The Effect of Teaching Discourse Markers through Flipped Model on Iraqi EFL Learners' Writing Performance

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Abstract
The main purpose of this study was to investigate the effect of discourse markers instruction through the flipped model on Iraqi EFL learners' writing performance. To achieve this end, 90 advanced EFL learners were selected and assigned into three groups; two as the experimental and one as the control group. The homogeneity of the participants was checked and the normality of the data was calculated. Data analysis revealed that teaching discourse markers significantly affected learners' knowledge of discourse markers. However, there was no significant effect of teaching discourse markers on advanced Iraqi EFL learners' overall writing ability. The results of the interview showed that using flipped model increased learners' confidence and developed positive attitudes towards flipped classes. Finally, some of the challenges and the problems of the study were stated by the interviewees. The findings of the present study can be fruitful for practitioners the field of EFL teaching in general, and for those who plan to hold flipped classes in particular.

Keywords: *Flipped Model Classes, Discourse Markers, Writing Performance*

Introduction
In recent decades, technology-mediated language teaching and learning has attracted the attention of both instructors and researchers. Some researchers (Bataineh & Bani Hani, 2011) emphasized that the application of technology envisages authentic situations for language learning and establishes social communities among language users (Sari & Wahyudin, 2019). Using technology in EFL classes is also believed to motivate learners and involve them in classroom activities. Teachers increasingly tend to make use of technology in the classrooms

or integrate them into traditional teaching activities (Subramaniam & Muniandy, 2019). As Lindeiner-Stráský et al. (2020) stated, the integration of technology into instructional settings helps teachers achieve their objectives and improve the effectiveness of their teaching. Following the perspective of integrating technology in language classes and enhancing EFL learners' motivation and achievements, the practitioners approached flipped classroom model (e.g. Tsai, 2021; Zhou, 2023).

Flipped learning refers to the reverse order of classroom practice. This model of classroom practice is called flipped because the main part of classroom instruction happens out of the classroom; the learners are supposed to learn the major instructional points of each lesson by themselves using technology-mediated tools and techniques like watching audio or video clips and films and try to learn the major point of each lesson on their own before attending the classroom. In this model, the classroom is the place for the students to practice what they have already learned using technology based on their own learning pace and also it is the place for collaboration, engagement, involvement and removing learning problems (Zhang, 2022).

Flipped teaching is supposed to find reputation as an online alternative to traditional classrooms. It is more favored by the students because it integrates technology and learning; learners make use of ordinary electronic devices like their cellphones or tablet for their learning purposes. As Diab (2016) defined, in flipped model, the traditional classroom is inverted: the instructional materials are provided by the teacher before the classroom session through technology-oriented media like short video-clips, audio files, voiced PowerPoint files or even the online games specifically designed for teaching purposes.

As Zhou (2023) mentioned, "flexible environment, learning culture, intentional content, and professional educator constitute the four pillars of flipped learning" (p. 2). The flexibility of the flipped classroom model is due to the fact that such classrooms provide the opportunity for the learners to use different learning activities and even rearrange the materials in order to accommodate them with their own needs and taste. Student activities may include independent practice and even group work. Such kind of flexible environment is believed to make the learners feel free to learn the materials based on their own learning speed and seek help from the teacher whenever they feel the need.

Flipped model of instruction can be integrated into EFL classrooms. Among the four language skills, writing has been frequently reported to be challenging. According to Anh (2019) "writing is commonly known as the most difficult but the least liked skill although it plays a crucial role in language production" (p. 74). Like other EFL learners, Iraqi students experience challenges in writing in English. Such kind of problems and challenges may stem from their insufficient or inaccurate knowledge of micro level linguistic elements or their unfamiliarity with macro-level, higher order organizational and style issues (Nasser, 2018). Writing is a complex activity requiring a good command of language, the ability to create ideas and foster them, and stick those ideas together both syntactically and semantically (Hedge, 1988). Accordingly, EFL learners' problems in writing may be due to their inability to deal will grammar and vocabulary appropriately or due to higher order processes of planning, organizing, and sticking ideas together through appropriate discourse markers. As mentioned by Fareed et al. (2016), an effective piece of writing must be coherent, cohesive, organized and accurate. However, for advanced EFL learners, the presupposition is that they have already mastered the language at the micro level. What seems even more troublesome is the knowledge

of language at the macro level. Therefore, more emphasis and attention should be paid to developing students' organizational and discourse-level knowledge. One major linguistic item that is essential for developing writing proficiency at the macro level is knowledge of discourse markers. Discourse markers (DMs) are explicit markers used in both speech and writing, which play the role of signposts. Discourse markers usually show turns in speech or writing, join ideas together, show attitudes, express additions or contrast and sum up the discussions. In a more elaborate definition of DMs, Levinson (1983) stated that "DMs indicate the relationship between an utterance and the prior discourse" (p. 53). Previous studies indicated that EFL learners have problems using discourse markers even at the advanced levels (Beach, 1993).

