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Original Article

The Impact of Online Metadiscourse Markers Instruction on Iranian EFL Learners' Expository Writing: A Mixed Methods Study

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Abstract

Focusing on metadiscourse markers during EFL writing classes has garnered research attention, yet few studies were conducted on online expository writing. This study explores the effect of metadiscourse markers instruction on expository writing of 80 male and female EFL learners in the school context, selected through convenience sampling and an interview followed with a smaller number of participants. Initially, the eighty participants were assigned to experimental (n=40) and control (n=40) groups after checking homogeneity in terms of English proficiency level. The participants in the experimental group received explicit instruction of markers, whereas the control group received the conventional curriculum-based writing instruction that included similar material/topics, except for the explicit focus on metadiscourse markers, all through a uniform digital platform mandated in the state-run schools. The frequency/use of metadiscourse markers in the writing assignments of the participants per session and the total was noted, and then a corpus of 80 collected essays was analyzed by a trained rater and researcher to both analyze whether metadiscourse markers instruction had any significant effect on expository writings and to determine which metadiscourse markers showed up in the texts written by students more. Finally, a semi-structured interview was conducted with eight EFL instructors to explore their attitudes. Statistical test of Analysis of Covariance showed a significant effect of metadiscourse markers instruction on EFL learners' expository writing. Another finding was that participants employed interactional metadiscourse markers frequently. Implications for policy-makers, students, and teachers indicate that free access to online writing resources improves learning perceptions/outcomes.

Keywords: E-Platforms, Expository Writing, Metadiscourse Instruction, Metadiscourse Markers, Shad Application

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Introduction

Writing is the most daunting and difficult language skill since it needs conscious practice and effort in making, expanding, and analyzing ideas (Paltridge, 2019). Perhaps this is not surprising for learners with English as their mother language or as English as L2 either that the ability to write requires sophisticated and extensive instruction. Awareness of importance, has consequently made composition or essay writing a vital element in different universities and colleges (Bhowmik, 2021), and writing instruction continues to receive emphasis in the most recent research literature (Tajik et al., 2023).

Among various genres of writing, expository writing is a reasonably challenging type and is usually taught after narrative and descriptive writing are taught in academic settings. L2 learners need a skillful use of writing for performing complicated expository tasks because, through expository writing, one can explain and clarify complicated processes (Chen et al., 2020). Expository writing is regarded as a challenging writing type in different phases of drafting, while many L2 learners have difficulties comprehending and linking the contents presented through expository writing suggested that teaching expository writing seems to be insufficiently resourced, and thus the need for finding more ways to facilitate learning of expository writing is more vital now than ever.

An explicit focus on metadiscourse markers can raise awareness of learners about this vitality and can address part of the challenge and facilitate L2 writing. Metadiscourse markers are defined as words that facilitates writing a text, or the writer's comments about the text (Fatahipour et. al., 2020). In a broader sense, metadiscourse markers are regarded as the feeling as if the writer or reader is present in a text. This unusual feature brings about a capacity, which can be employed for educational purposes, and since the outbreak of the pandemic, in light of online writing classes through available platforms. The use of metadiscourse markers in online teaching means that the physical absence of the teacher is filled with digital tools that unfailingly amplify the shadow of the writer or reader in the text. The benefits for EFL teachers and learners span from eased access to expository writing tools and a strong perception among students that they need discourse markers to communicate effectively to the audience (other students as well as the teacher) who are not physically present in the immediate environment when they are in the online class. Thus, part of the problem is that many teachers do not employ proper strategies or methods for

teaching and reinforcing expository writing, and another part, is that few empirical studies have been concerned with this issue. Perhaps, online metadiscourse markers instruction can present one significant way to enhance the expository writing of EFL learners.

As of 2019, the shift in modality to online teaching seems to be more than a temporary urgency in educational settings, and parts of writing classes can continue to be conducted online through available platforms. Thus, an objective of this study can be to show how the focus on performing online teaching of metadiscourse markers use and different access options for students can be subsumed under Computer Assisted Language Learning (hereinafter CALL). It is well-known that employing computers for teaching a foreign language can enhance the motivation of students because they simply prefer a more gamelike and multimodal learning atmosphere over the traditional setting of the classroom in achieving pedagogical objectives. In general, computers can not only enhance simple activities with graphics but can also facilitate the teaching of more complicated activities with a combination of sounds, images, videos, animation, and flexible communication available. Above such visual and modal enhancements, utilizing computer-based applications also enables language learners to learn without the usual limits in terms of time and place.

2. Literature Review

2.1 Theoretical Framework

Discussions about writing genres go back in time as early as the 60s, when Kinneavy (1969) claimed that the choice of writing genre depends on the aim of discourse, whether it is to inform, persuade or demonstrate, etc. Accordingly, a typical distinction of expository writing from creative writing hinged upon the discourse aims, which are indispensable to the modern writer. Modern language scholars (e.g., Chen et al., 2020; Sasaki, 2002) analyzed various dimensions of expository writing processes among EFL learners in various contexts and concluded that expository writing is taught more academically than descriptive and narrative writing genres and that topics suited to formal education should be dealt with in expository writing practice. This paved the way for a general framework, where Hyland (2005) posited that communication concentrates on the attitudes, assumptions, and personal characteristics of those who want to take part in communication, and metadiscourse markers are an aid to

the writers to impart their emotion and feelings on the readers. Hyland (2017) pointed out that metadiscourse can be considered as the ways through which authors and speakers can interact by employing language to carry meaning to the audience. Taking stock of four decades of research on metadiscourse, Hyland claimed to have disentangled the conceptual complexity. Hyland (2018) further depicted the significance of metadiscourse in studying the structure of text and composition in a bigger picture. Metadiscourse markers like code glosses are said to be more frequently used in expository writing. To anchor the framework, statements by early scholars like Crismore (1989), emphasized that using metadiscourse makes the writers more aware of the writing process, which is a critical element to content, while expository writing is an indispensable genre for learners as a distinctively academic form of composing.

Since language is considered a framework through which people can carry their intended meaning, in both written as well as spoken forms, an early study on metadiscourse markers highlights that metadiscourse is at the service of an L2 writer, as a guide to foresee the readers' choice (Crismore, 1989). Mohamed and Rashid (2017) stated that metadiscourse markers arrange text content as well as its message by employing form and connectives an interaction between the readers and the writers for becoming more reader-friendly texts. Thus, these markers provide techniques of communication and interaction with the reader in a written text, and they are shown to be crucial in both external and internal arrangements of texts. Similarly, Hyland (2017) pointed out that metadiscourse can be considered as the ways through which authors/speakers can interact by employing the language and they try to carry the meaning to the audience.

