

Does Applying a Collaborative Draw Label Caption (DLC) Strategy Improve Argumentative Writing and Learners' Attitude Towards EFL Learning?

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Abstract—This study aims to investigate whether a collaborative Draw Label Caption (DLC) strategy improves argumentative writing and learners' attitudes towards English as a Foreign Language (EFL) for learning. The study was conducted to address the research gap in the body of current literature. The originality of this research lies in presenting and examining the effectiveness of this specific teaching method that incorporates drawing into the writing process. The study aims to bridge the gap in previous research by implementing a quasi-experimental design that includes both an experimental and a control group. A pre-and post-test design was employed for this method. The study's participants consisted of 63 first-year Umm Al-Qura University students taking an English course. Thirty students formed the control group, whilst the remaining thirty-three comprised the experimental group. Further, a group interview was conducted with the learners in the experimental group to assess their attitudes toward the strategy. The results of the study revealed significant differences were observed between the pre-and post-tests in both groups; however, no significant differences were revealed in the post-tests between the two groups. The study also raises concerns regarding the findings' generalizability to various teaching philosophies. These restrictions highlight the need for care when extrapolating the study's findings and offer directions for future investigation.

Index Terms—English as a Foreign Language, draw label caption, collaborative, strategy, learners' attitude

I. INTRODUCTION

In the ever-evolving landscape of English as a Foreign Language (EFL) education, the exploration of innovative pedagogical strategies remains crucial for enhancing students' language proficiency and fostering positive attitudes toward learning (Shonazarov, 2023). This research investigates the efficacy of a collaborative Draw Label Caption (DLC) strategy and its potential impact on the improvement of argumentative writing skills and learners' attitudes in the context of EFL education. The Collaborative Draw Label Caption strategy incorporates a multifaceted approach, combining visual, linguistic, and collaborative elements to engage learners in the process of developing argumentative writing skills. By integrating drawing, labeling, and captioning activities, the DLC strategy aims to cater to a variety of learning styles and foster a collaborative learning environment (Liu et al., 2023). Visual strategies to enhance EFL writing are a beneficial technique for learners, as they use them before they begin writing to organize and collect their thoughts (Abas & Abd Aziz, 2018; Al Kamli, 2019). Therefore, this study aims to investigate the effectiveness of the DLC strategy in two key dimensions: first, it will explore its impact on the enhancement of argumentative writing skills among EFL learners, and second, it will investigate its influence on shaping positive attitudes toward the overall EFL learning experience. The research was positioned at the intersection of pedagogical innovation and language acquisition, seeking to contribute valuable insights to educators, curriculum developers, and policymakers in the realm of EFL education.

This study becomes imperative as it navigates the complexities of language education by understanding the potential of novel strategies such as the collaborative Draw Label Caption approach. This study also highlights the transformative possibilities that innovative pedagogies offer in the realm of EFL learning, which ultimately contributes to the ongoing discourse on effective language teaching methodologies. EFL writing is one of the most difficult skills for learners, as they need to be moderately proficient in the language to be able to write accurately (Alharthi, 2021). As Ahmed (2019) posits, when EFL learners write, they need to pay attention to the spelling, punctuation, grammar, and expression of the written ideas. This reflects the difficulty of writing in EFL; nevertheless, there are several techniques to help learners cope with such difficulties (Ahmed, 2019).

Alkubaidi (2019) asserted that the conventional approach to teaching writing in Saudi Arabia primarily emphasizes memorization of written text over comprehension of writing tasks. Alkubaidi (2019) found that the writing skills of Saudi EFL students were weak. Previous Saudi researchers (Alrabai, 2016; Alkubaidi, 2019; Ahmed, 2019; Alharthi, 2021) reported that learners of English as a foreign language (EFL) have a challenging time with writing because they don't have effective techniques to improve their skills. Therefore, the implementation of innovative techniques could facilitate learners' writing practice and foster an engaging environment in EFL teaching. EFL learners require a strategy that

enhances their ability to identify related items, vocabulary, and sentences within the writing text, enabling them to comprehend the written form in detail. Encouraging learners to recognize the correlations between the small items in the text can have a positive impact on their writing skills. Therefore, using Draw Label Caption can enhance learners' ability to recognize the small parts of the written text.

The researcher conducted this study to address a potential research gap in the existing literature by investigating the impact of a collaborative Draw Label Caption strategy on argumentative writing skills and attitudes towards learning English as a Foreign Language (EFL) (Gulnaz, 2020; Liu et al., 2023; Moonma & Kaweera, 2021). The novelty of the study lies in introducing and exploring the efficacy of this particular instructional strategy, which integrates drawing as a component of the writing process. The present study, examining the effects of the collaborative strategy on first-year students at Umm Al-Qura University, fills the gap in prior research in this specific area. The quasi-experimental design, which includes group interviews and tests before and after the strategy, is a new way of doing things that lets us look at both the quantitative and qualitative effects of the strategy (Fung & Liang, 2019).