Literature Review

Various researchers have emphasized the importance of writing skills in EFL/ESL situations. Browker (2007) stated that writing is a vital skill to meet life's requirements. According to Tajmirriahi and Rezvani (2021), EFL/ESL writing is a productive skill that has been confirmed as a challenging skill for learners.

Nowadays with technological improvement, the implementation of new technologies has been underlined by numerous teachers all over the world. More specifically, Post Covid-19 education area shifted toward increasing implementation of mobile and other facilities to teach language. Feng and Ng (2023) claimed that "technology is being used to help EFL learners overcome their difficulties with their language skills, especially writing skills" (Feng & Ng, 2023, p.1). It has been postulated that new technologies free learners' imagination and minds, which is supposed to inspire students and eventually results into improved writing performance (Lan et al., 2019). By the same consideration, Fathi et al. (2021) reported that implementation of new technologies leads to improvement on both writing self-regulation and writing performance.

Moreover, it is supposed that novel technologies cause new affairs in educational settings as it modifies the way of classrooms interaction altogether. Virtual worlds are the creation of the mind and they are a place of our imagination (Gajendra et al., 2010). People use virtual worlds to reduce the pressure of real-life. Nowadays virtual worlds can be used in business, education, and social networking and it is a place to entertain, educate and explore (Gajendra et al., 2010). According to Shahri and Ashraf (2016), students like using virtual worlds because they can move around freely, meet new people and experience its trips and simulated experiences.

Facilitating the writing performance of EFL/ESL learners via technology-based methodologies such as flipped model (FM) is postulated by various researchers. FM has been emphasized by various researchers. Hosseini et al. (2020) believed that FM can provide learners with instant correction as learners embrace new information and evolve their insights. Along these lines, Öztürk and Çakıroğlu (2021) conducted a quasi-experimental design in order to examine EFL learners' development of language skills using self-regulated learning strategies in a flipped vs. traditional classroom model. The results were in favor of the classroom who received the flipped model of instruction in terms of the outperformance in writing and grammar scores.

Alibeigloo et al. (2021) explored the effect of two types of FM on the Iranian EFL learners' appropriate use of apologies, requests, and refusals. Their participants were 60 intermediate

EFL learners from an Iranian private language institute. Then, the three designed classes were considered as three groups non-FM group, traditional FM group, and debate-oriented FM group. All were exposed to some treatment periods. To the FM groups, speech act teaching was accessible by obvious FM instruction. To the non-FM group speech act teaching was accessible by clear non-FM instruction. At the pre-phase and post–phase, a Multiple Choice Discourse Completion Test was managed to evaluate their speech act production skill. The results publicized that both types of FM had a meaningfully constructive effect on the EFL learners' usage of the speech acts.

Furthermore, Sahragard et al. (2020) claimed that FM is "an instructional approach that underlines the efficient use of classroom time by shifting the conventional activities of learners and educators in and out of the class"(P.239). They aimed to build a model of FM for general IELTS writing. Moreover, they aimed to scrutinize if there is a significant difference between the learners' general IELTS writing scores in the FM class and those in the traditional class. They carefully developed an FCI model according to the thematic analysis of the earlier FM studies about writing. Next, it was operationally clarified for a general IELTS writing class. The participants of the study included 100 Iranian EFL learners. Half of the learners were chosen to be exposed to FCI and the other learners were exposed to traditional classroom instruction. The final results indicated that the students in the FM classes gained better scores than the learners in traditional classes.

In another study, Parvaneh et al. (2020) intended to examine the long-term and instantaneous effects of FM on Iranian EFL learners' autonomy and anxiety. The participants were 94 learners at the advanced, intermediate, and elementary levels from a University and divided into the control and experimental classes. A pretest-posttest design was employed and data were analyzed utilizing an ANCOVA and a sample-paired t-test. The outcomes represented that the FM had a noteworthy effect on the learners' language anxiety and autonomy. Nevertheless, various language proficiency levels had no noteworthy impact on learners' language anxiety and autonomy. Results also revealed that the FM had a long-lasting EFFECT on language anxiety and learner autonomy.