The frameworks can integrate technology both in a general sense and in language learning dimensions and skills specifically. It is well-known that technology has changed the lives of people in many directions in general and has influenced education and language learning in particular. Computer Assisted Language Learning (hereinafter CALL) can be considered a framework for teaching and learning a language and includes tech-based applications that assist learners to learn a language skill with more facility (Tafazoli, et. al., 2020). We all experienced that the integration of audio, text, and sometimes video can make learning material effective for any learner and language skill. However, a more balanced view of technology-induced pedagogy includes humanistic concerns. For example, Anwaruddin (2018, 2019), presented CALL into the frameworks of use in such a manner

that requires ecological validity by emphasizing the humanistic as well as digital dimensions. In other words, the effectiveness of CALL for L2 writing skills lies in the power of interactive digital ecosystems and educational applications that facilitate the process of brainstorming, editing, and revising. It is only effective when educators are also willing/able to increase their availability by employing different social networks and presenting the feedback in various formats appealing to language learners which surpass the traditional obstacles in terms of choice of time, mode, and place.

2.2 Related Studies

Related studies in Iran in recent years can show the common concern of the present study issues in EFL teaching. For example, Shafiee Rad et al. (2022) investigated integrating flipped learning into EFL learners' expository writing. They concluded that employing online learning could be regarded as an effective way for enhancing EFL learners' expository writing. In another study, Rahimi Rad (2020) explored the employment of metadiscourse markers among argumentative writing Iranian EFL learners. A finding of the said study was that utilizing metadiscourse markers made the authors able to interact with the readers in a useful manner. Moreover, writers mainly used interactive markers in comparison to interactional markers.

In the same vein, in their study, Fatahipour et al., (2020) examined the impact of instruction of metadiscourse on narrative and descriptive writing of EFL learners. The final results of their study indicated that instruction of metadiscourse had a significantly positive effect on the narrative writing of EFL learners. Besides, it also had positive effects on their descriptive writing. In contrast, Gholami et al., (2014) investigated metadiscourse markers misuses by focusing on EFL learners' argumentative essays. They concluded that misuses of metadiscourse can be because EFL learners use them very frequently. They also showed that most EFL learners with higher levels of language proficiency employed metadiscourse markers in their writing properly.

Studies in EFL literature expand far beyond one country and can be considered a global EFL concern. For example, El-Dakhs (2020) explored metadiscourse variation in EFL learners' writing, with a focus on the learning contexts and language proficiency of the learners. The outcomes indicated utilizing metadiscourse had a strong effect on learning

context, while the effect was trivial concerning language proficiency. Moreover, significant differences in employing interactional and interactive metadiscourse markers among the three groups were shown. Besides, the organization of the essay of students became better after receiving the treatment. Earlier, Geta & Olango (2016) investigated the effect of blended learning on the writing skill of the students. In their study, they used online media for instruction and concluded that blended learning can significantly boost the writing skill of L2 learners. The effect of online teaching on L2 learners' writing was also shown in Carolan and Kyppö (2015).

In their study, Gholami, et al. (2015) investigated the effects of metadiscourse markers misuses on EFL learners' expository writing and their attitudes. The statistical results of their study showed that misuse of metadiscourse markers could be due to wrong use of some metadiscourse markers and it may be as a result of interlingual and intralingual errors. Furthermore, students believed that teaching metadiscourse markers can have a positive effect on their expository writing. Afshar et al. (2017) explored the realization of attitude and engagement markers in students' presentations. They pointed out that the most frequent engagement markers were 'you' and 'see'. These two items explicitly engage listeners and speakers. Attitude markers are less attended than engagement markers.

Literature also suggested that using technology in language teaching involves a clear focus on the real use of language in a reliable, authentic, and meaningful context as well as the interaction between internet users and learners around the world (Zaghlool, 2020). As a closing note, Jafarian, et al., (2012) claimed in a predictive way that the powerful role of technology in language learning is here to stay and so cannot be discounted anyway.

In sum and synthesis, the literature suggests that technology is inevitable for education in general, and language learning or expository writing is no exception for that matter. Specific features of academic writing and the expository genre make way for the use of digital tools and technology. This inevitability is not taken for granted although this is said to be boosted due to the shock of the pandemic but overall seems to be mostly mentioned as due to the normal progression in history and perhaps cannot be reversed from now on. However, the effectiveness of technology in fulfilling educational objectives and training balanced individuals depends on the context of technology use and the emotions of the humans involved. CALL is effective because learning with the help of computers can

facilitate both processes of learning and teaching a foreign language, and this is a double benefit to both language instructors and learners. Through using CALL, educators can enhance their availability by employing different social networks, whether asynchronously or synchronously. The teachers can present the intended content in different formats that offer to be interesting to language learners. Moreover, employing computers can be aligned with educational objectives more easily because both teachers and learners have access to authentic information.

In touch with all this, a word of caution against incorporating any technology at any cost is voiced in studies like Anwaruddin (2018, 2019), since humanistic factors and a positive attitude of serendipity and scaffolding should complement the technology use. In this study, exploring the effect of metadiscourse markers on EFL learners' expository writing was conducted through online instruction. Given the objective of the present study, the following research questions are formulated as follows:

- 1. Does online instruction of metadiscourse markers have any significant effect on EFL learners' expository writing essays? And which markers are more frequent in their essays?
- 2. What are the attitudes of Iranian EFL students and their teachers towards explicit teaching of metadiscourse and its online instruction?

3. Methodology

The current study used a convergent parallel mixed method design and it was composed of six phases (as described in Ary et al., 2010). Table 1, Phase one shows the pre-course quantitative and qualitative data collection and analysis. Phase Two was the 12-week online metadiscourse markers instruction course and during Phase Three, the researcher gathered and analyzed post-course quantitative and qualitative data. Phase four deals with additional qualitative data collection and analysis. Phase Five compared quantitative and qualitative data, and finally, during Phase Six, the whole corpus of data is interpreted and explained.

Table 1.Convergent Parallel Mixed-Methods Design (based on Ary et al., 2010)

Phase One	Phase Two	Phase Three	Phase Four	Phase Five	Phase Six
Pre-course	12-week	Post-course	Additional	Comparing	Findings
data	online instruction	data collection	analysis	data	
collection	msuucuon	& analysis	& Interpretation		

The quantitative constituent contained pre-course and post-course composition writing tests to determine the effect of the methods of online metadiscourse markers instruction on EFL learners' expository writings. The quantitative study in this research is quasi-experimental design (as explained in Ary et al., 2010). In this design, two groups of participants (i.e., the experimental group and the control group) were selected in a non-randomized manner. Thus, an experimental group + a control group were observed over time. In a Control Group, Time-Series Design was used. The qualitative component included semi-structured interviews with both students and teachers and a thematic analysis was employed to channel and analyze the qualitative interview data.

