# Examining Language Related Episodes (LREs) of Arabic as a Second Language (ASL) Learners During Collaborative Writing Activities

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*Abstract*—Previous studies have increasingly examined the nature of collaborative writing in English as a foreign/second language settings. However, little research has been conducted on its nature in Arabic as a second language (ASL) contexts. This study investigated the nature of 64 students' Language Related Episodes (LREs) while performing collaborative writing in ASL classrooms. Employing a quasi-experimental design with a mixed methods approach, the frequency and the focus of the students' LREs in collaborative (experimental) writing groups and in traditional (control) groups were compared. The findings showed that there was a statistically significant difference between the LREs produced by the experimental and the control groups which can be attributed to the collaborative writing approach. In particular, the analysis of LREs per minutes indicated that LREs were more frequent in the experimental group interaction than in control group interaction. In addition, the experimental groups paid more attention to language and were more successful at resolving language related problems than the control ones which may explain the differences in their performance. Specimens of dialogues of both groups are presented to explain their differential performance.

*Index Terms*—collaborative writing, Quasi-experimental research, Arabic as a second language (ASL) contexts, Language Related Episodes (LREs), second language learning

# I. INTRODUCTION

Collaborative writing (CW) as a potential means for developing second language (L2) writing ability is based on a social constructivist view of learning. This view derives from the work of Vygotsky (1978), who hypothesized that human development is driven by social activity. Being informed by a Vygotskian sociocultural framework, Swain (1995, 2005) argues that writing as an instance of language output can be viewed as a way to develop learners' skills in the L2. The written modality of language may equally contribute to L2 learning achievement, as L2 learners master language for literate purposes (Alshammari, 2011; Kern & Schultz, 2005). In other words, learners' writing skills can enhance their L2 competence (Harklau, 2002). Thus, writing is an essential means of L2 learning and can be a major source for L2 learners to improve their L2 proficiency.

# II. REVIEW OF RELEVANT LITERATURE

# A. Research on Collaborative L2 Writing

There have been numerous studies that support the use of CW in L2 classrooms either in pairs or small groups, particularly at the tertiary level (Fernández Dobao & Blum, 2013; Humphrey & Macnaught, 2011; Khatib & Meihami, 2015; Kuiken & Vedder, 2002; Sajedi, 2014; Shehadeh, 2011; Storch, 2001, 2005; Wigglesworth & Storch, 2009, 2012a, 2012b). Collaborative writing activities provide opportunities for learners to participate in the co-construction of knowledge and articulate their ideas to compose a written text collaboratively, to foster reflective thinking practice among them, and to raise their awareness of audience.

For example, Storch's (2001) study has illustrated how adult L2 learners at tertiary level participated in text construction in pairs. She found that, in most pair works, one learner took responsibility for managing the structure of the text while the other member expressed his or her opinions about the details to be included in the text. Even though both members contributed to the text composition, there were times when they had difficulties in reaching an agreement. Through confirmations and elaborations, these members could resolve the challenges in pair work. In addition, Shehadeh (2011) found that even though there was a significant improvement in terms of content and organization of written texts, learners found it difficult to assist each other when it came to accuracy which was due to the lack of learners' language knowledge.

Wigglesworth and Storch (2012a, 2012b)have investigated L2 learners' feedback and their writing development through collaboration. Overall, the findings showed that corrective feedback from peers in writing provided learners with potential L2 learning benefits particularly on how to improve their accuracy (i.e. linguistic knowledge). Reflective practice in collaborative writing promotes learners' awareness about their own learning and allows them to effectively

engage in peer interaction in completing writing tasks. As a result, they can continually evaluate their work and make changes in their writing process.