Similarly, Ariani, et al. (2024) examined the effect of flipped classroom instruction on EFL students' engagement and writing performance. The experimental group received some online writing assignments as well as some recorded lectures in a flipped manner while the control group practiced the same materials in the classroom in the traditional manner. Findings indicated that the flipped model pf instruction boosted students' engagement and their writing achievement to a significant extent.

Focusing on the effect of critical thinking instruction through flipped model on EFL learners' writing performance, Alpat and Görgülü (2024) conducted an experimental study using the California critical thinking level inventory survey. The results indicated that the experimental group who received the instruction via flipped model had better performance in writing, showed higher improvement in critical thinking strategies and expressed positive attitudes towards flipped manner of instruction.

With regard to teaching discourse markers though flipped model of instruction, Shahhoseini et al. (2023) attempted to examine the effect of flipped model of instruction on some Iranian EFL learners' use of linking words in writing. The experimental group received instruction on discourse markers (linking words) through flipped instruction in an online

context. The results confirmed the outperformance of the experimental group who were exposed to the flipped instruction compared with the control group who received instruction in the traditional manner in the classroom.

Considering the effective role of technology-oriented techniques in language teaching on the one hand and Iraqi EFL learners' writing problems at the higher order discourse levels, this study was an attempt to examine the effect of teaching discourse markers through flipped model on advanced Iraqi EFL learners' writing performance. Because of the potential problems that Iraqi teachers and learners may encounter, either due to technological shortcomings or linguistic inefficiencies, this study also interviewed some of the language learners participating in this study in order to examine their attitudes towards flipped model for teaching writing and the potential problems of using this model in the Iraqi EFL context. More specifically, the following research questions were posed:

RQ1: To what extent does teaching discourse markers through flipped model affect advanced Iraqi EFL learners' knowledge of discourse markers in writing?

RQ2: To what extent does using flipped model for teaching discourse markers affect the overall writing ability of advanced Iraqi EFL learners?

RQ3: What are the attitudes of Iraqi EFL learners towards the use of flipped model in teaching writing?

RQ4: What are the possible problems and challenges faced by Iraqi EFL learners while using flipped model of instruction?

Methodology

Design

This study relied on a mixed methods design; in order to find the answers to the first two research questions, an experiment was designed and in order to answer the third and fourth research questions, a semi-structured interview was employed.

Regarding the experimental part of the study, first three intact classes offering writing courses at University of Basra were selected. One of the classes was randomly taken as the first experimental group, who received the instruction of discourse markers through flipped model of instruction. The second intact class was randomly regarded as the second experimental group who received instruction on discourse markers through the usual, traditional manner in the classroom. The third group, randomly selected as the control group, received no instruction on discourse markers neither in the classroom nor in a flipped manner.

Participants

90 advanced Iraqi EFL learners studying at University of Basra, Iraq participated in this experiment. Based on their performance on an Oxford Quick Placement Test, this number of participants were selected from among 144 students who enrolled in the writing course in the fall semester, 2023-2024. They were both male and female students at the age range of 20 to 25. As mentioned above, two of the intact classes were randomly assigned to the two experimental groups and the other was randomly assigned to the control group.

Since the level of proficiency of Iraqi EFL learners of this study were not very high, it was not possible to select the sample based on the scoring manual of the OQPT and only a small number of students in the three classes stood at the range of advanced learners based on their

performance on the OQPT. Therefore, a norm-based criterion was adopted; the mean score of the students' performance of the three classes on OQPT was calculated. Those students from the three classes who scored more than 1 standard deviation above the mean were considered as the norm-referenced advanced learners and were selected as the final sample of the study. In this way, 30 students formed the first experimental group, 30 students comprised the second experimental and 30 students made the control group. Since the classes were intact, all students regardless of their level of language proficiency, received the treatment in the three groups; however, just these 90 students were considered as the sample of the study and their scores were considered in later data analysis.

In order to measure the participants' knowledge of discourse markers prior to the experiment, a productive writing task requiring the participants to write the appropriate discourse markers in the blanks was designed based on the list of discourse markers offered by Schiffrin (1995). The test was administered in the three classes before the treatment. All the students attended this test and their scores were recoded for later analysis. The same test was administered at the final session after the treatment in order to examine the improvement of participants' knowledge of discourse markers due to the instruction they received on discourse markers over the course of the treatment.