Moreover, the study contributes to the literature by offering insights into a relatively unexplored instructional approach within the context of EFL learning. When it comes to teaching writing in English as a foreign language, this study is important because it could help teachers find a suitable method to use. As a result, this approach could make it easier to teach writing skills in English as a foreign language (EFL). Writing encourages a creative flow, necessitating an engaging approach to assist EFL learners. A suitable strategy creates a compelling atmosphere that enables learners to practice and connect their thoughts with other learners (Doyle, 2023). Draw Label Captioning (DLC) is a strategy that helps the learner first picture their ideas in their head before drawing them and then writing down about them. According to Pinto (2023), DLC is an effective strategy that enables learners to improve their writing and create a positive classroom environment. The learning process of this strategy reflects on students' EFL learning (Gonzales, 2010; Pinto, 2023). Therefore, this research aims to investigate the impact of a collaborative DLC strategy on improving argumentative writing as well as learners' attitudes toward this approach. This study will address the following research questions:

1. What is the impact of employing collaborative DLC in argumentative writing within an EFL classroom?
2. How do EFL learners perceive the use of a collaborative DLC in argumentative writing?

II. LITERATURE REVIEW

According to Pinto (2023), the Draw Label Caption (DLC) strategy helps learners to write through three stages. The first stage involves drawing a picture that reflects the topic, which helps the learners to gather their ideas. The second stage includes labeling this picture, which fosters meaning-making. In this stage, learners formulate short sentences or phrases that briefly describe the drawing. The final stage is writing a caption for the picture, which involves writing full sentences to explain the drawing. DLC involves drawing a picture with a pencil based on the chosen topic. The label stage includes writing one or two words that describe each of the items in the drawing. A caption is then written under the pictures that explains the drawing and focuses on creating a meaningful sentence. Furthermore, the captions were clustered to create a full paragraph.

Researchers have explained that DLC is a prewriting strategy that helps learners brainstorm before writing (Sastrawati, 2015; Pinto, 2023). It also helps learners improve their vocabulary, which learners use to label the drawn picture (Hasna, 2021). DLC is a technique that helps learners draw for a purpose before explaining the drawing in detail. Therefore, DLC proves to be a helpful strategy for learners to focus on the details of the drawings before assigning meaning to the pictures. Previous studies have perceived that DLC enhances learners' writing skills (Sastrawati, 2015). It prepares students to gather ideas, shape them into drawings, give meaning to their ideas, and then transform them into essays. Thus, all of these processes prepare learners to develop their writing skills. Drawing allows learners to visualize every aspect of the picture (Willis, 2021). Meanwhile, the process of labeling the picture enables learners to form meaningful concepts for all drawn pictures. During this process, learners attempt to link the pictures with words and pinpoint crucial terms for labeling, resulting in an improved vocabulary. In the third stage, learners begin writing the first draft.

According to Stefanini et al. (2022), several benefits and difficulties are associated with using the DLC strategy. This strategy engages all students in the process of learning. It also helps learners to enhance their problem-solving abilities. This strategy's drawing element helps to create a fun atmosphere in the learning process, which in turn motivates learners to practice their writing skills more positively. Furthermore, it aids in the development of learners' intellectual abilities by enhancing their observation skills. However, the challenges associated with using DLC include feeling embarrassed to draw, particularly for learners who do not like to draw, and some learners require additional time to be able to draw well (Stefanini et al., 2022).

A few significant resolutions reduce the difficulty of using this strategy and enhance its benefits. These include instructors considering suitable and appropriate ways of grouping learners. Additionally, instructors should select engaging and relevant topics for argumentative writing to foster learners' critical thinking while they draw. Instructors of EFL should also be innovative and create a fun environment for learning (Pinto, 2023). Usually, EFL learners enter the classroom struggling to generate ideas about various English topics. Therefore, the role of the EFL instructors in classifying groups and choosing suitable topics that enable learners to engage in the process of learning is important for the successful usage of the innovative strategy (Muamaroh et al., 2020). A collaborative DLC served as an effective tool for learners to generate and discuss ideas related to argumentative topics, as well as to share and write about their

experiences based on the drawn phenomena. Thus, this research aimed to investigate the effect of a collaborative DLC on argumentative EFL writing.

A. *Argumentative Writing*

Argumentative writing is the ability to formulate an argument and convince the audience using the academic style of writing. It requires a professional and clear writing style to clarify the argument (Macagno & Rapanta, 2019). Therefore, argumentative writing is regarded as one of the most challenging writing styles, as it demands a high level of professionalism in writing skills. This style of writing necessitates a systematic approach to critical writing. Furthermore, university students must learn this type of writing to be able to discuss their perspectives on various issues (Huang & Jun Zhang, 2019).

