Effects of Feedback on Iranian EFL Learners’ Writing Development: Group Dynamic Assessment vs. Formative Assessment

Omid Mallahi¹, Mahboobeh Saadat²*

Abstract: Approaches to assessment are distinguished mainly by the fact that whether the provision of feedback and modification of learners’ performance during assessment procedures is of concern or not. In fact, Dynamic Assessment (DA) attempts to integrate assessment and instruction and uses a range of mediational strategies to gain insight into the learners’ current abilities and to assist them in reaching their learning potentials. Non-Dynamic Assessment (NDA), on the other hand, aims at obtaining a pure and reliable measurement of the learners’ abilities (Poehner, 2008). The present study was designed to experimentally investigate and compare the effects of feedback offered within the frameworks of Group Dynamic Assessment (G-DA) and Formative Assessment (FA) on the improvement of 34 intermediate Iranian EFL learners’ writing performance and their capability in transferring the acquired knowledge and skills to new and more challenging tasks. As for the intended treatments, the G-DA students benefited from a model of classroom-based DA including three stages of orientation, execution and control and the FA students received a careful and systematic sequence of instruction, assessment and feedback. The necessary data were collected from the students’ in-class written drafts and their performance on four non-dynamic writing tests. Results of the analyses, especially, two-way repeated measures ANOVAs, indicated the inherent superiority of the DA group in improving their writing; however, both groups of learners were equally able to transfer the acquired knowledge and skills to new and more challenging writing tasks, which can be attributed to the satisfactory level of internalization and self-regulation they have possibly achieved as a result of the interventions received. Accordingly, it was concluded that systematic feedback offered within the frameworks of these two approaches to assessment can successfully help the learners improve their writing ability.

Keywords: Feedback, group-dynamic assessment, formative assessment, mediation, transfer

Introduction

Writing is considered as one of the most demanding skills and at the same time a unique asset for learners to acquire. No matter what the content of the writing is and at what level students perform, teachers need to be prepared to respond to the students’ written texts and provide them with feedback on the quality of their performance. It is generally believed that the provision of appropriate feedback, which is effectively aligned with the instructional procedures and goals, can act as a scaffolding tool which help learners become more self-regulated and improve their writing (see e.g., Bitchener, & Ferris, 2012; Bitchener & Knoch, 2008; Chandler, 2003; Elwood & Bode, 2014; Ferris, 2003, 2007, 2014; Hyland, 2010; Kang & Han, 2015; Karim & Nassaji, 2018; Storch, 2010).

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Feedback or providing appropriate forms of support in order to simultaneously understand and promote students’ abilities is considered as a determining factor in distinguishing different types of assessment in classroom settings which attempts to connect assessment and instruction. Rea-Dickins (2004) identifies four conceptualizations of connecting assessment to instruction: washback effect as the impact of formal testing on teaching and learning; Curriculum-driven assessment in which assessment procedures are not developed a priori and then imposed upon institutions and classroom teachers, but instead emerge from a grounded analysis of institutional interactions and pedagogical practices as observed in the classroom; task-based assessment in which instruction and assessment follow the kind of communicative activities that characterize real-life communicative interactions that aim at improving students’ individual performance; and finally, formative assessment (FA) which is carried out by classroom teachers in order to adjust instruction to the learners’ needs, but modification of the learners’ performance during the assessment or their participation in this process is not of main concern. Poehner (2008) considers all these attempts in connecting assessment to instruction as non-dynamic and contrasts them with the hallmark of Vygotskian (1978) contribution to education, i.e., Dynamic Assessment (DA), which is an “approach to understanding individual differences and their implications for instruction … [that] embeds intervention within the assessment procedure” (Lidz & Gindis, 2003, p. 99). Ableeva (2010) asserts that “the goal of DA is to reveal learners’ potential future development on the intermental plane and to help it develop on the intramental plane through mediator-learner interaction” (p. 62). In fact, DA by systematically integrating assessment and instruction attempts to assess learners’ abilities by promoting them at the same time (see e.g., Alavi & Taghizadeh, 2014; Negretti and Mežek, 2019; Poehner & Infante, 2015; Poehner & Lantolf, 2010; Shrestha, 2017; Shrestha & Coffin, 2012).