#### B. Language Related Episodes (LREs) in Collaborative Writing

Swain (2000) claims that as learners work together, they share ideas and pool their knowledge to reach their shared goals. Collaborative activities enable them to collaborate to solve language related problems. They engage with language as a cognitive tool to reflect on language and facilitate problem-solving, called as 'languaging' (Swain, 2006). 'Languaging' is defined as "the process of making meaning and shaping knowledge and experience through language" (Swain, 2006, p. 89). Swain also argues that 'languaging' is a potential source of L2 learning. For instance, in the case of collaborative writing, learners deliberate with their peers in small groups, not only to talk about how to write a text, but also to discuss metalinguistic aspects of language itself. During the writing process, there are many kinds of language problems that may arise and be solved together, and thereby contribute to language learning. Languaging or collaborative dialogues has been operationally defined as language-related episodes (LREs) (Swain, 2005, p. 1). Swain and Lapkin (1998, p. 321) define LREs as "any part of a dialogue where the students talk about the language they are producing, question their language use, correct themselves and others." In general, LREs can be categorized into; formfocused (e.g. morphology and syntax), lexical-based (e.g. word meaning and word choices), and mechanics (e.g. the punctuation, the spelling, and the pronunciation) (Storch, 2007).

Under this frame, a growing number of studies have investigated learners' collaborative dialogues during the completion of different written tasks (Abadikhah, 2012; Fernández Dobao, 2012; Storch, 2007; Swain & Lapkin, 1998; Wigglesworth & Storch, 2009). These studies mainly focus on language-related episodes (LREs). For example, Storch (2007) investigated the nature of the learners' talks during the completion of a text editing task. The task required learners to change the text in order to improve its accuracy. Involving 9 pairs, one triad, and 16 individually, the study revealed that the participants in pairs focused more on grammar (67% of all episodes) than lexis (31%). Most LREs were correctly resolved (80%). In another study, Abadikhah (2012) studied the effect of mechanical and meaningful production of output when learning English relative clauses. The study involved thirty-six Iranian EFL learners divided into two groups: control (mechanical output) and experimental (meaningful output) groups. The participants in pairs completed three tasks over an 8-week period. The result showed that the experimental group generated a higher number of LREs (58%) than the control one (42%). The finding suggests task types could influence learners' focus either on meaning or form.

Further, Fernández Dobao (2012) examined the performance of intermediate Spanish learners in a university context. The learners were assigned in groups, in pairs, or individually to complete a written task as a follow up lesson of past tense grammar. The study showed that the groups produced the most accurate texts, followed by the pairs and the individuals. Further, the groups produced a bigger number of LREs than the pairs, and had a higher percentage of correctly resolved the LREs.

Another similar study was conducted by Amirkhiz, Bakar, Samad, Baki, and Mahmoudi (2013). They investigated orientations towards metatalks of EFL dyads (i.e. Iranian) and ESL dyads (i.e. Malaysian). The dyads were assigned to complete fifteen collaborative writing tasks. The findings indicated that EFL dyads attended more to the language features than ESL dyads. This could be due to the different status of English in their countries and their educational experiences.

To sum up, findings from these studies suggest that learners' collaborative work may lead to deliberations on language aspects which can modify or consolidate learners' current linguistics knowledge. Even though task types and learners' proficiency level may influence the frequency of LREs produced, the analysis of LREs may explain how learners discuss language aspects and learn from their peers' feedback.

#### C. Collaborative Writing in L2 Classrooms

Working collaboratively on writing tasks can benefit learners during the whole process of writing, creating a positive impact on learners' writing outcomes (Storch, 2011, 2013; Wigglesworth & Storch, 2012a). Generally, working together in pairs and small groups facilitates learners' interaction to achieve group goals in learning (Gillies, 2014; Johnson & Johnson, 2014). In other words, through interaction, learners can negotiate different views of their own learning so that they can learn from one another. Therefore, being supported by Vygotsky's (1978) sociocultural framework, CW is considered an effective approach to improving L2 learners' writing outcomes (Storch, 2013).

Given its learning potential, a lot of research has been conducted on CW (Fernández Dobao, 2012; Fernández Dobao & Blum, 2013; Fong, 2012; Kuiken & Vedder, 2002; Shehadeh, 2011; Storch, 2001, 2005, 2011, 2013; Wigglesworth & Storch, 2009, 2012a, 2012b). However, this research has mainly focused on English as a second or foreign language; limited attention has been given to CW in other second or foreign language contexts. For instance, very few studies have investigated the use of CW in the context of Arabic as a second language (ASL).