The Writing Pre-test and Post-test

As mentioned before, this study first examined the advanced Iraqi EFL learners' use of discourse markers in expository writing and then, investigated their overall writing proficiency. For this purpose, two timed essays were given as the pre-test and two timed essays were given to the students as the post-test. For the pre-test, the participants of the three groups were required to write a cause and effect essay entitled "What causes air pollution in your country? What are the harms of air pollution?", and a comparison and contrast essay on the topic of "Living in the city or in the suburbs? merits and demerits?". For the post-test, the participants of the three groups were required to write a cause and effect essay entitled "living in the digital age. What are the advantages and the disadvantages?", and a comparison and contrast essay about the topic "Online education vs. traditional educations: merits and demerits". In order to ensure the inter-rater reliability, the essays were examined and scored by two professional raters and the reliability was calculated.

The Semi-structured Interview

In order to examine the Iraqi EFL learners' attitudes towards the use of flipped model of instruction in writing classes and to know more about the advantages and shortcomings or challenges of using this classroom model in the Iraqi EFL context, a semi-structured interview was conducted. All 30 students, who were in the first experimental group and received the instruction on discourse markers through the flipped model, were interviewed in order to examine their attitudes towards using the flipped model of classroom instruction as well as the challenged they had using this model. This semi-structured interview consisted of 6 open-ended questions asking about the participants' attitudes towards this model of instruction, the points they loved most about it, the drawbacks it suffered from and the challenges they encountered during the course of the treatment. In-depth data regarding attitudes towards this classroom model as well as its advantages and challenges were gathered out of the participants' responses

to the interview questions. The validity and appropriacy of the items of the questionnaire was ensured by consulting the supervisor of this study as the expert in the field of language teaching.

Model of Analysis

Discourse markers connect various elements of a text together either in speech or writing. In a more elaborate definition of DMs, Levinson (1983) stated that:

> There are many words and phrases in English, and no doubt most languages, that indicate the relationship between an utterance and the prior discourse … It is generally conceded that words such as *but, therefore, in conclusion, to the contrary,* etc. What they seem to do is indicate, often in very complex ways, just how the utterance that contains them is a response to, or a continuation of, some portion of the prior discourse (p. 53).

Discourse markers share some specific features for example their interpretation is context-dependent. Without the knowledge of the preceding and following context, their interpretation may be flawed. That's why the study of DMs roots in pragmatics. The pragmatic perspective towards discourse markers mostly focuses on the functions that discourse markers play in the text. This perspective deals with how discourse markers are employed as sources for social action and for negotiating the interactions among the interlocutors in spoken discourse and among the interactants in the written discourse (Beach, 1993).

Different classifications have been offered in the literature, mostly extracted from the seminal book of Schiffrin (1995). For the purpose of this study, the category suggested by Dumlao and Wilang (2019) for discourse markers in academic writing was employed because of the similarities in the objectives and procedure between their study and the present study:

Table 1

Category of Discourse Markers and their Functions (Dumlao & Wilang, 2019, p. 204)

Category Discourse Markers	Functions	Examples
Contrastive discourse markers	Concepts of denial and contrast, with modifications directly or indirectly with the prior segments	Although, but, despite, in spite of, even though, however, instead of, nonetheless, on the other hand, rather, still, though, while.
Elaborative discourse markers	Indicating the information contained in the discourse segments	Also, and, as well as, besides, for example, furthermore, in addition, in other words, moreover, or.
Inferential discourse markers	Implying significant results	As a conclusion, because, because of, consequently, since, so, so that, then, therefore, thus.
Temporal discourse markers	Indicating the time sequence	Eventually, finally, then, afterwards, first, first of all, now, second, third, etc.
Spoken discourse markers	Embedding students' attitudes in their writing	Actually, from my point of view, in my opinion, in my viewpoint, of course, let's say, just, well.

Data Collection Procedure

As mentioned in the Participants Section of this study, 90 advanced Iraqi EFL learners, who were passing the writing course in the fall semester 2023-2024 at the University of Basra, were selected for the purpose of this study. Based on their performance on an Oxford Quick Placement Test, this number of participants was selected from among 144 students who enrolled for the writing course. They were both male and female students at the age range of 20 to 25. They were the members of three intact classes, randomly assigned to two experimental groups and a control group. In the next step, a norm-based criterion was adopted in order to select the participants with advanced level of language proficiency; the mean score of the students' performance of the three classes on OQPT was calculated and those who received 1.5 score above the mean were considered as the norm-referenced advanced learners and were selected as the sample of the study. In other words, 30 participants comprised the first experimental group, 30 students made the second experimental and 30 students were the members of the control group. The classes were intact; therefore, all students received the treatment in the three groups. However, just the scores of these 90 students were considered in later data analysis.