The statistical or NDA approaches to assessment are mostly understood by their preference for the isolation of assessment and instruction, albeit to varying degrees, in order to obtain a pure measurement of the abilities in question. DA, on the other hand, integrates assessment and instruction to modify the learners’ performance during the assessment procedure and enable teachers to optimize their learners’ abilities by continually adjusting the mediation to the learners’ changing needs and their emergent abilities (Poehner & Infante, 2015; Poehner & Lantolf, 2010). This procedure foregrounds process over product, and thus it promotes development rather than learning. Although DA has been used to investigate the efficacy of intervention/mediation in a various domains of education and psychology, few studies have employed this framework in the classroom setting and, more specifically, investigated the feasibility of its application in a writing class where offering a systematic form of feedback becomes a challenge for teachers because the learners have different levels of competence and such contexts do not permit the use of one-to-one DA (Alavi, Kaivanpanh, & Shabani, 2012; Poehner, 2009). Therefore, to solve this theoretical and practical problem, the notion and practical aspects of Group-Dynamic Assessment (henceforth G-DA) can be used which aims to involve learners in tasks which learners can only perform by pooling their resources together in a dialogic interaction (see below for further details). In spite of its theoretical attraction, G-DA has been far less explored in the terrain of second/foreign language teaching. Accordingly, the present study intends to explore the feasibility of implementing G-DA in classroom sessions and compare the performance of non-DA participants (in this case FA) in relation to the DA ones regarding their academic writing development.
Review of Related Literature

Theoretical Framework: DA approach is derived from Vygotsky’s (1978) Sociocultural Theory (SCT) of Mind in which learning is considered as a social rather than an individual process that occurs through meaningful negotiation and interaction (scaffolding) between learners. The central notion within this framework is the facilitating role of scaffolding which can reveal information about the learners’ current abilities in order to help them overcome any performance problems and, thus, realize their potential abilities through some guidance or collaborative objects which can be offered through means like computers and other symbolic tools (see e.g., Poehner & Lantolf, 2010; Shrestha & Coffin, 2012; van Compernolle & Williams, 2013). In fact, this approach attempts to provide learners with appropriate and timely feedback in a supportive and interactive environment to enhance the quality of their learning (Poehner & Lantolf, 2013). Three concepts relevant to the framework of DA are zone of proximal development (ZPD), mediation and transfer.

Vygotsky (1978) considered the difference between individuals’ independent and assisted performance as their ZPDs and suggested that in order to extend learners’ independent performance to the further levels which they are not capable of achieving alone, it is necessary to help them while they are completing the assessment tasks. In fact, ZPD links assessment and instruction as a means of regulating learning and, in turn, fostering the development of learners in educational settings (Poehner & Infante, 2015; Poehner & Lantolf, 2005; Shabani, 2018). Mediation provides an opportunity for such a development. Lantolf and Thorne (2006, p. 79), define mediation as “a process that humans employ in order to regulate (i.e., gain voluntary control over and transform) the material world, others’ or their own social and mental activity by using culturally constructed artifacts, concepts and activities”. To understand the ways in which mediation is approached in DA, Lantolf and Poehner (2004, 2011) suggested the terms interventionist and interactionist DA. These two terms are different with regard to “the relative freedom mediators have to respond to learners’ difficulties and to pursue concerns as they emerge during the interaction” (Lantolf & Poehner, 2011, p. 15).

As it is stated by Poehner (2008), models of assessment that seriously consider learners’ ZPD emphasize that improvement within the assessment context is not the sole concern: attempt should be made to help learners reach actual cognitive development that goes beyond a specific pedagogical task; therefore, the mediation provided should have a purpose beyond the learners’ immediate needs and should help produce long-term effects. Therefore, some DA practitioners have introduced a method known as transcendence or transfer (TR) which refers to the extent to which learners have internalized the knowledge in the previous interventions and whether they are close to or have reached the higher levels of thinking and independent performance to perform equally well on the tasks of increasing levels of complexity or not. According to Feuerstein, Falik, Rand, and Feuerstein (2003) there are two types of transfer: near transfer and far transfer. Near transfer refers to the transfer of the acquired knowledge and skills to the assessment contexts/tasks which are similar to the ones already accomplished by the learners in the immediate past. In the far transfer task, the learners are required to apply the acquired knowledge to more complex and challenging tasks which demand a higher level of mental functioning.