3.1. Participants

The pool of participants has age ranges from 16 to 18. Eighty out of 118 male and female EFL learners, at the intermediate level studying at a high school in Khuzestan, Iran took part in this study. To make sure that these learners are homogenous, an English proficiency level test was administered. After obtaining the results of the proficiency test, only those participants who scored 1 SD above/below the mean were chosen to participate in the study. These homogenized participants were assigned into two groups experimental and control with 40 learners each. These learners were of almost even several males/females within the approximate age range of 16 to 18, with Persian/Arabic as their mother tongue. One of the intact classes was assigned by a flip of a coin as an experimental group and the other as a control group. For the qualitative phase which aims to complement the quantitative data, the participants were the two teachers of both groups who were briefed about how and what to teach and not to teach but were asked to express their opinion freely and independently from

each other. Moreover, twelve randomly selected learners from the experimental group were also interviewed.

 Table 2.

 Demography of the Participants

Number of the initial participants	N=118
Number of the research sample	N=80
Number of the participants in the experimental group	N=40
Number of the participants in the control group	N=40
Age	16-18
Gender	Male and Female
Setting	High school/ Khuzestan
Mother Tongue	Persian/ Arabic

3.3. Materials and Instruments

To answer the research question, five instruments employed in this study included (a) Oxford Placement Test by Allan (2004), (hereinafter called OPT), (b Topics chosen from Preliminary English Test, (c) the Writing Scoring Scheme, (d) Semi-Structured Interview Protocol for Learners, and (e) the same interview protocol for Teachers. Together, they are used in a mixed-method design, and each is explained in the ensuing section. A topic for Pretest was asking the students to write the steps of making food, a cookie, or something else. It is a type of process, that explains how a process works or the steps the reader needs to follow to assemble something or complete another task. A Posttest topic was comparable and yet a different shade of expository writing, that is to explain the effective methods for studying to pass the university entrance exam. The learners were required to imagine a problem and a solution and write an explaining an existing problem and then explore the most effective solution for that problem. This kind of structure can also be found in persuasive writing, as well as expository writing, and it is frequently used in troubleshooting guides where a specific problem is to be solved.

3.3.1. Oxford Placement Test

The placement test (Allan, 2004) consists of 60 multiple-choice items which determine the learners' general language ability and is usually used to place the learners in their existing level for a language course. It features testing grammar, vocabulary, and the way language learners utilize that knowledge to understand the meaning in real communication, aiding them to practice using English naturally and self-confidently in real-world situations. Thus, since it is often used as a quick measure of the English knowledge of learners, it is the choice in this study.

3.3.2 Topic for Composition Writings as Pretest and Posttest

Two topic areas that were deemed suitable for intermediate learners were selected for writing practice focus in this study, and the students were asked to write expository essays of 250-300 words each. The content of the writing topics was considered by two specialists in L2 writing as dependable and credible topics. In addition, a pilot phase was conducted with 20 intermediate students to estimate the reliability of the assessed topics. The reliability of the writing Pretest and Posttest was measured to be .84 and .85 respectively through an interrater reliability method, as the two raters scored the essays. See Figure 3 in the Results section for further explanations about the reliability of the quantitative instruments.

3.3.3. Semi-Structured Interview Protocol for Learners and Teachers

The aim of the study is not only to explore the results obtained on statistical tests but also to explain the in-depth firsthand accounts of the attitudes of the participants gathered through the semi-structured interviews (based on protocols described by Ary et al., 2010). Twelve EFL learners and two instructors of the experimental/control group were interviewed. The teachers were well-experienced in teaching writing and interested in teaching metadiscourse markers, working in similar institutions. The semi-structured interviews were used to scrutinize how metadiscourse instruction impacts EFL writing in general and expository writing in particular. The interviewed participants also shared their ideas about the effectiveness of the online mode of instruction.

The dependability and credibility of the interview protocol were investigated through the review of the starter questions and then a set of other interview questions was tested. These items of the interview were evaluated by two university instructors (teaching EFL) in terms of comprehensibility, clarity, and relevance. Based on their feedback, the order of the questions was re-arranged and further probing questions were added, hoping to provide a more naturalistic or spontaneous atmosphere which can potentially increase the chance of themes to emerge in the interview process. Several questions in the instrument are found in need of modification according to the responses of the pupils and thus rectified for a more credible and dependable interview.

3.3.4. Materials for Teaching Metadiscourse

The materials used for teaching in the experimental and control group were mainly the English textbook designated by the state education authority. For the experimental group, part of the optional exercise and revisions were replaced with resources that purposefully included instances of metadiscourse to add the intended explicit focus. The researcher chose short passages suitable for intermediate students from available teaching materials. The criteria for the selection were the proper instances of the use of arranged tables used by Hyland (2005).

A basic version of a state-sponsored learning management system was allowed as the only platform for virtual education in state schools. In this system, students were required to attend online/virtual classes at scheduled times almost on par with what used to be in-person class times. The bespoke system has been designed and implemented by the Ministry of Education to organize students' virtual education and has not been provided in any virtual store so far, and the main access gateway is addressed at: https://shad.ir. And it has been launched by the end of March 2019, a month after the outbreak of the Coronavirus and the closure of schools, it is asynchronous and has a simple user interface for authentication of principals, teachers, and students for their input and does not possess the various features of the most available platforms which were additionally used in private-run schools, including the features in open-source and open-access platforms like BigBlueButton. In all, the researchers in the present study were well aware of the limits that the intactness of the

teaching material and digital tools mandates in a strict top-down system, yet the only way is researching to discover evidence, either in favor/against such practice.

3.4. Data Collection Procedure

Firstly, the researcher ensured the homogeneity of the participants through OPT administered to learners of a high school in a town in Khuzestan, Iran. The allotted time for the placement test was 55 minutes. Then, 80 learners with one SD above and below the average score were chosen in the mind of the researcher and the level of information was held in confidence to minimize any possible disruption to the natural flow of teaching to the intact classes and also protect their privacy. Then, each student was given a consent form indicating their express permission for research participation. In addition, they were ensured that their personal data and learning information is codified as anonymous and kept private, and would not be shared with the third party or government institutions. They were informed that they can opt out of the study without any consequence at any stage of the data collection and their marks do not have any adverse effect on their institutional evaluation thus all measures were taken as to the confidentiality of their data. All the foreseeable ethical dimensions of the research were addressed to the best knowledge of the researcher. The qualified participants were assigned into experimental and control groups of 40 learners each. The experimental group received metadiscourse markers instruction but the control group received a more textbook-based conventional way of teaching writing.

Following that, the writing section of a level test was conducted. A pre-test (a composition of 250-300 words) was also administered to the two groups. The compositions were rated by two trained raters independently and the teaching proceeded as follows:

As the first step before actual teaching, the detailed instructions on how to use metadiscourse markers with ample examples were carried out through the medium of the bespoke social networking app. to the experimental group while the control group kept on receiving the same number of messages in clarifying the conventional teaching by their teacher. A regular schedule was arranged and followed after negotiating with students. Students were exposed to many instances of metadiscourse markers by providing them with passages containing target metadiscourse markers. Students were provided with files containing passages for reading and discussed the topics and stories of the passages

afterward, mostly in the chatbox. Whenever appropriate, the discussion was initiated with the teacher asking questions about the content of the passages with a particular focus to target those areas that are associated with the use of metadiscourse markers. In each session, one passage was read and discussed plus a discussion of another extra passage that students were supposed to read and be prepared to discuss before the session followed.

