group interview, indicated that there is a significant difference in the syntactic variety of L2 learners' oral performance at the beginning and end of semester, substantiating the positive effects of the implementation of audiotaped journals on producing more grammatical verb forms.

Additionally, there exists a significant difference between the learners' oral performance with respect to accuracy at the beginning and end of the semester, meaning that audiotaped journals assisted learners in producing more error-free clauses and correct verb forms.

Further to these, the reflective aspect of audiotaped journals involved learners in activities (e.g., listening to their own speech several times, rethinking about their oral performance) which increased their attentiveness and awareness of learning process resulting in their growth and development (Richards & Farrell, 2005).

It is worth emphasizing that there are a number of caveats and limitations in the current study. Firstly, the process of audio recording, videotaping, discussing the issues with regard to each learner's presentation was quite time-consuming which is very difficult to be conducted in large classes. Secondly, conducting such kinds of projects in classes requires teacher's expertise to handle the processes of audio recording, videotaping, and audiotaping comments. Though this study shows the positive effects of audiotaped reflective journals on L2 oral performance, further research should be recommended to investigate other challenges with regard to such kinds of tools for language learning.

5 References

- [1] Ahmadian, M. J, The effect of 'massed'task repetitions on complexity, accuracy and fluency: does it transfer to a new task?, The Language Learning Journal, 39(3), 2011, 269–280.
- [2] Ahmadian, M. J., & Tavakoli, M, The effects of simultaneous use of careful online planning and task repetition on accuracy, complexity, and fluency in EFL learners' oral production, Language Teaching Research, 15(1), 2011, 35–59
- [3] Ahmadian, M. J., Tavakoli, M., & Vahid Dastjerdi, H, The combined effects of online planning and task structure on complexity, accuracy and fluency of L2 speech, The Language Learning Journal, 43(1), 2012, 41–56.
- [4] Allen, D, Tape journals: bridging the gap between communication and correction, ELT Journal, 45(1), 1991, 61–66.
- [5] Akef, K., & Nossratpour, S, The impact of keeping oral dialogue journals on EFL learners' oral fluency, JELS, 1(2), 2010, 127–142.
- [7] Brown, C, Audiotaped Dialogue Journals: Lexical, Grammatical, and Affective Benefits. 1996.
- [8] Burton, J. & Carroll, M, Journal writing as an aid to self-awareness, autonomy, and collaborative learning. In J. Burton & M. Carroll (Ed.), Journal writing (pp.1–7), 2001, Alexandria, VA: Teaching of English to Speakers of Other Languages, Inc.
- [9] Cohen, J, Statistical power analysis for the behavioral sciences (2nd ed.), 1988, New York: Academic Press.
- [10] Daft, R. L., & Lengel, R. H, Organizational information requirements, media richness and structural design, Management science, 32(5), 1986, 554–571.
- [11]Dantas-Whitney, M, Critical reflection in the second language classroom through audiotaped journals, System, 30(4), 2002, 543–555.
- [12] Donabedian, B., McKinnon, S. M., & Bruns, W. J, Task characteristics, managerial socialization and media selection, Management Communication Quarterly, 11,1998, 372–400.
- [13] Ellis, R., & Barkhuizen, G. P, Analysing learner language, Oxford: Oxford University Press, 2005.
- [14] Ellis, R, The differential effects of three types of task planning on the fluency, complexity and accuracy in 12 oral production, Applied Linguistics 30 (4), 2009, 474.
- [15] Elsegood, S, Teaching critical thinking in an English for academic purpose program using a 'claims and supports' approach, In First Year in Higher Education Conference, 2007 (Vol. 1, pp. 1–10).
- [16] El-Shinnawy, M., & Markus, M. L, Acceptance of communication media in organizations: Richness or features, IEEE Transactions on Professional Communication, 41, 1998, 242–253.