There is no doubt that focusing on the development of an individual learner is more manageable than mediating a group of learners. However, considering time limitations, resources and capabilities of teachers in the classroom, turning and attending to the problems of each individual becomes an unrealistic and idealized model for classroom teachers who generally must deal with classes of fifteen or more students.
vein, Poehner (2009) believes that “a major challenge to implementing DA in second language (L2) classroom is that these contexts typically do not permit the one-to-one interactions that have characterized most DA work to date (and ZPD research more generally)” (p. 471). Therefore, in order to study social mediation and interaction within the classroom context, he introduced the notion of Group-dynamic assessment (G-DA) which similar to the one-to-one DA uses mediational strategies to co-construct a learner’s ZPD, but the mediators must also consider the group’s ZPD and simultaneously negotiate with a group of learners to help them promote their learning (Poehner, 2009). In G-DA, learners require different levels and quantities of mediation while completing the assigned activities and teachers, besides focusing on the development of ZPDs of the group by actively engaging the entire group in G-DA interactions, should attend to “the development of the individual’s ZPD within the broader group ZPD by foregrounding the support offered to an individual within the group and to examine his or her responsiveness” (Poehner, 2009, p. 477). Also, in the cumulative form of G-DA, the mediation that is offered to the individuals should also be directed to the group of learners present in the classroom. In other words, during a learning task when the teacher mediates a given learner’s difficulty, that learner and the teacher are considered as primary interactants since they negotiate the support that is needed. This interaction has also a mediating potential for the rest of the class (i.e., secondary interactants) since the exchange occurs in the social space of the class and before the other group members (Poehner, 2009).

**Related Studies on the Role of DA in Writing:** Feedback on the students’ writing has been the focus of several studies and a considerable number of scholars in the field have examined different aspects, forms and strategies used to provide such a response (see e.g., Biber, Nekrasova, & Horn, 2011; Bitchener, & Knoch, 2008, 2010; Bitchener & Storch, 2016; Boggs, 2019; Chandler, 2003; Ferris, 2006, 2010, 2014; Guenette, 2007; Karim & Nassaji, 2018; Liu & Brown, 2016, to name a few). As for the implications of feedback studies for assessment and learning, Lee (2007) indicated that “teacher feedback mainly functions summatively, serving the function of assessment of learning, rather than assessment for learning – i.e., using feedback as a pedagogical tool for improving the teaching and learning of writing” (p. 180). Parr and Timperelsey (2010) also indicated that considerable teacher pedagogical knowledge is required to give an assessment feedback that can enhance learning. Some scholars have conducted studies to investigate the role of DA-based intervention in writing. For example, Xiaoxia and Yan (2010), engaging in an experimental endeavor, pointed to the fact that the use of dynamic assessment in providing feedback in writing can provide a dialogic way of teaching that is of great help in enhancing learners’ writing interest and their writing competence. Shrestha (2011) compared the performance of DA and NDA students on three assessment writing tasks and found that DA students outperformed their counterparts in gains in writing ability and they were more successful in transferring the acquired knowledge and skills from one assessment task to another. Moreover, Shrestha and Coffin (2012) suggested that by targeting the students’ individual needs DA can enhance the quality of learners’ performance and “the focused tutor mediation is an effective way of providing the kind of reflective, dynamic mediation that is able to effectively support students’ academic writing development” (p. 55). In addition, it has been revealed that dynamic assessment of writing has a positive impact on improving internalization of writing content and organization skills and strategies of L2 learners (Alavi & Taghizadeh, 2014). Moreover, Rahimi, Kushki and Nassaji (2015), by conducting a qualitative case study approach and chronologically tracking the learners’ performance in various writing tasks, confirmed the diagnostic and treatment effect of interactive DA to help the learners resolve their problems, enhance the quality of their performance and hence improve their
Shrestha (2017) also found that dynamic assessment may contribute to the transfer of genre features and conceptual knowledge to new assessment contexts. The students also believed that DA was more relaxed and comfortable, and helped to build their confidence in academic writing. Shabani (2018) also maintained that G-DA instructions have the potential to diagnose quite the learners’ sources of writing difficulties and the scaffolding/mediations offered and the state of intersubjectivity and positive interdependence among the learners could help them promote the abilities which are in the state of maturation. The researcher finally argued that the G-DA serves as a precise, teacher/learner-friendly and, thus, ethical procedure for the assessment of learners’ writing abilities. Moreover, Shi, Matos, and Kuhn (2019) supported the positive role of a dialogic approach in promoting students’ argumentative writing, especially for academically low-performing students. In the same vein, Negretti and Mežek (2019) indicated that “social interaction is crucial in supporting students’ regulation of writing, effectively leading to an experience of individual learning and transformation” (p. 28). Finally, Afshari, Amirian and Tavakoli (2020) also confirmed that cumulative group dynamic assessment procedures were more effective than conventional explicit intervention for supporting EFL writing development. However, Hidri (2019) maintained that DA did not advance test-takers’ current level of thinking into a more developed one nor did it predict better cognitive modifiability in a dynamic assessment (DA) writing exam among ESP learners.