As for practice, students immediately wrote an example (e.g., a sentence) for each metadiscourse marker that was taught and sent to the instructor. The instructor read the examples (sentences) and gave feedback (correcting false or confirming correct sentences) to the students regarding the correctness of their examples through the same channel individually.

Teaching for twelve sessions, which lasted 60 minutes each. Before beginning the intervention, the researcher also administered a writing test as the pretest to ensure the participants of both groups were the same concerning expository writing. In this test, the two groups were given the same topic. Then the teacher gathered the papers and corrected them.

The experimental group became familiar with a list of definitions and instances of English pragmatic discourse markers. The teacher remained vigilant during and throughout all sessions regarding the use of discourse markers in the writings of the experimental group. Finally, the posttest of the expository was conducted for the general writing proficiency of the participants as well as items that targeted knowledge of metadiscourse markers. Then, the student's scores on the pretest and posttest were compared to see the extent of improvement of participants within the group. Meanwhile, the two groups' scores were compared with each other to see the effect of explicit instruction of metadiscourse markers. The written essays were also analyzed based on metadiscourse markers use. The number of metadiscourse markers in the writings of the participants was counted, complemented with a more qualitative mode of analyzing the text of a corpus of 80 essays, and the effective use of metadiscourse markers was observed in their expository writings.

At last, a semi-structured interview was performed on 12 learners in the experimental group to determine their perception regarding the employment of online metadiscourse markers instruction to improve writing proficiency. Then, another semi-structured interview was conducted with 8 EFL instructors (2 instructors of the experimental group in the current

study, and 6 other instructors to find out more about their teaching and views of metadiscourse marker instruction).

3.5. Data Analysis Procedure

In this study, the researcher used both qualitative and quantitative analysis. Two quantitative sources were used. Pre-course composition writing test results indicated there was not any significant difference between the participants of both groups on the pre-course survey. When the course finished, participants took the post-course composition writing test. Using SPSS Software V.25, descriptive statistics have presented frequency counts for different types of metadiscourse markers, and mean, standard deviation, and standard error of means for writing scores. One-way Analysis of Covariance (one-way ANCOVA) was run to see if there are any significant differences in writing proficiency of the two groups from the precourse to the post-course as the result of the metadiscourse markers instruction course. One-way ANCOVA was used since according to Pallant (2013, p. 308), ANCOVA can be used when you have a two-group pre-test/post-test design (like the current study). The scores on the pre-test are treated as a covariate to 'control' for pre-existing differences between the groups.

Having conducted that, a thematic analysis procedure was employed on qualitative data. In this regard, Boyatzis (1998) pointed out the importance of a thematic analysis for making sense of seemingly unrelated issues. This study employed a six-phase procedure for thematic analysis introduced by Braun et al., (2015, pp. 188-189) to analyze the qualitative data from interviews. In phase one, the given text were perused several times to determine items of possible interest. In phase two, the first codes recognized as crucial data-points relating to the research question(s) were created and coded assigned reliably across segments. In phase three, the codes were inspected and organized to recognize wider meaning patterns to explore themes. In phase four, the assigned themes were reviewed and analyzed if they tell a persuading story that can answer a research question; noting that themes may be split, integrated, or even cast off. Phase five, the themes were named and a comprehensive analysis of each theme was conducted; and finally as phase six, a report weaving together the data segments and analytic narrative to relate the analysis to related literature was produced.

4. Results

In this section, the homogeneity results obtained through OPT are presented and then the main results answering the research questions are elaborated on in detail.

4.1. Homogeneity of Participants through OPT

The results showed that the type of expository writings chosen influenced the type and frequency of metadiscourse markers used by learners. Administering OPT helped select relatively homogeneous intermediate participants, details for which are outlined in Table 3. The mean, median, and mode before homogenizing were 33.28, 38, and 35 respectively. These central parameters are close to one another denoting that the OPT scores are normally distributed around the mean. Moreover, according to Table 3, the ratios of skewness and kurtosis over their respective standard errors are not beyond the allowed ranges of +/- 1.96 showing that the scores are normally distributed. Based on these results, 80 learners who scored one standard deviation (SD= 7.38) plus and minus the mean (M = 38.28), or scores between 31 and 46 were chosen as homogeneous intermediate participants for the main study.

Table 3.Descriptive Statistics for OPT Before Homogenizing

N	Mean	Median	Mode	SD	Skewness Ratio	Kurtosis Ratio
118	38.28	38.00	35	7.38	246	.830

Figure 1 below displays the distribution of the homogeneity test scores on a normal curve. As can be seen in the Histogram, most of the OPT scores are located around the mean in the center of the curve, and then there are only a few minimum and maximum scores on the two sides of the curve forming a bell-shaped curve. The results indicate the normal distribution of the scores around the mean.

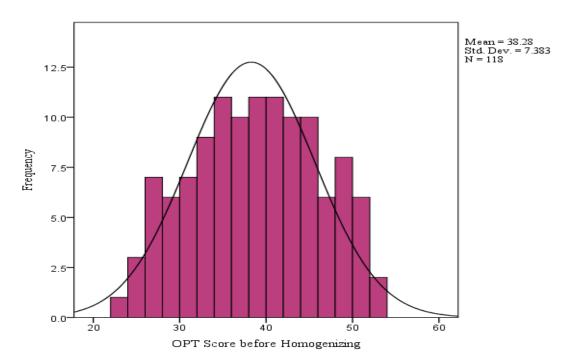


Figure 1. Histogram of Normal Distribution of OPT Scores before Homogenizing (N = 118)

Table 4 below represents the descriptive statistics for OPT score after homogenizing. As shown, the mean, median, and mode of the OPT scores after homogenizing were 38.55, 38.50, and 35 respectively that are very close to each other showing normality. In addition, as evident from Table 4, the ratios of skewness and kurtosis over their respective standard errors are within the ranges of +/- 1.96 denoting the normal distribution of the OPT scores.

 Table 4.

 Descriptive Statistics for OPT Score after Homogenizing

N	Mean	Median	Mode	SD	Skewness Ratio	Kurtosis Ratio
80	38.55	38.50	35	4.47	053	-1.832

The distribution of the OPT scores before homogenizing was drawn on a normal curve (Figure 2). Like the previous histogram, the one below indicates that most of the OPT scores are recorded around the mean in the center of the curve, and there are few minimum and

maximum scores on the two sides of the curve forming a bell shape. It reveals the normally distributed scores.