Two tests were administered before the treatment across the three groups. First the productive test of discourse markers was administered in order to examine all participants' knowledge of discourse markers prior to the instruction on discourse markers. Then the writing pre-test (a cause and effect essay) was administered in order to examine participants' general writing proficiency. For the pretest, the participants of the three groups were required to write a cause and effect essay entitled "What causes air pollution in your country? What are the harms of air pollution?", and a comparison and contrast essay on the topic of "Living in the city or in the suburbs? merits and demerits?".

In the next session, the treatment got started. The learners of the first experimental group received instruction on discourse markers through flipped model of classroom. This means that the major classroom instructional points were sent to the students in the form of a video clip, an audio clip, a piece of film, or a short voiced PowerPoint file recorded by the teacher two or three days before the classroom session. The students were required to listen to the file or watch it as many times as required in order to master the instructional tips that provided in those files. These instructions focused on discourse markers. Then, in the classroom time, the students only practiced writing. This means that an expository topic was given to the students and they were supposed to write about it as the writing task. So, in the regular classroom time, the teacher had enough time to examine their writings.

The learners of the second experimental group received instruction on discourse markers in the classroom in the traditional manner. Each session, one category of discourse markers was taught to the learners and then the same expository topic, given to the first experimental group, was presented to them and they were supposed to write about it as the writing task. However, the control group did not receive any instruction on discourse markers. They followed the regular traditional pattern of writing classes: the same expository topic, given to the experimental groups, was presented to them and they were supposed to write about it in the classroom as the writing task. In all the three groups, during the classroom time, the students were given an expository topic to write about and then, the writing of one of the students was examined and commented by the teacher and all other students every session. The treatment

lasted a whole semester (12 weeks, 90 minutes a week). At the end of the semester, the three groups attended the same productive test of discourse markers as well as the writing post-test. For the writing post-test, the participants of the three groups were required to write a cause and effect essay entitled "living in the digital age. What are the advantages and the disadvantages?", and a comparison and contrast essay about the topic "Online education vs. traditional educations: merits and demerits".

Regarding data analysis, initially the performance of each group on the discourse markers and writing pre-tests were examined to check the homogeneity of participants in these aspects. After ensuring about the homogeneity of participants, three groups were cross-compared too in order to see which group out-performed the other groups both in terms of the knowledge of discourse markers and the overall witting proficiency in post-tests. It is worth mentioning that the overall writing proficiency was measured in terms of grammar, word choice, discourse markers, organization, thematic organization and style based on an appropriate writing rubric/scale.

Finally, a semi-structured interview was conducted in order to investigate the attitudes of the students of the first experimental group towards using flipped model of instruction and ask them about the problems and challenges they faced during the treatment as well as the merits and advantages of this model of teaching. In order to check the homogeneity of participants of three groups at the beginning of the study in terms of discourse markers knowledge and overall writing ability, the data obtained from discourse markers and overall writing pre-tests were analyzed using two separate one-way analysis of variance (ANOVA). Moreover, another two ANOVAs were run to examine the effectiveness of the treatment. In case of need, post-hoc tests were also run.

Results

The first research question addressed the extent to which teaching discourse markers through flipped model may affect advanced Iraqi EFL learners' knowledge of discourse markers in writing. A one-way between-groups analysis of variance (ANOVA) was conducted to compare the results of the pre-test of discourse markers administered for the learners of all groups. As shown in Table 2, the mean scores of the first experimental group ($M = 12.43$, $SD = 1.30$), the second experimental group ($M = 12.33$, $SD = 1.37$), and the control group ($M = 12.53$, $SD = 1.13$) were almost at the same level. This means that these three groups of learners were almost homogeneous at the beginning of the study. In addition, Table 2 indicates that there was no significant difference at the $p < 0.05$ level in discourse markers pre-test scores for the three groups: $F (2, 87) = 0.18$, $p = 0.83$. Therefore, as the mentioned three groups' performance did not differ significantly in the discourse markers pre-test, it can be concluded that their performance is comparable on the discourse markers post-test.