To help learners write argumentative essays, they must be given a topic that originates from various resources (Ho & Li, 2018). This activity helps learners assess the different sides of the same issue. Also, it is necessary to provide the students with a map of the argument to help them organize their ideas and prepare them to make their arguments (Jonassen & Carr, 2020). Many researchers have stated that visual mapping enables learners to comprehend and organize their information and begin writing an argument. Visual maps also initiate paths for learners to go through them (Kinchin, 2016). Further, it helps learners to develop coherent ideas as well as foster deep thinking. According to Huang and Jun Zhang (2019), writing an argument with the help of a visual map helps learners find the relationships between issues (Huang & Jun Zhang, 2019).

However, Lam et al. (2018) stated that argumentative writing is quite difficult for learners since it requires them to show both the positive and negative sides of an issue (Lam et al., 2018). Sometimes, learners struggle to highlight one aspect of the issue, which can weaken their argument. In addition, Landrieu et al. (2022) perceived that argumentative writing has a weak level of persuasiveness and that it requires more development in systematic writing (Landrieu et al., 2023). Therefore, a collaborative DLC strategy aids learners in visualizing their ideas and comprehending and labeling visual elements. This strategy reduces the challenges of argumentative writing by combining collaborative and visual methods to enhance learners' writing.

Collaborative writing involves more than one learner working together on a piece of writing to share and organize ideas before writing them in a clear and coherent manner (Yusuf et al., 2019). According to Ghufron and Ermawati (2018), collaborative writing positively impacts learners' quality of writing. It further helps in developing learners' motivation and enthusiasm to write the argument (Ghufron & Ermawati, 2018).

Engaging in a dialogue through collaborative writing enables learners to elaborate on their opinions in person. It also leads to a discussion of several different perspectives, which are combined in their writing to further develop their argument. Discussion in groups also helps learners to support each other and apply writing strategies to the argument text. However, some learners do not respond well while working in a group; hence, support from the instructors is necessary in writing (Zhang, 2018).

Previous studies investigated whether collaborative writing had an impact on the self-efficacy of learners since it directs them to develop decision-making skills, brainstorm ideas, improve critical thinking, and enhance individual performance (Qiu & Lee, 2020). Thus, collaborative writing increases learners' motivation and creates a less intimidating environment (Yusuf et al., 2019). This research aimed to find out whether collaborative DLC improves learners' EFL writing. It further assesses whether the attitudes of EFL learners are necessary to help the instructors understand the learners' opinions, and whether the strategy needs to be improved to foster better results.

B. *EFL Learners' Attitudes*

Learners' attitudes toward the learning process are considered essential as they have an impact on their language learning. Getie (2020) stated that learners' attitudes impact their behavior when learning, such as the use of the native or target language (Getie, 2020). Thus, EFL teachers need to consider this factor when promoting EFL learning. Furthermore, achievement of the language practice not only depends on learners' abilities in the language; rather, it depends on learners' attitudes toward learning the language. It is further dependent on social communication. Hence, by promoting a positive attitude toward the language, learners enhance their performance. Zulfikar et al. (2019) conducted a study on learners' attitudes toward language learning and found that negative attitudes lead to weak performance in learning the English language (Zulfikar et al., 2019).

Several researchers have stated that learning the language is reliant on learners' attitudes and motivation alongside their intellectual abilities (Kim et al., 2019; Moskowitz & Dewaele, 2019). Thus, learners' attitudes must be considered by language instructors. This study aimed to explore learners' attitudes toward using a collaborative DLC strategy and its impact on their argumentative writing in EFL classes.

III. METHODOLOGY

To test the hypothesis, this study employed a quasi-experimental design and formed both a control and an experimental group. Based on the previous literature on a collaborative DLC strategy, the research null hypothesis is as follows:

H0: In the writing performance test outcomes, there is no statistically significant difference between the mean score of the experimental group that used a collaborative DLC strategy and the control group that did not.

According to Reichardt (2019), research design has four different types of categories: pre-experimental, true experimental, factorial experimental, and quasi-experimental (Reichardt, 2019). Studies related to education often use a quasi-experimental design, which includes pre-and post-tests (Maryam et al., 2021). Researchers primarily use this design to explore the effectiveness of new teaching methods and novel innovations (Gopalan et al., 2020). Therefore, in this study, the researcher employed a quasi-experimental design to evaluate the effectiveness of a collaborative DLC in argumentative writing and to gauge the attitudes of learners towards such a collaborative DLC. Therefore, the researcher conducted a semi-structured group interview to delve into these attitudes.

Random assignments were distributed between the experimental group and the control group, with both groups containing EFL learners studying English for academic purposes at Umm Al-Qura University. Writing an argumentative essay was an essential part of this course. The researcher examined the writing ability of both groups before implementing a collaborative DLC strategy. The writing test was administered to 63 EFL learners: 33 in the experimental group and 30 in the control group. The test involved writing an argumentative paragraph following the procedures of argumentative rules. Pre- and post-test questions are also presented in Appendix A.