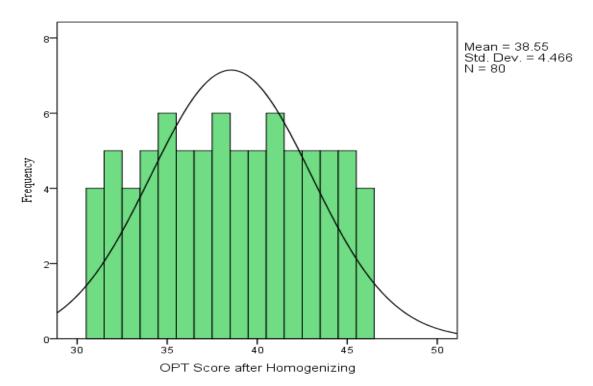


Figure 2. Histogram of OPT Scores after Homogenizing (N = 80)

Figure 2 shows the selected students were divided into equal experimental (n = 40) and control groups (n = 40) based on their OPT scores. An independent-sample t-test confirms the homogeneity of the experimental and control groups by four assumptions of interval data, independence of subjects, normality, and homogeneity of variances. Table 5 indicates that the ratios of skewness and kurtosis over their respective standard errors for the two groups' OPT scores are within the ranges of +/- 1.96, denoting that the scores did not violate the normality assumption. In addition, Table 5 shows that the mean score of the experimental (M = 38.68, SD = 4.72) and control group (M = 38.43, SD = 4.24) is not far from each other .

Table 5.Descriptive Statistics of the Two Groups' OPT Scores

Group	N	Mean	SD	SEM	Skewness Ratio	Kurtosis R
Experimental	40	38.68	4.725	.747	137	-1.395
Control	40	38.43	4.248	.672	010	-1.710

The results of independent samples t-test appeared in Table 6, indicating that the hypothesis of equal of variances was met since the significance value associated with Levene's Test (.33) exceeded .05. Additionally, no statistically significant difference in the proficiency measures between the experimental and control groups ($t_{(78)} = .25, p > .05$) were found. Thus, it can be concluded that the students in the experimental and control groups are homogeneous in terms of English language proficiency.

Table 6.Independent Samples T-test for the Two Groups' OPT Scores

Levene's Test for Variances			T-test for Means				
\overline{F}	Sig.	t	df	Sig. (2- ta	iled) Mean Diff.		
Equal variances assumed .977	.326	.249	78	.804	.250		
Equal variances not assumed		.249	77.13	.804	.250		

To explore the effect of the markers' instruction on EFL learners' expository writing, ANCOVA was conducted for two groups with the pre-test/post-test design (e.g., comparing the impact of different interventions, taking before and after measures for each group). The

scores on the pre-test are dealt as a covariate to control for pre-existing differences between the groups. The assumptions for this statistical test includes no influence of treatment on covariate measurement, reliability of covariates, no strong correlations among covariates, linear relationship between dependent variable and covariate, equality of error variances, normality, and homogeneity of regression slopes. Since the covariates were measured prior to the treatment, they could not be influenced by the treatment. Therefore, this assumption was not violated. In addition, there was only one covariate in each ANCOVA. Hence, the assumption of correlation among covariates was not applicable.

To check the assumption of the reliability of covariates, Pearson product moment correlation was conducted and the results showed the covariate was measured reliably (r = .864, inter-rater reliability). Moreover, the assumptions of linearity of the relationship between dependent variable and the covariate, and the homogeneity of regression slopes were also checked. In Figure 3, the linearity is assuming the relationship between the dependent variable (post-test expository writing) and the covariate (pre-test expository writing). As seen in the scatterplot of Figure 3, the requirement of linearity is fulfilled since the two lines are straight.

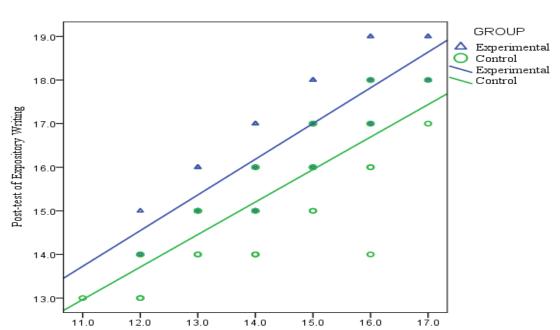


Figure 3. Scatter Plot of Pre-Test and Post-Test of Expository Writing

Pre-test of Expository Writing

Table 7 reflects that the significant value associated with Levene's test (.83) exceeded the selected significant level (.05) and so the homogeneity of variance assumption was not violated for expository writing scores in the two groups. Table 8 represents the two groups' skewness and kurtosis and their ratios over the standard errors for expository writing scores on both pre- and post-test. Since all ratios were within the ranges of +/- 1.96, it was concluded that the assumption of normality was met.

Table 7.Levene's Test of Equality of Error Variances for Expository Writing Scores by Group

Levene's Statistic	df1	df2	Sig.
.045	1	78	.833

Table 8.Skewness and Kurtosis Indices of Normality for Expository Writing Scores

Test	Group	Skewness	Std.	Skewness	Kurtosis	Std.	Kurtosis
		Statistic	Error	Ratio	Statistic	Error	Ratio
Pre-test	Exp.	202	.427	473	76	.833	912
	Cont.	516	.427	-1.208	224	.833	269
Post-test	Exp.	66	.427	-1.546	.193	.833	.232
	Cont.	.012	.427	.028	879	.833	-1.055

As set forth in Table 9 below, the results indicated that the significance level of the interaction (Group * Pre-test) between group and the pre-test of total expository writing was above .05 ($F_{(1,76)} = .050$, p > .05) and, therefore, not statistically significant. This means that the pre-test and post-test of expository writing scores in the two groups fulfil the assumption of homogeneity of regression slopes. Since all ANCOVA assumptions were met, the one-way type is used. Descriptive statistics including the number of students, mean, standard

deviation, and standard error of means for the expository writing scores in the experimental and control groups were summarized in Table 10, showing that the mean of expository writing in the experimental group (M = 14.84, SD = 1.44), and control group (M = 14.52, SD = 1.46) are not far from each other on the pre-test. Nonetheless, the mean of expository writing in the experimental group (M = 16.92, SD = 1.35) is higher than the mean of the control group (M = 15.67, SD = 1.37) on the post-test. It must be noted here that two raters marked the essays and the average of the two raters' score was computed and used in this analysis.

 Table 9.