- [17] Ferry, D. L., Kydd, C. T., & Sawyer, J. E, Measuring facts of media richness, Journal of Computer Information Systems, 41(4), 2001, 69–78.
- [18] Gough, M., Wedum, M.K, Audio diaries in listening/speaking classes, Paper presented at the 34th Annual TESOL Convention, Vancouver, BC, 2000.
- [19] Granville, S., & Dison, L, Thinking about thinking: Integrating self-reflection into an academic literacy course, Journal of English for Academic Purposes, 4(2), 2005, 99–118.
- [21] Hatton, N., & Smith, D, Reflection in teacher education: Towards definition and implementation, Teaching and Teacher Education, 11 (1), 1995, 33–49.
- [22] Ho, Y. K, Audiotaped dialogue journal: An alternative to speaking. ELT Journal 57(3), 2003, 269–274.
- [23] Kavaliauskiene, G., Kaminskiene, L., & Anusiene, L, Reflective practice: assessment of assignments in English for Specific Purposes, Ibérica: Revista de la Asociación Europea de Lenguas para Fines Específicos (AELFE), (14), 2007, 149–166.
- [24] Khatib, M., Marefat, F., & Ahmadi, M, Enhancing critical thinking abilities in EFL classrooms: Through written and audiotaped dialogue journals, Humanity & Social Sciences Journa, 1, 7(1), 2012, 33–45.
- [25] Kluge, E. D., & Taylor, A. M, Boosting speaking fluency through partner taping, The Internet TESL Journal, 6(2), 2000, Retrieved on April 10, 2005, from: http://iteslj.org.
- [26] Lee, I, Using dialogue journals as a multi-purpose tool for preservice teacher preparation: How effective is it?, Teacher Education Quarterly, 31(3), 2004, 73–97.
- [27] Lengel, R. H., & Daft, R. L, The selection of communication media as an executive skill, The Academy of Management Executive, 2,1988, 225–232.
- [28] Liao, M. T., & Wong, C. T, Effects of dialogue journals on L2 students' writing fluency, reflections, anxiety, and motivation, Reflections on English Language Teaching, 9(2), 2010, 139–170.
- [29] Moon, J. A, A handbook of reflective and experiential learning: Theory and practice, Psychology Press, 2004.
- [30] Moon, J. A, Learning journals: A handbook for reflective practice and professional development, 2006, Routledge.
- [31] Murphy, J. M, Reflective teaching in ELT. In M. Celce-Murcia (Ed.), Teaching English as a second or foreign language (3rd edition) (pp.499–515), 2001, Heinle & Heinle, Boston, MA.
- [32] Peyton, J.K., Staton, J, Dialogue journal bibliography: Published works about dialogue journal research and use (Bibliographies ERIC# ED451731), 2000, National Clearinghouse for ESL Literacy Education, Washington, DC.
- [33] Peyton, J.K. & Reed. L, Dialogue journal writing with nonnative English speakers: A handbook for Teachers, 1990, Alexandria, VA:TESOL.

- [34] Richards, J. C., & Farrell, T. S. C, Professional development for language teachers, Cambridge: Cambridge University Press.
- [35] Richards, J. C., & Ho, B, Reflective thinking through journal writing, Beyond training, 1998, 153–179.
- [36] Rodgers, C, Defining Reflection: Another look at John Dewey and reflective thinking, Teachers College Record, 104(4), 2002, 842–866.
- [37] Ryan, M., & Ryan, M, Theorising a model for teaching and assessing reflective learning in higher education, Higher Education Research & Development, 32(2), 2013, 244–257.
- [38] Saeedi, M., & Rahimi Kazerooni, S, The influence of task repetition and task structure on EFL learners' oral narrative retellings, Innovation in Language Learning and Teaching, 8(2), 2014, 116–131.
- [39] Siyli, N. A., & Kafes, H, Audio Journal in an ELT Context, International Journal of Applied Linguistics and English Literature, 1(4), 2012, 66–75.
- [40] Skehan, P, A framework for the implementation of task-based instruction. Applied Linguistics, 17, 1996, 38–62.
- [41] Tavakoli, P., & Foster, P, Task design and second language performance: the effect of narrative type on learner output, Language Learning, 58(2), 2008, 439–73.