To sum up, based on the studies reviewed above, DA-based feedback can contribute to the progression of learning and can help learners overcome their difficulties in writing. However, although DA has been used to investigate the efficacy of feedback in a variety of domains (e.g., Ableeva, 2010; Kozulin & Grab, 2002; Peña & Gillam, 2000; van Compernolle & Zhang, 2014), few studies in Iranian academic contexts have employed group-dynamic assessment framework in the classroom setting and, more specifically, investigated the feasibility of its application in a writing class where offering a systematic form of feedback becomes a challenge for teachers because the learners have different ZPD levels. In fact, dynamic assessment is a very new-coming endeavor in classrooms settings in which the mediator must mediate a group of learners’ ZPDs simultaneously which is a rather labor intensive approach and may not be feasible in all contexts (e.g., Alavi, Kaivanpanah & Shabani, 2012; Alavi & Taghizadeh, 2014; Davin, 2013; Lantolf & Poehner, 2011; Poehner, 2009; Poehner & Lantolf, 2013). Another drawback of most of the previous studies was the lack of transcendence/transfer tasks which include more complex and difficult tasks to expand learners’ cognitive capabilities beyond the here and now demands of tasks in DA. Investigating the learners’ progressive trajectories towards higher level of ZPD functioning in these new and more challenging tasks might reveal further information about the efficacy of these assessment procedures and interventions for the long term development of learners. Therefore, the present study attempts to experimentally explore the feasibility and efficacy of feedback in writing offered following a G-DA framework and to compare the results with the performance of a group of learners who received feedback following a NDA (here FA) approach in the context of academic writing development among undergraduate students of English Language and Literature in an EFL setting. To put it in a nutshell, the current study aims to compare the extent to which two types of feedback within the frameworks of two assessment systems, i.e., (G-)DA and FA, can improve students’ overall writing ability and their transfer of knowledge to more challenging tasks. Based on the points mentioned above, the present study attempts to answer the following research questions:
1. To what extent can feedback offered to the DA and FA groups result in the students’ overall writing development?

2. To what extent do the students of the DA and FA groups transfer their acquired knowledge and skills during the intervention sessions to new contexts?

Material and Method

Setting and Participants: The present quasi-experimental study, as part of a rather longitudinal mixed-methods research project, was implemented in a Shiraz University in Iran in which undergraduate students of English Language and Literature, in their third semester, are required to take a two-credit course in writing that is offered one session, lasting about 90 minutes, per week for a whole semester. The aim of this course is to teach the students some preliminary aspects of writing in English such as narrowing down topics, brainstorming, idea classification, outlining, writing appropriate topic sentences and how to write paragraphs using different techniques of support and development. A convenient sample of 34 intermediate students (18 males and 16 females), aged between 20 and 22, in two intact writing classes taught by the same instructor took part in the study. These students had already passed two four-credit reading comprehension courses, two four-credit grammar courses, two four-credit conversation courses, and were taking some major literature courses at the time of the experiment. Based on the objectives of the study, in order to compare the efficacy of feedback provided following DA and NDA (here FA) approaches, one of the classes was randomly assigned to a DA class and the other class benefited from FA procedure.

Instruments and Materials: In order to conduct the intended study and collect the necessary data, the researchers used three main instruments (a proficiency test, writing tasks done by the students in class and four writing tests) which were all administered in English and a scoring and analytical scale to score the students’ written texts. The proficiency test which was used to make sure about the homogeneity of the two groups in terms of language proficiency before the inception of the treatments was Oxford Placement test (2001). It consists of two parts including a total of 60 items on vocabulary, grammar and reading comprehension (in the form of cloze passages). The reliability index of the scores obtained from the test estimated through Cronbach’s alpha appeared to be .86 which was quite satisfactory for the purpose of the study.