 Homogeneity of Regression Slopes for Expository Writing Scores

Source	Type III Sum of Squares	of Df	Mean Square	F	Sig.	Partial Eta Squared
Corrected Model	133.568	3	44.523	80.123	.000	.760
Intercept	16.697	1	16.697	30.047	.000	.283
Group * Pre-test	.028	1	.028	.050	.782	.001
Error	42.232	76	.556			
Total	21431.000	80				
Corrected Total	175.800	79				

Table 10.Descriptive Statistics of Expository Writing Scores on Pre-test and Post-test by Group (Average of the Two Raters)

Test	Group	N	Mean	SD	SEM
Pre-test	Experimental	40	14.84	1.44	.227
	Control	40	14.52	1.46	.231
Post-test	Experimental	40	16.92	1.35	.213
	Control	40	15.67	1.37	.217

In order to depict the results of both pre-test and post-test for the two groups in terms of expository writing, a Line Chart (Figure 4) was made. As it is observable from the Line Chart, the means of expository writing in the experimental and control groups are much closer to each other on the pre-test than on the post-test, where the mean of expository writing for the experimental group is considerably larger than that of the control group.

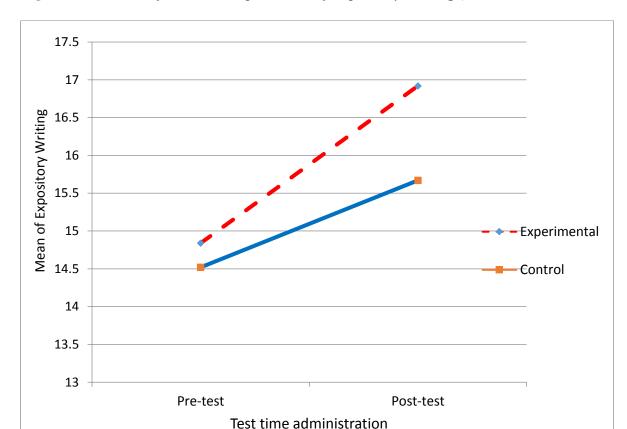


Figure 4. Line Chart for Two Groups' Means of Expository Writing (Pre-Test & Post-Test)

As the next step, Table 11 summarizes the results of the ANCOVA. After adjusting for the expository writing scores on the pre-test, there was a significant difference among the expository writing means of the two groups on the post-test ($F_{(1,77)} = 36.25$, p = .000, partial eta squared = .32). As a result, it can be claimed that instruction of metadiscourse markers improves EFL learners' expository writing. As evident from Table 11, there was a strong relationship between the pre-intervention and post-intervention scores on the expository writing ($F_{(1,77)} = 36.25$, p < .05). This means the expository writing scores gained on the pre-test affect the expository writing scores obtained on the post-test. Additionally, Table 11 shows that the partial eta squared (effect size) value is .32.

Table 11.Tests of Between-Subjects Effects on Expository Writing

Source	Type III Sum of Squares	df	Mean Squar	reF	Sig.	Partial Eta Squared
Corrected Model	133.541	2	66.770	121.661	.000	.760
Intercept	16.747	1	16.747	30.514	.000	.284
Pre-test	102.291	1	102.291	186.382	.000	.708
Group	19.897	1	19.897	36.253	.000	.320
Error	42.259	77	.549			
Total	21431.000	80				
Corrected Total	175.800	79				

Moreover, the frequencies of interactive metadiscourse markers used in writings of the experimental group were counted before and after instruction; the results of which are demonstrated in Table 12. The occurrence of all seven types of interactive markers has increased form the pre-test to the post-test. The most dramatic increase from the pre-test (f = 1) to the post-test (f = 31) was observed for the 'code glosses' type with the gain rate (estimated by post-test divided by pre-test) of 31 times, followed by 'Frame markers (announce goals)' (4 times), 'Frame markers (shift topic)' (2.8 times), 'Frame markers (label stages)' (2.7 times), 'Endophoric' (1.7 times), and then 'Transition markers' (1.5 times). Still, too unexpectedly, the rate of 'Frame markers (sequencing)' (-5.4 times) decreased dramatically from pre-test (f = 111) to post-test (f = 60). In all, the occurrence of interactive meta-discourse markers improved considerably from the pre-test (f = 347) to the post-test (f = 466) with the gain rate of 1.3 times. Finally, the results indicated that no 'Evidential' interactive metadiscourse marker was employed on both pre-test and post-test.

Table 12.Frequencies of Interactive Meta-Discourse Markers before and after Meta-Discourse Instruction in Expository Writing

		Type	of Interactive	Meta-Disco	ourse Ma	rkers			
	Code glosses	Endophoric	Frame markers (sequencing)	Evidential		Frame markers (announce goals)		Transition markers	T otal
Pre- test	1	10	111	0	6	0	5	214	347
Post- test	31	17	60	0	16	4	14	324	466
Total	32	27	171	0	22	4	19	538	813
Gain Rate	31.0	1.7	-5.4	0	2.7	4.0	2.8	1.5	1.3

On the other hand, the frequencies of interactional meta-discourse markers were computed before and after meta-discourse markers instruction; the results of which are represented in Table 13, and the incidence of all five types of interactional markers in the expository writing has augmented from the pre-test to the post-test phase. The most noticeable increase from the pre-test (f = 1) to the post-test (f = 31) was detected for the 'Attitude markers' type with the gain rate (estimated by post-test divided by pre-test) of 59 times, followed by 'Boosters' (10.3 times), 'Hedges' (3.8 times), 'Engagement markers' (3.3 times), and then 'Self-mention' (1.7 times). In general, as demonstrated in Table 13, the use of whole interactional markers improved considerably from the pre-test (f = 176) to the post-test (f = 537) in the expository writing with the gain rate of 3.1 times. In all, the use of interactional markers from the pre-test to the post-test (gain rate = 3.1 times) raised more starkly than the interactive ones (gain rate = 1.9 times) in the expository writing.

Table 13.Frequencies of Interactional Meta-Discourse Markers before and after Meta-Discourse Instruction in Expository Writing

Test time	Type of Interactional Meta-Discourse Markers					Total
	Attitude markers	Boosters	Self-mention	Hedges	Engagement markers	_
Pre-test	0	3	81	5	87	176
Post-test	59	31	141	19	287	537
Total	59	34	222	24	374	713
Gain Rate	59.0	10.3	1.7	3.8	3.3	3.1

To investigate the second research question, the responses of two teachers and twelve learners from the experimental group to the interview questions were analyzed using thematic analysis to qualitatively explore their attitudes towards effectiveness of explicit focus on metadiscourse markers in teaching expository writing. Each statement was read by three raters in order to draw out the underlying meaningful concepts/themes in it. The significant themes that emerged from this qualitative analysis included the metadiscourse markers effectiveness, necessity and the appropriate level of learners for their instruction as well as points about instruction in respect to the available platform and advantages of online instruction for teaching and learning writing.

The first theme among both learners teachers interviewed was that teaching metadiscourse markers is very useful because they are meaningful and essential words that connect the dots and improve writing. Most students were satisfied to learn about their expository writing while they demanded more practice on usage provided by teachers who were described as diligent but were not perceived as very confident about the actual use of markers in communication.