#### D. Collaborative Writing in ASL Classrooms

In the past two decades, interest in learning ASL has grown exponentially in many countries around the globe in multiethnic, multilingual, and multi-religious communities (e.g. Malaysia, Singapore, Indonesia, Australia, United States, United Kingdom and some European countries) (Al-Rajhi, 2013; Aladdin, 2010; Brosh, 2013). The growing

importance of Arabic can be understood from the fact that it is the fifth most commonly spoken language in the world. The interest in Arabic is not restricted to Muslim countries only where the language is used for prayer and reciting religious texts (e.g. the Qur'an written in Arabic) (Dahbi, 2004); it is also increasingly used in globalised marketplaces (Crystal, 2010). Moreover, Arabic is the language of a petroleum-based global industry which is at the centre of geopolitics (Karmani, 2005). The teaching and learning of Arabic was part of the security strategy for a number of Western countries since 9/11 (Brecht & Rivers, 2012). Thus, there is a widely perceived need to learn Arabic in schools and universities in many countries across the world. This justifies paying research attention to the teaching and learning of Arabic as an L2.

There are many challenges for ASL learners when it comes to learning and practicing Arabic in their daily life compared to other commonly taught languages such as English, Spanish or Chinese. These challenges are related to not only insufficient resources such as curricula, instructional materials and teaching and assessment strategies, but also to divisive cultural and political issues between people in western countries and in Muslim societies. In particular, these issues relate to the assumptions that the western and Islamic cultures are not compatible (e.g. veiling school girls in Islamic education and polygamy issues are exaggerated by politicians and the press). More recently, there have been misperceptions that the Islamic world is a threat to the West. As a result, learning ASL is not as popular or common as other international languages. Thus, one of the solutions to meet the challenges in learning Arabic may be to develop its own theory and pedagogy. Arabic needs to be taught and learned on its own terms (Wahba, Taha, & England, 2013). This calls for research on the teaching and learning of ASL in different contexts.

While there are many aspects of ASL that need to be learned in order to be proficient in the language, writing is one of the most difficult skills for ASL learners. This is because Arabic has complex morphological and syntactical systems that are highly varied compared to, for example, English and other European languages (Wahba et al., 2013). According to Jassem (1996), the most notable difficulty in writing for ASL learners is Arabic grammar (e.g. the use of Arabic tense, subject-verb agreement, verb phrases, mood, and voice). Nevertheless, writing may also provide L2 learners opportunities to use their existing linguistic resources and produce new language knowledge.

Research on ASL writing skills is currently at its initial stage. Only have a handful of studies investigated ASL learners' essays to understand their deficiencies in their writing (Salim, 2000; Shakir & Obeidat, 1992). Shakir and Obeidat (1992), for instance, investigated cohesion and coherence in ASL leaners' essays. They found substantial incoherence in their text production, which was attributable to their inadequate knowledge of cohesive devices. Similar findings were reported by Salim (2000) who studied writing processes and strategies used by American learners of ASL and evidenced their poor performances in writing tasks. In order to make writing tasks more effective, ASL learners, in particular, should be able to use a variety of writing strategies in the process of planning, generating ideas, reviewing, and revising writing texts. Their choices of writing strategies may affect the level of their writing performance (Salim, 2000). Given that collaborative writing strategy has been found beneficial in English as an L2 writing contexts as evident in many relevant studies (Sajedi, 2014; Storch, 2013; Wigglesworth & Storch, 2012b), it is important to investigate whether and to what extent the use of CW in the context of ASL would be effective in developing ASL learners' writing skills.

Against the background of the theoretical and empirically verified benefits of CW, the present study examined CW in the context of ASL in Saudi Arabia to substantiate the nature of students' LREs as reported in the literature by drawing on a language other than English. In particular, the following research questions were formulated for the purpose of the study:

1. Is there a difference between collaborative writing groups and traditional small groups in terms of the frequency and the focus of LREs produced?