Table 2
Descriptive Statistics of the Discourse Markers Pre-test

	N	Mean	SD	Min.	Max.
Experimental 1	30	12.43	1.30	10.00	15.00
Experimental 2	30	12.33	1.37	10.00	15.00
Control	30	12.53	1.13	11.00	14.00
Total	90	12.43	1.26	10.00	15.00

Table 3

Result of the ANOVA Test for Discourse Markers Prior to the Experiment

	Sum of Squares	Df	Mean Square	F	Sig.
Between Groups	.60	2	.30	.18	.83
Within Groups	141.50	87	1.62		
Total	142.10	89			

After ensuring about the homogeneity of learners prior to the implementation of the experiments in terms of their discourse markers, another ANOVA was run to figure out whether the three groups were significantly different in terms of discourse markers post-test scores. As Table 4 reveals the mean scores of the first experimental group ($M = 14.33$, $SD = 2.12$) and the second experimental group ($M = 13.96$, $SD = 2.20$) increased as compared to the obtained mean scores in the discourse markers pre-test.

Table 4

Descriptive Statistics of the Discourse Markers Post-test

	N	Mean	SD	Min.	Max.
Experimental 1	30	14.33	2.12	10.00	18.00
Experimental 2	30	13.96	2.20	10.00	19.00
Control	30	12.86	1.22	10.00	15.00
Total	90	13.72	1.98	10.00	19.00

Table 5

Result of the ANOVA Test for Discourse Markers after the Experiment

	Sum of Squares	Df	Mean Square	F	Sig.
Between Groups	34.95	2	17.47	4.82	.01
Within Groups	315.10	87	3.62		
Total	350.05	89			

In the next step, post-hoc comparisons using the Tukey test were made in order to spot the group which performed better. As Table 6 shows, post-hoc comparisons indicate that the mean score for Group 1 (the first experimental group) ($M = 14.33$, $SD = 2.12$) was significantly different from the mean score for Group 3 (the control group) ($M = 12.86$, $SD = 1.22$). Group 2 (the second experimental group) ($M = 13.96$, $SD = 2.20$) did not differ significantly from either Group 1 or 3.

Table 6

Post-hoc Tukey Test on Discourse Markers Post-test Scores

(I) groups	(J) groups	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval Lower Bound	Upper Bound
1	2	.36	.49	.73	-.81	1.54
	3	1.46*	.49	.01	.29	2.64
2	1	-.36	.49	.73	-1.54	.81
	3	1.10	.49	.07	-.07	2.27
3	1	-1.46*	.49	.01	-2.64	-.29
	2	-1.10	.49	.07	-2.27	.07

*. The mean difference is significant at the 0.05 level.

To answer the second research question regarding the extent to which teaching discourse markers using flipped model affect the overall writing ability of advanced Iraqi EFL learners, firstly, an ANOVA was conducted to analyze the results of the writing pre-test administered for the learners of all groups. As shown in Table 7, the mean scores of the first experimental group ($M = 11.56$, $SD = 1.16$), the second experimental group ($M = 12.06$, $SD = 1.20$), and the control group ($M = 12.26$, $SD = 1.04$) were almost at the same level. This means that these three groups of learners were almost homogeneous at the beginning of the study. In addition, Table 8 indicates that there was no significant difference at the $p < 0.05$ level in writing pre-test scores for the three groups: $F (2, 87) = 3.00$, $p = 0.055$.

Table 7

Descriptive Statistics of the Writing Pre-test

	N	Mean	SD	Min.	Max.
Experimental 1	30	11.56	1.16	10.00	14.00
Experimental 2	30	12.06	1.20	10.00	15.00
Control	30	12.26	1.04	10.00	14.00
Total	90	11.96	1.16	10.00	15.00

Table 8

Result of the ANOVA Test for Writing Prior to the Experiment

	Sum of Squares	Df	Mean Square	F	Sig.
Between Groups	7.80	2	3.90	3.00	.055
Within Groups	113.10	87	1.30		
Total	120.90	89			

In the next step, another ANOVA was run to figure out whether the three groups were significantly different in terms of writing post-test scores. According to Table 10, the result of an ANOVA revealed that there was not a statistically significant difference at the $p < 0.05$ level in post-test writing scores for three groups: $F (2, 87) = 2.90$, $p = 0.06$.