The second theme that was shown in the data from the interviews was that the participants considered learning through metadiscourse markers as interesting because they

are placed in a way to facilitate communication and express the writer's attitudes and mental shifts. They mentioned that although metadiscourse markers may hard to master for beginners but they'd better be taught and incorporated in the curriculum and textbooks of pre-intermediate or upper-intermediate EFL learners because they are useful shortcuts that have power to shape writing.

The third theme was about attitudes to online instruction. Both teacher and students agreed that online teaching has at least some advantages over traditional teaching of writing because they have access to everyone else's essays for as long as they want and feel better when they see more models and examples. Yet, almost all had reservations about how to conduct online instruction and their optimal scenario is when more digital options and facilities are provided by the school and more interaction is provided by the teacher to avoid boredom. The reason they perceived for restrictions are cited as insufficient awareness of policy-makers regarding the great capacities of other tools, often available open-source or otherwise obscure security policies that at least created a misunderstanding about the available potentials, between the stakeholders.

5.Discussion

The statistical analysis and qualitative findings of this study demonstrates the impact of metadiscourse markers instruction on Iranian EFL learners' expository writing. It is also confirmed that the general attitudes towards the use of online metadiscourse instruction are positive with a number of reservations regarding the choice and functionalities, detailed below. It is also found that the participants of the experimental group employed more interactional than interactive metadiscourse markers. In other words, boosters, hedges and engagement markers are used more than frame markers, transitions, code glosses and evidential. Among interactional metadiscourse markers, engagement markers has been employed more than other interactional metadiscourse markers in both pretest/posttest, since 'you' was the most-frequent word, while hedges were employed the least. Concerning the expository writing among interactive metadiscourse markers, transitions markers were used more than others, and the word 'and' was the most-frequently used word, while evidentials were employed the least.

The outcomes of the present study is in line with findings of a number of scholars in literature, e.g., Chen et al., (2020); Sasaki, (2002), Expository writing is shown to serve a function that was previously shown by Bhowmik (2021) who describes as learning to write as well as writing to learn a language. Also aligned with findings of Rahimi Rad (2020), EFL learners used interactive markers more in than interactional markers. Significant differences in the employment interactional and interactive metadiscourse markers were also found in El-Dakhs (2020).

The findings of current study are in line with a previous study by Fatahipour et al, (2020) who found a significant impact of instruction of metadiscourse on narrative and descriptive writing of EFL learners. Narrative writing could be seen as akin to expository writing. The results of this study further confirms findings in international contexts (Hyland, 2018; Mohamed & Rashid, 2017) as well as local studies (Shafiee Rad et. al., 2022). In line with the outcomes of this study, Taghizadeh & Tajabadi (2013) investigated metadiscourse in essay writing of EFL learners, finding that teaching metadiscourse to EFL learners have positively influenced their essay writing. The findings can also be aligned with Afshar et al. (2017) who found engagement markers such as 'you' and 'see' as most frequent.

At first sight, the results of this study align with Geta & Olango (2016) who employed online social network for reinforcing writing skill of their students and Carolan & Kyppö (2015) who showed the effectiveness of online learning on EFL learners' writing skill. Undoubtedly, the four emerged themes that were explained in the previous section indicate an overall positive attitude to both the markers and their online instruction. However, the discrepancies in attitudes can be envisaged and explained in a different way, too. As for online instruction, there are two general theories that require further scrutiny, namely determinism and instrumentalism, which are applicable in respect to CALL perspectives. The first one emanates from technological determinism and states that technology is a foundational ultimate force in shaping social and cultural values while technological instrumentalism as the competing perspective which views technology as a toolbox that a mindful human can employ whenever and wherever necessary and useful without ever denying the important role/effect of technology in every aspect of modern life. Arguably, education is too complex to be determined or to have a cause and effect relationship with technology. The pressure from policy makers to make technology look good at any cost has limited the researchers to only look at positive effects of any technology

at the price of ignoring human agency. Once again, it should be clarified that no one is or can afford to be against the comfort technology brings about; however, we need to take other important human factors into account (Anwaruddin, 2018).

While the findings of this study confirm the obvious benefits of using online tools in somewhat approximating the atmosphere of classroom and attitudes towards using CALL online writing activities in teaching writing (Zaghlool, 2020; Jafarian, et al., 2012), they also pose a question to top-down administrators/policy-makers who do not often seek timely feedback from the teachers/students. The expected synergy required for the ideal positive attitude conducive to learning is in willingness to communicate with teachers/students as actual digital tool users. Otherwise, insufficient awareness of the great capacities of other tools, often available open-source or obscure security policies, as mentioned before, would minimize the positive role of integrating technology. In light of the above, the place of technology in form of online instruction needs to be viewed as one of the important factors that continues to impacts learning after the pandemic phasing out. No need to mention that resorting to online learning in short notice, at any rate, will always remain a emergent necessity - due to threats of global warming such as air pollution, etc. In the other extreme; however, it should be noted that considering technology as an autonomous/sole determiner of what happens in learning is unrealistic. All individual, sociocultural and political factors need to be taken into consideration when using any technology for learning. For example, putting teachers and learners under direct or indirect pressure to use a certain state-owned application may backfire in a noticeable way and negatively impacts online instruction and thereby, reduces the possible benefits it could have been achieved otherwise. It is acknowledged that using a certain limited set of digital tools can only serve admin jobs and work-related correspondence with some level of confidentiality. However, for nationwide general educational purposes, it is hardly conceivable/justifiable to let go of all open-access and strong international digital tools and suffice to a mediocre option, and quote some reason that may be interpreted as a protectionist policy at best. Finally, these findings also aligns with what author offers in a later publication (Anwaruddin, 2019) as a dialogic approach to instruction using other digital tools like social media but discourages blind following and claims that online instruction can be based on a principle of discovery learning, that is, attitude of serendipity, resourcefulness, and scaffolding.

6.Conclusion

As the statistical significance showed the positive impact of explicit teaching of metadiscourse markers on expository writing of EFL learners, it can be concluded that such practice can assist EFL learners to perform better in expository essay writing. Therefore, language teachers perhaps use this rare resource to assist their L2 learners for boosting their expository writing among metadiscourse markers, and no wonder the interactional ones were improved more than the interactive ones, as the comparisons showed. The most noticeable increase from the pre-test (f = 1) to the post-test (f = 31) was signified for the 'Attitude markers' type with the gain rate (estimated by post-test divided by pre-test) of 59 times, followed by 'Boosters' (10.3 times), 'Hedges' (3.8 times), 'Engagement markers' (3.3 times), and then 'Self-mention' (1.7 times). Furthermore, it is worth mentioning here that the online mode of instruction could have removed the conventional obstacles of time and place and many access issues and is a further confirmation of the rather obvious statement that free internet should be a basic right for all, anywhere in the world. Students showed different attitudes to online instruction and platforms, most likely due to long-standing social or emotional barriers in certain schools. EFL learners can experience learning different language skills by utilizing technological aids to satisfy what they themselves see as their needs.