2. What are the outcomes of LREs produced?

### III. METHODOLOGY

## A. Participants

Sixty-four male ASL students participated in the study. The majority of the students came from Africa with a range of first language backgrounds including French, German, Indonesian, Malay, Urdu, Hindi, Bengali, Pashto, Dhivehi, Spanish, and Portuguese. In the sampling process, participants' willingness and availability to be part of the study (Creswell, 2015) were taken into account. Thus, convenience sampling was employed in the study. Of 10 classes in the program, 4 classes that consisted of 16 students each, and their 2 Arabic native teachers participated in the study. These four classes in the institute had been organized naturally and were considered to share the same characteristics. They were enrolled in Arabic language preparation programs in an Arabic language institute which is a part of a public university situated in Makkah, Saudi Arabia. Based on their program entrance examination scores, they were considered to have a high-intermediate level of Arabic competence. The participants ranged in age from 20 to 23 years. Since the student participants did not share the same native language, Arabic was the only language used for instruction in the classroom.

Class	Condition	Learning Approach	Groups	Teacher
1	Control	Traditional Group Work	1, 2, 3, 4	А
2	Control	Traditional Group Work	5, 6, 7, 8	А
3	Experimental	Collaborative Approach	9, 10, 11, 12	В
4	Experimental	Collaborative Approach	13, 14, 15, 16	В

TABLE I.

As shown in Table 1, the study was conducted in four parallel classes. Each class consisted of sixteen students. Two of the four classes were experimental groups while the other two groups were control groups. That is, both experimental and control classes had thirty-two students each. Experimental and control classes were taught by two different teachers who used the same syllabus and materials provided by the course textbooks. While experimental classes implemented a collaborative writing approach, control classes were involved in traditional group work. In each class, the student participants were then divided into small groups which consisted of four students.

#### **B.** Data Collection Procedures

The data collection techniques in this study involved the use of different research instruments, including observations, audio-recordings, and writing tasks. During the 10-week intervention, all participating classes were given three types of writing tasks: descriptive, narrative, and argumentative texts. Each task (500-word text) was completed in three weeks (i.e. 50 minutes per meeting each week). During the classroom observation, the author observed how learners participated in co-constructing the writing tasks. This process included brainstorming, planning, drafting, and revising. While observing from Week 2-11, the author audiotaped the verbal interactions among group members when they completed the writing tasks collaboratively.

	I ADLE II.	
	WRITING TASK PROMPTS	
Week	Prompts	Activities
Week 1	Pre-test: Describe your own country in 500 words.	The students completed the test in 50 minutes individually.
Week 2-4	Task 1 (Descriptive Text): Describe your first day in Makkah (or you can choose your own topics)	Brainstorming, planning, drafting, and revising
Week 5-7	Task 2 (Narrative Text): Narrate your visit to Madinah (or you can choose your own topics)	Brainstorming, planning, drafting, and revising
Week 8-10	Task 3 (Argumentative Text): What do you think about marriage during the study period or after graduation? (or you can choose your own topics)	Brainstorming, planning, drafting, and revising
Week 11	Post-test): What do you think about cooperative writing and/or collaborative writing?	The students completed the test in 50 minutes individually.
Week 12	Semi-structured interviews with the students and the teachers	

TABLE II

#### Data Analysis

All of the data obtained from the audiotapes of the groups' verbal interactions were transcribed and analysed by the Independent-samples Mann-Whitney U Test for frequency, focus, and outcome of LREs. The analysis was run by the Statistical Package for the Social Science (SPSS) Version 23. Further, the types of LREs were classified based on their focus on form, lexis, and mechanics.

# **IV. RESULTS**

Regarding the first question of the study, as shown in Table 9, LREs were rather frequent in both groups. The experimental groups produced a total of 986 and the control ones 789 LREs. The results of the Independent-samples Mann-Whitney U Test showed that this difference was statistically significant (U = 64, p = .039) with alpha was set at the standard p < .05 for all statistical tests. Even though the experimental groups spent slightly more time on task, the analysis of LREs per minutes indicated that LREs were more frequent in the experimental group interaction than in control group interaction (U = 58.9, p = .029). Thus, most of the experimental groups produced a larger number of LREs than the control ones.