Once the researcher conducted an argumentative writing pre-test for both groups, the control group was taught using the usual method of teaching argumentative writing, which involves providing learners with an argumentative topic and asking them to brainstorm and state their opinion of the argument before they begin writing. However, for the experimental group, a collaborative DLC strategy was applied. The strategy was employed twice a week for a period of eight weeks, and eight argumentative topics were applied during the second semester of 2022. When the researcher had chosen the topic for each week, the teacher distributed the handouts to the experimental cohort, which included six further groups of students. The number of learners in each group varied between five and six.

The handouts provided to learners helped them to follow the three stages of the DLC strategy. On the first page of the sheet, learners were able to draw a picture related to the topic. A space had also been provided to label each of the items in the drawing. At the end of the page, learners were asked to write captions of the pictures, for which they formulated sentences through the labels in the pictures. The caption included multiple sentences related to the drawn pictures. On the second page of the sheet, learners were asked to write an essay by combining the formulated sentences and clarifying their arguments. An example of the writing sheet distributed to learners is also presented in Appendix B. In addition, a few examples of learners' work on DLC strategy are shown in Appendix C.

In the final week of the term, before the final examination, the researcher administered a post-test to both groups, followed by a semi-structured group interview for the learners in the experimental group. The learners' attitudes toward the strategy are essential to developing the procedure for applying this policy to EFL learning. Furthermore, it aids EFL instructors in examining the challenges encountered by learners and the strategies they employ to overcome them. In the interviews, the researcher asked the groups a list of the following open-ended questions:

1. *Do you like working in a collaborative DLC strategy? Why?*
2. *How has a collaborative DLC strategy helped you improve your argumentative writing?*
3. *Do you enjoy learning through a collaborative DLC strategy in the EFL classroom?*
4. *What are the challenges of using a collaborative DLC strategy in EFL class?*

The researcher allowed the learners to speak freely and made notes of the highlighted issues. The learners expressed their attitudes toward a collaborative DLC strategy. The researcher explained to them that their attitudes would not only aid future researchers in their development but also aid instructors in their use of the strategy with other learners.

IV. FINDINGS

A. Quantitative Results

TABLE 1
DESCRIPTIVE STATISTICS
Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
Control Pre-Test	30	6.00	19.00	13.0333	3.59581
Control Post-Test	30	8.00	19.00	13.8000	3.58541
Experimental Pre-Test	33	6.00	18.00	13.2121	3.33314
Experimental Post-Test	33	7.00	19.00	14.6970	3.18674
Valid N (Listwise)	30				

In Table 1, above, the pre- and post-test scores for the control and experimental groups are summarized in the descriptive statistics. For the control group, the pre-test scores displayed a mean of 13.03 and a standard deviation of 3.60, ranging from 6.00 to 19.00, while the post-test scores showed a mean of 13.80 and a standard deviation of 3.59, ranging from 8.00 to 19.00. Within the experimental group, the mean scores for the pre-test were found to be 13.21 with a standard deviation of 3.33 and a range of 6.00 to 18.00, whereas the mean scores for the post-test were 14.70 with a standard deviation of 3.19, ranging from 7.00 to 19.00. The central tendency and variability of each group's pre-and post-test results are illustrated by these data. Notably, on average, the experimental group outperformed the control group on the post-test.

(a). Control Pre-Test and Post-Test

TABLE 2
CONTROL PRE-TEST AND POST-TEST

		Paired Samples Test					t	df	Sig. (2-tailed)
		Paired Differences							
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
Lower	Upper								
Pair 1	Control Pre-Test Control Post-Test	-0.76667	0.89763	0.16388	-1.10185	-0.43148	-4.678	29	0.000

According to the paired samples t-test results ($t = -4.678$, $df = 29$, $p = 0.000$), seen in Table 2 above, the pre- and post-test scores for the control group displayed a significant difference. The post-test scores of the control group showed an average decline of 0.77 units when compared to their pre-test results. This implies that the performance of the control group significantly varied between the examined time points.

(b). Experimental Pre-Test and Post-Test

TABLE 3
EXPERIMENTAL PRE-TEST AND POST-TEST

		Paired Samples Test					t	df	Sig. (2-tailed)
		Paired Differences							
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
Lower	Upper								
Pair 1	Experimental Pre-Test Experimental Post-Test	-1.48485	1.32574	0.23078	-1.95493	-1.01476	-6.434	32	0.000

In Table 3 above, a significant difference was observed between the pre- and post-test scores for the experimental group in the paired samples t-test ($t = -6.434$, $df = 32$, $p = 0.000$). In comparison to their pre-test results, the experimental group's post-test scores decreased by an average of 1.48 units. This suggests that the performance of the experimental group significantly varied between the assessed time points.