A contribution of this study is in classroom implications for both teachers and learners. For L2 learners, online instruction provides more opportunities to communicate in written forms with authentic material as well as their teachers and classmates more freely because of the access options it provides. It is perhaps effective for L2 teachers as they are already generally aware of the usefulness of employing online instruction for EFL learners' but may not be necessarily aware of the potential that lies in various genres of writing skill in particular. Raising awareness of writing conventions through discovery of metadiscourse markers in discourse is a useful by-product. Therefore, an explicit use of metadiscourse can contribute to learners' writing skills. Furthermore, EFL teachers should find themselves in a position to assess the effectiveness of online instruction and employ various online platforms and discover the ideal scenario/tools for presenting metadiscourse markers to their learners. Familiarizing the students with the metadiscourse markers can be a factor to improve accuracy and coherence of compositions. The outcomes of the current study could be beneficial for many local undergraduate students of 'English Literature', 'English Teaching'

and 'English Translation' majors, which are the fields widely available and immensely popular in Iran. The outcomes of the study can also provide a number of pedagogical implications beyond EFL teachers and learners, to what is traditionally the realm of curriculum developers, syllabus designers and policy-makers in that they should not underestimate the role of online access options for a successful programme because classroom life depends both on the teacher's conscience in integrating useful materials and tech-savvy mode of education that provides for inclusive rather than exclusive options.

The limitations in this study was the ability to work on a specific writing genre, within intact classrooms, prescribed learning materials, platform and tools. Further study is necessary to find out how Iranian writers from different disciplines/contexts vary in their employment of online metadiscourse markers or other writing genre, e.g. descriptive, persuasive, and argumentative, etc. The current study was conducted on the available intermediate-level learners selected from a state-run school, in the hope of adding a useful learning element to their already-planned instruction. Further studies could be conducted in rural/urban areas, focusing on EFL learners with different language proficiency levels. Finally, further research could be replicated with a focus on other digital tools and online applications.

References

Afshar M. A., & Ebrahimi, S. F. (2017). Realization of attitude and engagement markers in students' presentations. *International Journal of Applied Linguistics and English Literature*, 6(2), 73-77.

Allan, D. (2004). Oxford placement test 2 (Vol. 10). Oxford University Press.

Anwaruddin, S. M. (2019). Teaching language, promoting social justice. Calico Journal, 36(1), 1-18.

Anwaruddin, S. M. (2018). Beyond determinism and instrumentalism: Re-conceptualizing technology for CALL. In *Applications of CALL theory in ESL and EFL environments* (pp. 22-35). IGI Global.

Ary, L. C., & Sorensen, C. (2010). Introduction to research in education. Cengage Learning.

Bhowmik, S. (2021). Writing instruction in an EFL context: Learning to write or writing to learn language? *BELTA Journal*, *5*(1), 30-42.

Boyatzis, R. (1998). Transforming qualitative information: Thematic analysis and code development. Sage.

- Braun, V., Clarke, V., & Rance, N. (2015). How to use thematic analysis with interview data. In. Vossler, A. & Moller, N. *The Counselling and Psychotherapy Research Handbook*, 183-197.
- Carolan, F. & Kyppö, A. (2015). Teaching process writing in an online environment. Procedia -
- Social and Behavioral Sciences, 29, 1115-1122.
- Chen, Y., Smith, T. J., York, C. S., & Mayall, H. J. (2020). Google Earth Virtual Reality and expository writing for young English Learners from a Funds of Knowledge perspective. *Computer Assisted Language Learning*, 33(1-2), 1-25.
- Crismore, A. (1989). Talking with readers: Metadiscourse as rhetorical act. Peter Lang.
- El-Dakhs, D. A. S. (2020). Variation of metadiscourse in L2 writing: focus on language proficiency and learning context. *Ampersand*, 7, 100069.
- Fatahipour, M., Tahmasbi, M., & Salehi, M. (2020). Ecology of teaching academic writing: A case study of the effect of metadiscourse markers instruction on intermediate EFL learners' narrative vs. descriptive writing. *Başkent University Journal of Education*, 7(1), 70-80.
- Geta, M. & Olango, M. (2016). The impact of blended learning in developing students' writing skills: Hawassa University in focus. *African Educational Research Journal*, 4(2), 49-68.
- Hyland, K. (2018). Metadiscourse: Exploring interaction in writing. Bloomsbury Publishing.
- Hyland, K. (2017). Metadiscourse: What is it and where is it going? Journal of Pragmatics,
- 11(3), 16-29.
- Hyland, K. (2005). Metadiscourse: Exploring Interaction in Writing. Continuum.
- Jafarian, k., Soori, A., & Kafipour, R. (2012). The effect of computer assisted language learning
- (CALL) on EFL high school students' writing achievement. European Journal of Social
- Sciences, 27(2), 138-148.
- Kinneavy, J. E. (1969). The basic aims of discourse. College composition and communication, 20(5), 297-304.
- Mohamed, A. F. B., & Rashid, R. B. A. (2017). The metadiscourse markers in good writers' essays corpus. International Journal of English Linguistics, 7(6), 213–220.
- Pallant, J. (2013). SPSS Survival manual. (5th Ed). Allen & Unwin.
- Paltridge, B. (2019). Focusing on language in second language writing classrooms: Rethinking the approach. Journal of Second Language Writing, 46, 1-2.

Rahimi Rad, M. (2020). Iranian EFL learners' use of metadiscourse markers in argumentative writing. Budapest International Research and Critics in Linguistics and Education (BirLE) Journal, 3(3), 1353-1362.

Sasaki, M. (2002). Building an empirically-based model of EFL learners' writing processes. In

S. Ransdell & M. Barbier (Eds.), New directions for research in L2 writing (pp. 49–80).

Kluwer Academic Publishers.

Shafiee Rad, H., Namaziandost, E., & Razmi, M. H. (2022). Integrating STAD and flipped

learning in expository writing skills: Impacts on students' achievement and perceptions.

Journal of Research on Technology in Education, 2(3), 1-17.

Tafazoli, D., Gomez-Parra, M. E., & Abril, C. (2020). Teachers' computer-assisted language learning (CALL) literacy: A comparative study in Spain and Iran. *International Journal for 21st Century Education*, 7(1), 3-18.

Taghizadeh, M., & Tajabadi, F. (2013). Metadiscourse in essay writing: An EFL case.

International Research Journal of Applied and Basic Sciences, 4(7), 1658-1662.

Tajik, A., Hedayat, N., & Gharagozloo, N. (2023). The effect of interactive metalinguistic feedback on the iranian middle school students' argumentative writing in English: A mixed methods research. *Research in English Language Pedagogy*. Article in press.

Zaghlool, Z. D. (2020). The Impact of using CALL online writing activities on EFL University students' writing achievement. *Theory and Practice in Language Studies*, 10(2), 141-148.