FREQUENCY OF LRES IN EXPERIMENTAL AND CONTROL GROUP INTERACTION								
	Experimental (n=32) Total Mean SD			Control (n=32) Total Mean SD				
LREs	986	69.08	23.01	789	49.66	20.35		
Minutes	402	26.28	3.98	351	24.47	4.50		
LREs per minutes		1.48	.80		1.34	.58		

TABLE III.

.23

21

22.56

Incorrectly resolved LREs

FOCUS OF LRES IN EXPERIMENTAL AND CONTROL GROUP INTERACTION									
	Experimental (n=32)				Control (n=32)				
	Total	Mean	SD	%	Total	Mean	SD	%	
Form-Focused LREs	471	26.18	11.46	47.78	381	22.78	8.23	48.28	
Lexis-Focused LREs	412	25.80	14.16	41.78	355	22.57	9.45	44.99	
Mechanics-Focused LREs	103	6.76	3.84	10.44	53	3.34	2.13	6.73	

TABLE IV.

In terms of the focus of LREs, both groups focused on grammar and lexis. 47.78% of the LREs produced by the experimental groups focused on grammar and 41.78 on lexis. Likewise, 48.28% of the LREs in the control groups were form-focused and 44.99% were lexis-focused. The experimental groups produced a higher number and percentage of mechanics-focused LREs than the control groups, and this difference was statistically significant (U = 55, p = .014). Only 103 mechanics-focused LREs occurred in the experimental groups and 53 in the control groups (See Table 4).

Lastly, Table 5 displays the analysis results of the outcome. Obvious differences can be seen between the experimental and control groups with regards to the resolution of the LREs. The experimental and control groups had almost a similar number of incorrectly resolved LREs; 241 and 178 respectively. However, while the experimental groups were able to correctly resolve 69.87% of the LREs they produced (a total of 689 LREs), and just had 5.68% of unresolved LREs (a total of 56 LREs), the control groups could only produce 35.23% of correctly resolved LREs (a total of 278 LREs) and even had 42.21% of unresolved LREs (a total of 333 LREs). The Independent-sample Mann-Whitney U Test confirmed that the differences in the percentage of correctly resolved LREs (U = 63, p = .039) and unresolved LREs (U = 59, p = .042) were statistically significant (See Table 5).

TABLE V.											
OUTCOME OF LRES IN EXPERIMENTAL AND CONTROL GROUP INTERACTION											
	Experimental (n=32)				Control (n=32)						
	Total	Mean	SD	%	Total	Mean	SD	%			
Correctly Resolved LREs	689	47.58	19.96	69.87	278	20.98	9.38	35.2			
Unresolved LREs	56	4.80	3.16	5.68	333	22.18	11.54	42.2			

7 4 5

TABLE V

To conclude, the implementation of collaborative writing approach may affect positively their focus and outcome of LREs, but did not really influence the frequency of LREs. Overall, in spite of individual difference among group members, the experimental groups paid more attention to language and were more successful at resolving language related problems than the control ones.

24 45

178

9.24

4.33

In order to have a better understanding why the experimental groups were more successful at resolving linguisticrelated problems than the control ones, the nature of their LREs (the second research question) was further examined. The examination showed that the experimental groups were able to reach a correct resolution with a higher percentage of their problems since they actively engaged in the discussion, and had more linguistic resources than the control groups. Through the interactions, they were able to pool and share their knowledge to solve problems encountered. Evidence of collective scaffolding (i.e. learners in small groups pool their language resources to co-construct grammatical knowledge or sentences which are beyond their individual level of competence) (Donato, 1994), frequently occurred in the data of the experimental groups. The following two instances describe the process.

In Excerpt 1, Harith points out that the word "الاستفادة" (benefit) should not be used with "همزة القطع" (a detached hamzah). He thinks that the spelling for the word is not correct, but Abdurrahman has a different opinion. Harith tries to convince Abdurrahman by asking Mauoon to explain what they have studied in the Arabic spelling rules. Then, Mauoon explains why they need to put "همزة الوصل" (a linking hamzah) instead. Further, Abdullah adds that he also has studied about the spelling rules. Finally, every one accepts the explanation from Mauoon and Abdullah, and Abdurrahman revises the spelling error.