Table 9

Descriptive Statistics of the Writing Post-test

	N	Mean	SD	Min.	Max.
Experimental 1	30	13.97	1.52	12.00	18.00
Experimental 2	30	13.43	1.83	10.00	18.00
Control	30	13.00	1.25	10.00	16.00
Total	90	13.47	1.58	10.00	18.00

Table 10

Result of the ANOVA Test for Writing after the Experiment

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	14.06	2	7.03	2.90	.06
Within Groups	210.33	87	2.41		
Total	224.40	89			

The third research question concerned with the attitudes of Iraqi EFL learners towards the use of flipped model in teaching writing. To this end, the researchers conducted a semi-structured interview with all thirty participants of the first experimental group. They were

asked about their attitudes towards the manner of instruction of discourse markers. Five respondents claimed that using flipped model gave them the insight that they can work in a less stressful and abnormal condition since they were asked to practice in the classroom what they have already learned. So the conditions let them have the optimum performance and the consequence of their product was more satisfying. They developed a strong positive opinion about such an instruction because they felt more confident and examine their performance after the task completion as optimal. Nine respondents asserted that their understanding of the discourse markers have helped them to write expository essays as well as the other types of writing and increased their ability to produce longer and more cohesive essays. Fifteen respondents said that their overall evaluation of the experiment was positive since they feel relaxed with the conditions and they found discourse markers very significant in their academic writing since they developed their skills in producing appropriate and well-structured sentences.

The fourth research question concerned with the possible problems and challenges faced by Iraqi EFL learners while using flipped model of instruction. This question was also answered by the same respondents of the first experimental group through the semi-structured interview. Twelve respondents suffered from the connectivity and stability of their internet connections, which were claimed to be the most challenging problem during the instruction; however, the conditions were more tolerable than the conditions during the Covid-19 pandemic. The other problem was the quality of their writing in their level as Arab EFL learners. Four learners expressed their negative feelings toward writing tasks and they experienced stressful moments while writing as a productive skill, which requires simultaneous knowledge of vocabulary, grammar, cohesion, coherence, and the punctuations.

Discussion

As indicated in the previous section, the findings indicated a significant impact of teaching DMs through flipped model on advanced Iraqi EFL learners' knowledge of DMs. This finding may be due to the higher efficacy of using innovative pedagogical methods and techniques in language education. As Graham et al. (2019) reported, "A flipped classroom shows greater effectiveness in knowledge gain"(p.92). In complete agreement with this finding, Zheng et al. (2020) believed that flipped model not only facilitates a comprehensive grasp of DMs but also cultivates critical thinking skills essential for effective writing proficiency. In the same vein, using flipped model of instruction improved EFL learners' knowledge of discourse markers in the present study.

Moreover, the success of teaching DMs through flipped model among advanced Iraqi EFL learners speaks to the potential for broader implementation of such methodologies within diverse educational settings. As evidenced by the positive outcomes observed in this study, flipped model offers an ideal way for enhancing language instruction beyond traditional classroom boundaries. The yielded results confirm the outcomes of Wilson's (2013) study who claimed that flipped model accommodates varying learning styles and paces, allowing for personalized learning experiences tailored to individual needs and preferences.

The second research question concerned with the extent to which teaching DMs using flipped model affect the overall writing ability of advanced Iraqi EFL learners. The results did not reveal a significant effect of this instruction on EFL learners' overall writing performance.

This may be due to the fact in general, Iraqi EFL learners are not proficient in writing skill and this short period of instruction did not significantly improve their writing. For better improvement of the writing skill, longer treatments and blended approaches are required. This finding also suggests that while flipped model effectively targets specific linguistic features like DMs, its impact on broader writing abilities may be limited. Thus, while the FM may contribute to enhancing certain aspects of language learning, its influence on comprehensive writing skills requires further investigation and consideration of additional instructional factors.

Although the results showed no significant effect on writing performance of participants, other studies have reported conflicting findings. For instance, Fathi et al. (2021) reported that implementation of new technologies leads to improvement on both writing self-regulation and writing performance. As another conflicting results, both synchronous and asynchronous English writing classes are implanted around the world and as Bin Dahmash (2021) reported it provides various benefits regarding EFL/ESL learners writing performance.

Yet, in full accordance with the outcomes of the present investigation, Syahrin and Salih (2020) examined the outcomes of asynchronous online teaching and concluded that it did not enhance EFL learners' writing skills. Additionally, the present research aligns with the study conducted by Davari and Mall-Amiri (2022), which found that flipped learning was not significant in improving EFL learners' accuracy. The same was also observed in the results reported by Fathi and Rahimi (2020), who indicated that EFL learners' writing complexity and accuracy were not influenced by flipped learning.