(c). Control vs. Experimental

TABLE 4
CONTROL VS. EXPERIMENTAL

		Paired Samples Test					t	df	Sig. (2-tailed)
		Paired Differences							
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
Lower	Upper								
Pair 1	Control Pre-Test Experimental Pre-Test	-0.26667	5.61361	1.02490	-2.36282	1.82949	-0.260	29	0.797
Pair 2	Control Post-Test Experimental Post-Test	-0.93333	5.48310	1.00107	-2.98076	1.11409	-0.932	29	0.359

In Table 4, above, no statistically significant differences were found between the pre- and post-test results for the control and experimental groups, as seen from the t-tests of the paired samples. Since the p-values were higher than the usual significance level of 0.05, the differences in mean scores between the control and experimental groups for both the pre-test and post-test were not statistically significant. This implies that there is no discernible difference in the performance of the two groups at any point in time. In the final analysis, both the control and experimental groups demonstrated significant performance changes from the pre-test to the post-test; however, there were no significant performance disparities between the two groups, suggesting that participant affiliation had no bearing on the alterations.

B. Qualitative Results

The results from the group interview indicated that nearly all participants in the experimental groups expressed satisfaction with the collaborative DLC technique. However, one of the groups indicated that, while they appreciated collaborative writing techniques, they did not prefer DLC because of its time-consuming nature. This helps us understand how the students feel about this method, as it's not the method itself that takes a lot of time; rather, it's the persuasive writing that takes longer to write than other forms.

The majority of learners believed that creating illustrations assisted them in structuring their thinking, hence facilitating the retention of associated terminology linked to these images. A cohort of questioned learners indicated that this method facilitated their acquisition of new words introduced by other group members, hence enhancing their EFL vocabulary

repertoire. Utilizing imagery to comprehend and acquire vocabulary enhances students' motivation to learn English as a foreign language.

In addition, it enables learners to discuss their thoughts with others during the first and second stages, which helps them to better understand each other. Therefore, the learners found that the collaborative DLC strategy enabled them to start discussing and writing more specific ideas related to the topic after they engaged in discussions. This strategy helped them organize their theoretical ideas gradually. Learners from Group 3 perceived that they liked working with this strategy since it helped them understand other learners' thinking. Then, they engage in a discussion to determine what illustrations they should use to clarify their arguments, which also helps keep their writing organized for the initial general argument. Next, they outline both sides of the argument, indicating who is in favor of and against the subject matter. This, therefore, mirrors the structure of their written text.

A group of learners believed that a collaborative DLC enabled them to learn from their spelling mistakes, as they were required to accurately label the drawing. Then they combine those words to formulate sentences. Therefore, learners believe that this process involves enhancing their writing from the beginning to the end. On the other hand, some of the students in one group stated that it would be better to write the argumentative text before they draw a few related pictures to it. These learners found it difficult to illustrate the topic and favored expressing their ideas in writing before creating the picture. Learners from Group 5 perceived that:

It was indeed an interesting strategy, but we began by writing the text first, as I found it difficult to generate ideas without first putting them down in writing. So, I suggest we start with the third stage of the strategy so that when we complete the text, we can draw a picture that reflects it. Since it was hard to think of ideas and draw them, the text gave us many ideas. (Group 5)

Further, some of the students perceived that a collaborative DLC helped them to share their ideas with other learners and state their arguments well. Since all the provided topics were argumentative, students could be either in favor of or against the topic. The learners did not mind if half of the group agreed and the other half disagreed. The consideration of all diverse viewpoints made writing beneficial for the learners. Group 4 perceived that:

Actually, we enjoy this approach, as we often encounter conflict in group work. However, this strategy enables us to actively listen to other learners and their diverse ideas. Even in the face of conflict, we can effectively present both sides of an argument, highlighting areas of agreement and disagreement within the argumentative text. Therefore, this strategy aids us in refining our argument writing skills and alleviates any concerns about potential conflicts. Ideally, we enjoy collaborating and crafting arguments using the DLC strategy. (Group 4)

Another interesting finding from the two groups was that when they drew a picture related to the argumentative topic, it helped them to focus on solely writing the items in the picture rather than thinking of other ideas. However, one of the groups observed that when learners discuss the topic, they often discuss various social and unrelated matters, which can take time away from completing the argumentative text.

Some groups stated that they learn how to write in stages, which enables them to enhance their writing skills. They cannot write an essay without labeling the pictures; thus, they need to prepare themselves for writing and collect suitable vocabulary. This helps them create sentences from the labels and combine them to form paragraphs. All these gradual processes helped the learners form meaningful argumentative texts. Without this technique, forming a meaningful argumentative text becomes a challenging task for the learners. Learners from groups 2 and 6 stated that:

This strategy enhances our writing skills by collecting vocabulary that we or other learners are familiar with. We need to understand the fundamentals of writing text, which involves gathering relevant vocabulary. I believe that a gradual approach to learning writing could be more effective, as we often find it challenging to construct coherent sentences that effectively convey our arguments. Therefore, this approach facilitates and simplifies the process of writing the text. (Group 2)

Drawing pictures before writing greatly aids learners in focusing on the topic at hand. We write the related vocabulary, and then we write sentences to make meaning of the vocabulary; then we think together to combine these sentences into text. This helps us stay more focused on the provided topic. (Group 6)

A final interesting finding from all groups was that a collaborative DLC strategy creates a fun atmosphere for learning, as it provides an unthreatening environment. It facilitates learners in listening to others who hold varying opinions. The learners then discuss their differences and draw their ideas. The majority of learners expressed that drawing helps them cooperate and work collaboratively, as they enjoy participating and creating their artwork. Some groups also mentioned coloring the pictures after drawing them to enjoy the DLC strategy. Therefore, a collaborative DLC strategy creates a fun environment for EFL learners.