# Excerpt 1. Experimental Group 8 – Mechanics focused LRE

241

17.76

"كذلك هو ممكن الإستفادة من مساعدات التي يقدمها الجمعيات خيرية لمساعدة طلاب في الزواج" :Abdurrahman

[also, he might be able to benefit from assistance voluntary organisation provide to students wanting to get married] طيب... لماذا أنت كتبت كلمة (الاستفادة) بهمزة قطع؟ : Harith

[well... why did you write the word "benefit" with a detached hamzah?]

أتوقع هي صحيحة... :Abdurrahman

[I think it is correct...]

لا ... هي ليست صحيحة... أخبره يا ماعون عن سبب كما در سنا في قواعد كتابة العربية...:4. Harith

[no... it is not correct. Tell him the reason Mauoon as we studied in the Arabic spelling rules]

...ايوه... كلام حارث صحيح...لأن الفعل هنا خمسة حروف، فلا بد نضع همزة وصل :5. Mauoon

[yeah (slang)... Harith is right... because the verb here consists of 5 letters... so we have to put a linking hamzah] صحيح... وأنا أيضا درست ذلك... :Abdullah

[true... I also studied that...]

خلاص... نضع همزة وصل :Abdurrahman

[ok (slang)... we put a linking hamzah]

Excerpt 2 shows that four students are discussing the correct use of adjective, noun, and the gender of Arabic nouns. Firstly, Yosuf wants to confirm the use of the phrase "ضخم المبنى" (the huge building) since he realises he has always issues when dealing with the rules of making a phrase in Arabic. Then, Faris proposes his idea about it. He thinks the use of "ضخم المبنى" (the huge building) is not correct in the sentence. He explains that in Arabic grammar, noun has to come before an adjective. Yahya reminds every one about the topic of the grammar rule – the adjective and noun rule. Yahya also offers the correct stem "مندى ضخم" (building huge). Further Yosuf notices another rule in using "ل " to determine the gender of noun since adjectives should be matched with the noun in terms of either masculine or feminine, and singular and plural. After all, they can resolve the grammar problems they encounter in the writing process.

Excerpt 2. Experimental Group 3 - Form-focused LREs

ا ...و هو عبارة ... ااه .. عن ضخم المبنى" !1. Yosuf

[and it is ... ah... a huge building]

...أعتقد أن هنا خطأ نحوي... لأنه لا بد الاسم يأتي قبل صفة... وليس العكس مثل الانجليزي :Faris 2. Faris

[I think here is a syntactic error... because noun has to come before an adjective in Arabic... not the opposite like English]

تقصد.. هذا .. قاعدة صفة والموصوف.. صحيح؟ :3. Yahya

[you mean the adjective and noun rule right?

نعم... و هي الڌي در سناها قبل اسبو عين :4. Faris

[yes, we studied this topic two weeks ago...]

طيب.. ماذا يمكن نكتب؟ عندي مشكلة دائم في هذه قاعدة.. :5. Yousuf

[ok, what can we write? I have always a problem with this rule]

هذا طبيعي... لأننا نتعلم لغة جديدة :6. Faris

[this is normal, because we are learning a new language]

طيب .. صح .. ااه .. إذا نكتب "مبنى ضخم" بدل من ذلك :7. Yahya

[ok... right,,, so we write "building huge" instead]

نعم :8. Faris

[yes]

هل لا بد نحذف (ال) من (المبنى) :9. Yousuf

[(المبنى) from (ال) from (المبنى)?]

نعم أعتقد ... لأنى أنا قرأت مثل ذلك في كتاب قواعد :10. Saeed

[I think yes, I read that in the grammar book. Right?]

أحسنت يا سعيد... نعم لا بد يكون صفة مثل الموصوف في التذكير وتأنيث وتعريف وتنكير ومفرد والجمع :11. Faris

[we're done Saeed. The adjective needs to be matched with the noun in terms of feminine and masculine, and also the singular and plural]

شكرا لكم يا .. أصدقائي الأن هذه قاعدة صارت واضحة لي :Yousuf

[thank you my friends. Now, this rule is very clear to me]

As stated by Donato (1994), most of the learners in the Excerpt 1 and 2 are individually novices but they can collectively resolve the problems. Even though some learners lacked the linguistic resources required to make accurate use of language, other learners provided help to correct the use of language. Further, these examples revealed that collaborative writing approach offered opportunities for peer collaboration and co-construction of linguistic knowledge.