Concerning the qualitative aspect of this research, the analysis of data unveiled various significant observations regarding the perceptions of Iraqi EFL learners regarding the integration of flipped model in the teaching of writing. Primarily, a notable portion of the participants emphasized the decrease in stress levels and the enhancement in participation linked with this pedagogical method. These indicate that the chance to interact with course content before class sessions fostered a more relaxed learning atmosphere, empowering learners to utilize their understanding efficiently during in-class engagements. The findings are in line with those of Sheikhipour et al. (2021) who investigated the effect of FM on EFL learners' performance and identified additional psychological factors among EFL learners that also demonstrate a positive effect. Their study expands upon the psychological aspects influencing language learning, aligning with the present findings. This convergence suggests a broader understanding of the psychological dynamics at play in EFL learning contexts. They reported that "the results revealed that the flipped class increased the students' motivation, self-efficacy, engagement, self-confidence, and autonomy" (Sheikhipour et al., 2021, p.21). The results of the present study are also in line with those reported by Zhang (2022) who undertook an investigation into the influence of educational technology on the self-efficacy of English as a Foreign Language (EFL) learners, uncovering a significant positive effect on the alleviation of stress levels. However, in contrast to these findings, Hsu (2017) elucidated that individuals often manifest negative emotional reactions, such as apprehension and stress, attributed to their inability to effectively utilize novel technological tools.

Similar results were reported by Jiang et al. (2023), corroborating the findings of this study. Their research also indicated that "online learning positively affected the participants' motivation, and attitudes" (p.2310). This convergence further strengthens the validity of the

observed effects and underscores the potential applicability of the identified strategies across different contexts.

Conclusion

The convergence of findings from this study with those of other studies further underscores the validity and potential applicability of innovative pedagogical methods and techniques such as the flipped model in enhancing writing skills among EFL learners across various contexts. These collective insights highlight a growing consensus regarding the positive impact of technology-integrated instructional approaches on language learning outcomes.

Although the findings of the present study support the efficacy of flipped model for teaching DMs in writing, further research is called for to explore its long-term impact across different learner populations and educational settings. Additionally, investigating the potential integration of other instructional technologies and pedagogical approaches could enrich our understanding of effective language teaching methodologies. By adopting a systematic and iterative approach to educational research and innovation, educators can continue to refine and adapt instructional practices to meet the evolving needs of learners in a rapidly changing world.

Moreover, writing skill was mentioned as a noteworthy challenge for Iraqi EFL learners, reflecting broader concerns related to language proficiency and writing skills development. Four respondents expressed negative opinions towards writing tasks, citing the multifaceted demands inherent in productive writing. They described experiencing stressful moments while dealing with various linguistic elements such as vocabulary, grammar, cohesion, coherence, and punctuation, underscoring the complexity of mastering writing as a skill. This finding underscores the need for targeted instructional strategies aimed at scaffolding writing proficiency and addressing the diverse needs and challenges faced by EFL learners in the context of flipped model of instruction.

In terms of practical implications, this study highlights the effectiveness of utilizing flipped model to teach discourse markers (DMs) to Iraqi EFL learners. While quantitative analyses indicated a positive influence on learners' DMs usage in writing tasks, this model does not necessarily result in enhanced overall writing proficiency. The favorable reception of flipped model by learners highlights its capacity to foster an ideal learning environment, despite challenges such as internet connectivity issues and low levels of writing proficiency that require attention for successful implementation. Further research is warranted to investigate the long-term effects of this model and its scalability across diverse educational contexts for teaching discourse markers as well as other grammatical components across different language skills.

In considering avenues for further research, it is paramount to address existing gaps within the literature on EFL/ESL settings. To advance the knowledge base of the field, researchers could explore the long-term impact of employing flipped model for teaching different language skills and components. Additionally, exploring the intersection of flipped model with other language skills such as speaking and listening, could provide comprehensive insights into its efficacy in facilitating holistic language acquisition. Furthermore, examining the role of socio-cultural factors and learner motivation in shaping the effectiveness of flipped-based instruction would offer valuable perspectives on enhancing learner engagement and success in language learning. By pursuing these avenues of research, scholars can contribute to bridging gaps in the literature and advancing pedagogical practices in EFL/ESL education.

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