V. DISCUSSION

There were no significant differences between the control and experimental groups in the handwriting post-test, but both groups showed substantial differences between the pre-and post-tests. This result contradicts other previous researchers (Sastrawati, 2015) who reported a significant effect of using DLC in teaching writing. The group interview revealed that nearly all experimental learners were satisfied with the collaborative DLC strategy. However, one of the groups expressed that, despite their preference for collaborative writing, they did not expressly favor DLC due to its time-consuming nature. Conversely, according to Vögelin et al. (2019), argumentative writing requires time to develop critical

thinking skills, and learners require planning and organizing the ideas before they state their arguments. The learners' sentiments toward this technique indicate that it is not the strategy itself that is time-consuming; instead, it is the process of argumentative writing that necessitates more time than other forms of writing.

The EFL participants demonstrated greater constructiveness in all three stages of the collaborative DLC technique, particularly when it came to writing assignments, and they experienced less intimidation from the challenges of task completion. The students recognized that collaborative drawing facilitated the brainstorming of ideas and their subsequent organization into a sequential text format. Moreover, it enables them to comprehend the learners' disposition toward the method as well as foster a favorable and engaging learning environment. Therefore, this study's result showed that drawing pictures assisted learners in organizing their thoughts, subsequently aiding them in remembering words associated with the pictures. This finding aligns with the findings of several other researchers (Mahn, 2016; William et al., 2019), who have observed that multimodal drawing, or writing through stages, effectively stimulates learners to compose meaningful sentences, which they then combine to form a paragraph.

Students believed the DLC approach helped them learn new words that other students in the group used, which improved their EFL vocabulary bank. EFL students are more likely to learn when they can use pictures to understand and learn words (Al-Khresheh & Alruwaili, 2020). Furthermore, Al-Khresheh and Alruwaili (2020) have found that learners tend to be more attracted to and visual-oriented, and they memorize better with pictures rather than written text.

Furthermore, the findings indicate that learners can engage in discussions with others during the learning process, which enhances comprehension. The learners discovered that the collaborative DLC technique facilitated more focused conversations and writing on the topic of interactive discussions while also allowing them to systematically organize their theoretical concepts. Many researchers (William et al., 2019; Burgett & Hendler, 2020) have stated that writing in stages helps learners connect their ideas with the drawing, thereby fostering meaningful concepts. Multiple modes also assist learners in assigning meaning to the text.

The results indicated that collaborative DLC facilitates the learning process by requiring learners to accurately label the drawing, which enables them to learn from their spelling errors. Then, they combine these words to create sentences. Consequently, learners are under the impression that this process entails the improvement of their writing from the outset to the conclusion. Burgett and Hendler (2020) assert that the process of writing through stages enables learners to clarify the keywords they should use in their writing before assigning meaning to these words.

Conversely, the results indicated that students in one group believed it would be more advantageous to compose the argumentative text before creating a series of related illustrations. These students encountered difficulty in creating a subject-related image and opted to record their thoughts before executing the drawing.

Moreover, a few students believed that a collaborative DLC facilitated the exchange of ideas with their peers and the effective presentation of their arguments. They could support or oppose all the polemical topics. The students found it beneficial to exchange diverse viewpoints, as it facilitated their writing practice. It was also found that drawing a picture connected to the argumentative topic could help students concentrate on writing the things that were in the picture. This result is in line with other previous findings, as Creswell and Baez (2020) observed that when they investigated the effect of drawing pictures on acquiring words, drawing images helped learners to become more focused on the task and involved in the process of learning (Creswell & Baez, 2020). However, the results revealed that students often discuss social issues unrelated to the topic, which prolongs the completion of the argumentative text.

The results showed that students learn how to write in steps, which helps them get better at writing. Furthermore, DLC helped them write an article by labeling the pictures, which helped them get ready to write and learn the right words. This enables them to utilize the labels to construct sentences, which they then combine to form paragraphs. All of these steps helped the students write an argumentative text that made sense. Without this method, it's challenging for them to do what they need to do.

One last interesting point that all groups agreed on was that a collaborative DLC approach makes learning fun, as it creates a safe environment. It's helpful for students to hear different points of view from other students. The students then discuss their differences and illustrate their thoughts. Most of the students stated that working together and cooperating benefits them, as many of them enjoy participating and creating artwork. Some groups also expressed that coloring the pictures after they are drawn enhances the enjoyment of the DLC approach. Therefore, a collaborative DLC approach enhances the enjoyment of English language learning for individuals. Using pictures in EFL learning brings excitement to the classroom and leads to positive attitudes of EFL learners (Ibrahim, 2022).