Unlike in the experimental groups, the control groups tended to be more passive in their discussion. In Excerpt 3, for instance, Sajid and Rihan question about the meaning of the word "محاجهنا" (our beds). Even though Razzan tries to explain the meaning of the word, others (Ghalib, Sajid, and Rihan) do not seem to understand the meaning. They do not try to figure out the meaning of the word. They are not really interested to discuss further and just skip the part. They tend to adopt a more passive role.

Excerpt 3. Control Group 3 – Lexical focused LREs ...وصلنا إلى فندق متأخرين... تعشينا... وبعدها ذهبنا إلى محاجهنا :Razzan [we arrived hotel late... had dinner, then we went to "محاجهنا" (our beds)] محاجهنا ؟!!! ما هذه الكلمة؟ ممكن ليس عربية... :Sajid ["محاجهنا"], what is this word ?!! maybe not Arabic] ماذا تقصد يا رزان بكلمة "محاجهنا"؟ :Rihan [Razzan, what do you mean by "محاجهنا"?] اعتقد واضح ... هو مكان نذهب فيه للنوم ... :Razzan [I think it is clear... the place we go to for sleeping] لم أقصد معنى مقصود .. هل أحد فهم ما قصده؟ :Ghalib [I didn't get it... did anyone get it?] Sajid: ¥ [No] أنا أيضا ما فهمت :Rihan [me too, I didn't understand] ما يهم.. دعونا نكمل :Ghalib

[doesn't matter... let's continue]

# V. DISCUSSION

This study was conducted to examine the frequency, focus, and the outcomes of students' LREs produced during collaborative writing tasks in Arabic as a second language (ASL) classrooms. The study employed a quasi-experimental design involving mixed methods approaches. With regards to the first research question, the results of the Independent-samples Mann-Whitney U Test indicated that this difference was statistically significant (U = 64, p = .039) between those writing in traditional group work and those using collaborative writing approach. In particular, most of the experimental groups produced a larger number of LREs than the control ones. However, both groups had different focus. The findings indicate that learners in the experimental groups paid more attention to language than those in the control groups. The results support earlier remark by Amirkhiz et al. (2013) that EFL dyads tended to focus more on the language aspects than ESL dyads. A possible explanation of the differences is that the students not only may have limited understanding and knowledge of the linguistic features, but also had different language learning experiences.

Considering the outcomes of the LREs produced, the experimental groups produced not only more LREs, but also a bigger percentage of these LREs which were correctly resolved. However, although the learners working in the control groups also produced a considerable number of LREs, they could not resolve most of their problems. This finding confirms that any gain in the students' resolved LREs from the experimental groups may be attributed to the collaborative writing practices. In other words, their CW experience led to enhanced performances on the writing tasks. Similar findings have been reported by few previous studies (e.g. Fernández Dobao, 2012; Wigglesworth & Storch, 2009). The result of these studies found that collaborative problem solving activities may occur when learners implemented a collaborative approach. They tended to share ideas and actively engage in the discussion. The results of the present study confirm that the experimental groups scaffolded each other and co-constructed knowledge more often than the control groups.

## VI. CONCLUSION

This study reports on examining the nature of the students' LREs produced during collaborative writing activities in ASL contexts. Based on the statistical data, the students may gain L2 knowledge during the CW activities. It can be seen that the experimental groups produced a larger number of LREs than the control ones. In other words, CW provides them with opportunities to engage in meaningful interactions. They can generate and pool ideas while drafting their jointly written texts. Regarding the resolved LREs, unlike the control groups, the experimental groups showed significant improvement. This difference can be attributed to the fact that they actively engaged in the discussion, and had more linguistic resources than the control groups. All in all, CW could be a potential source of L2 learning. Nevertheless, this claim still need further research. The study also had some limitations such as the small sample sizes and limited time. Considering these limitations, the generalizability of the research results should be interpreted with caution.

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