VI. CONCLUSION

While both groups showed significant differences between the pre-and post-test, the post-test of writing showed no significant differences between the control and experimental groups. However, learners in the experimental group perceived that a collaborative DLC strategy helped them enhance their writing and the process of learning argumentative texts in EFL classes. The three stages of a collaborative DLC strategy made the EFL participants feel more constructive about any given writing task, and they felt less threatened by the challenges of completing it. The learners perceived that drawing collaboratively helped them to brainstorm their thoughts and organize them as text in a step-by-step fashion. However, the learners only applied this strategy for eight months, which was insufficient to assess its effectiveness in their writing. Since writing skills are considered the most challenging aspect of EFL learning, it necessitates more time

for practice and improvement in learners' writing abilities. Therefore, this study proves to be crucial for EFL instructors, as it highlights the effectiveness of using DLC in argumentative writing. Further, it helps them to realize the learners' attitude toward the strategy, as well as learning in a positive and stimulating environment.

Furthermore, this study demonstrated the students' increased enthusiasm and enjoyment of the learning process during the development of argumentative paragraphs. In addition, the learners perceived that a collaborative DLC strategy helped them develop and increase their vocabulary bank when they went through the labeling stage. Developing arguments and reasoning was a significant problem for the learners, as they had not previously practiced critical thinking. In this study, a collaborative DLC strategy proved that critical thinking was effective in teaching argumentative text since learners engaged with thinking and discussion before formulating their ideas. Finally, this study proves important for EFL instructors to realize the effectiveness of using DLC in argumentative writing.

Concerning the study's limitations, the results' applicability to wider educational settings is restricted by the small sample size of 63 EFL students from a specific university. Although the eight-week collaborative Draw Label Caption (DLC) strategy intervention yields some initial findings, further time is required to fully comprehend its long-term impact. The study's other limitation is that the application of this strategy for only eight months was insufficient to assess its effectiveness in learners' writing. Writing skills, being the most challenging skill in EFL learning, necessitate more time for practice and improvement in learners' writing abilities. Furthermore, because the study's primary focus was on argumentative writing within a single course, its findings were not as applicable to other language skills or courses with distinct linguistic goals. The writing assessment's dependence on a single pre- and post-test is insufficient to fully represent the range of language skills. The subjective nature of attitude assessment through semi-structured group interviews introduces potential bias. Moreover, the fact that a single instructor conducted the study raises concerns regarding the findings' generalizability to various teaching philosophies. These restrictions highlight the need for care when extrapolating the study's findings and offer directions for future investigation to overcome them.

Therefore, there is a need to conduct more future studies of a collaborative DLC for a large sample of EFL learners. The study also suggests conducting further studies on the topic and applying a collaborative DLC strategy for a longer period. Furthermore, investigating the impact of the DLC strategy on other forms of writing could be beneficial for EFL literature. Another suggestion is to have future studies that investigate learners' motivations for learning EFL through DLC.

APPENDICES

A. Pre and Post-Writing Tests

Pre-Test for Writing

Video and computer games can negatively impact those who play them. Do you agree or-not, why? (write a short paragraph up to 200 words).

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Post-Test for Writing

Is online learning effective? Do you agree or not, why? (write a short paragraph up to 200 words).

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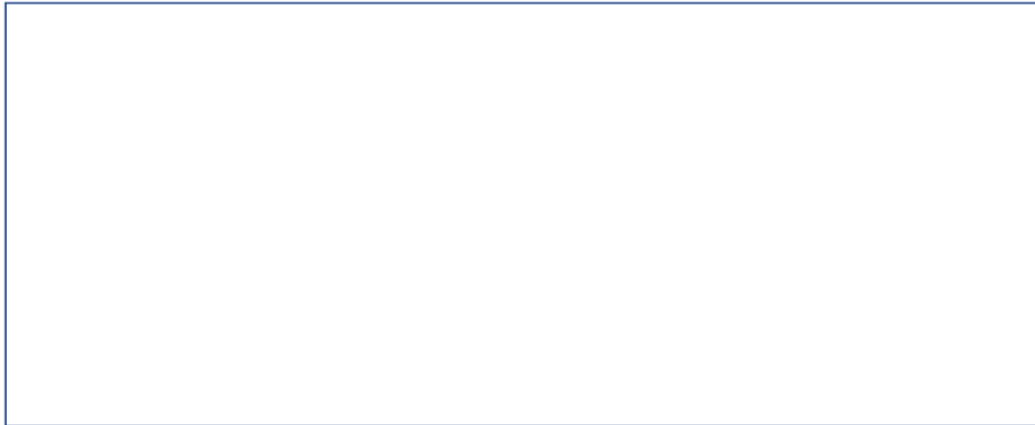
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B. Model of the DLC Template

The writing sheet

- ❖ **Draw a picture to collect ideas for thinking and discussing about this argument:
Money can buy happiness. Do you agree or no?**



Outlines for the main labels from the picture:

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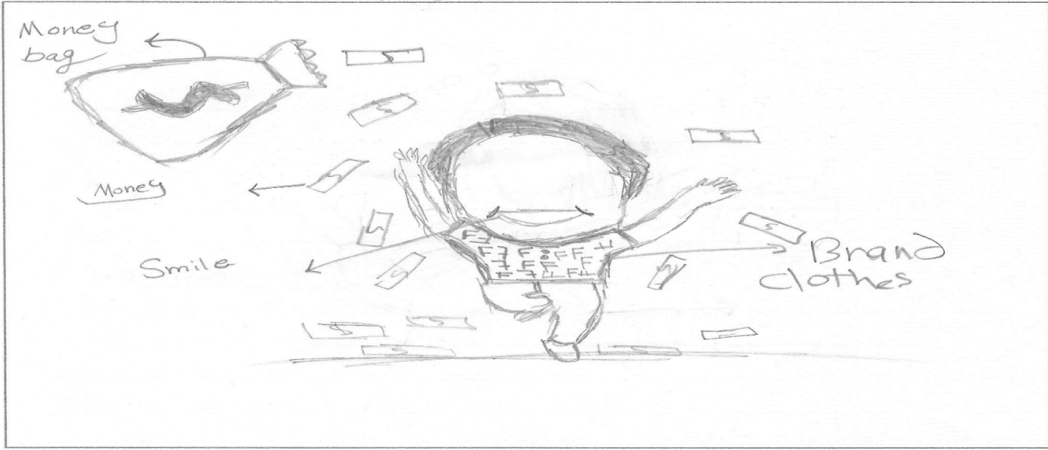
Writing the paragraph:

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C. Examples From the Students' Writing Task

④

❖ Draw a picture to collect ideas for thinking and discussing about this argument:
Money can buy happiness. Do you agree or no?



Outlines for the main labels from the picture:

- 1) Money bag: A small bag of leather or cloth in which coins and personal papers are kept.
- 2) Money: Concept of money as an active negative agent.
- 3) Smile: A smile is an expression of happiness, gratitude or welcome.
- 4) Brand clothes: With money you can buy expensive clothes.

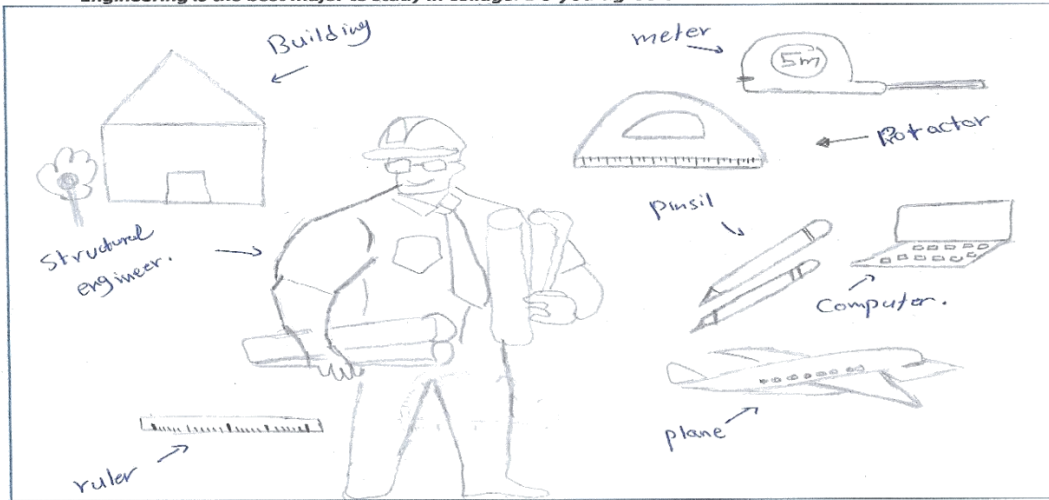
Writing the paragraph:

They say that happiness is not bought with money, which is true, but it is also true that money is able to buy "less sadness". Money may be a more effective tool to reduce sadness better than to get and enhance happiness.

I mean who doesn't smile and feel happy when he has a bag of money? Y.

Yes, money is not everything, but it can make you happy for sure.

❖ Draw a picture to collect ideas for thinking and discussing about this argument:
Engineering is the best major to study in collage. Do you agree or no?



Outlines for the main labels from the picture:

- (1) Protractor (Transducer measures angles)
- (2) Pencil (we can draw the urban project)
- (3) plane (Core Computer, but with development they have become easy)
- (4) Structural engineer (It's the architect who constructs the building)
- (5) ruler (The ruler contributes to the accuracy of drawing)
- (6) Meter (measuring the expected areas of the building)
- (7) buildings (Magnificent building increase City Aesthetic)

Writing the paragraph:

We strongly agree that it's an important specialization and study of engineering in our lives and our future because without it we can't live in wonderful homes, The such as the architect responsible for planning the city and giving a special and distinctive character to the city that increases the attraction of tourist. The engineer construct important buildings and using engineering can build ships, planes, and engineering interfaces in technology and computer. For these reasons engineering is the best major.

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