In order to assess the efficacy of feedback provided in the two groups to improve (different aspects of) the students’ writing, their written samples (a total of 9 compositions in different methods of paragraph development and support such as description, anecdote, process, definition, classification, comparison and contrast and cause and effect) during the semester were collected, assessed and commented on. In fact, after receiving the intended instruction, the students were required to write a paragraph on a given topic and support it based on different methods/techniques of paragraph development and support covered in the class.

As for exploring the students’ overall writing development and the possible level of transcendence/transfer in the DA group, compared to FA group’s performance, four non-dynamic writing tests for which the students in both groups received no feedback/mediation during the assessment serving as the pretest, near-transfer, post-test plus a far-transfer task, were used in the study. As for the first test, which was given to them in the first session and served as the pretest, the students in both groups were asked to write a paragraph about the same topic (i.e., why do/don’t you like team work?). They were given no further instruction and were free to use their already acquired knowledge of writing. In fact, this test was employed to provide information about
the learners’ writing ability and the homogeneity of the two groups of learners in terms of writing competence before instruction, and the learners’ performance on this test was to be compared with their subsequent performances.

Furthermore, the two other (non-dynamic) writing tests were given to the learners in both groups. Again, in these tests, all the students were required to write on the same topic using the writing modes they had already learned during the previous class sessions; however, the tests were designed in an increasing level of difficulty (in terms of genre and cognitive demand) in order to challenge the learners, assess their writing development and, in turn, verify their overall writing ability development and the possible transfer of knowledge and skills in the DA group as compared to the performance of the FA group. For the first non-DA test, which required the students to write a composition similar to what the students had already practiced in the classroom and served as the near-transfer task, the students in both groups sat for the same exam in the same session and were required to write about an abstract concept -i.e., fear- using any modes of paragraph support and development that suit the way they would develop the ideas. As was stated, these writing tests were non-dynamic for which the students received no feedback/mediation during the assessment procedure.

In the final non-DA test, which was administered three weeks after the treatments were finished, the students in both groups were asked to write two different compositions. In the first one, which served as the posttest and its results were compared to those of the pretest to examine and compare the level of overall writing development in the two groups, the students wrote in the process mode of paragraph development (which was one of the modes already practiced in the class) about the topic “How to prepare for a trip”. In the second composition, which was intended to serve as the far-transfer task, the students were required to write a composition not shorter than 250 words on the topic “Mass media” and to elaborate on it using different modes of paragraph support and methods of development such as definition, classification and cause and effect. In fact, it was supposed that due to the length and the use of different modes of development demanded, the task would be highly complex and demanding and its completion would require the learners to apply more sophisticated levels of mental functioning.

Some further but subsidiary instruments/measures were used in the present study as well, for example, in order to comprehensively assess the overall writing ability of the students as well as different aspects of their written drafts such as content and organization, support and development, cohesions and coherence, structures, vocabulary and mechanics, a writing scoring rubric developed by Paulus (1999) was used. Then, based on the features of the scoring rubric, a simplified and student-friendly grading scale was developed by the researchers so that it would be easily attached to the students’ written drafts and would provide them with some information and comments regarding the quality of their performance, the problematic areas in their written work and what they needed to do in order to improve their performance in subsequent drafts. In order to ensure the consistency and reliability of scores offered for the learners, two raters analyzed and scored the students’ texts and the final score and the intended comments were issued only after discussing the inconsistencies in their scorings that were finally compromised and adjusted.

Data Collection Procedure: At the beginning of the course, the students in both classes were given a proficiency test and a writing task with the same topic (serving as the pretest) to inform the researchers of the individual learners’ proficiency level, their ability in writing and, thus, the homogeneity of the two groups before the introduction of the treatments. These tests were administered in a single classroom session and the
time assigned to the students to answer these tests was 60 minutes, 30 minutes for each. The results independent samples t-tests showed that the two groups of learners were of a rather equal competency with regard to their proficiency level (t (32)=1.58, p=.123) and writing ability (t (32)=338, p=.737). As for the intended treatments, the classes were randomly assigned to a FA group, receiving a careful and a rather systematic sequencing of instruction, assessment and provision of feedback, and the DA group that besides the normal instruction on writing (also given to the FA group) received teacher intervention, situated and immediate assistance and other mediating strategies in order to fulfill the main principles of interactionist DA approach. In each session, the instructor introduced one method of supporting the topic sentence, provided the students with model paragraphs in their textbooks and then the students were asked to write a paragraph based on the technique they had learned.

More specifically, Gal Perins’ (1967, as cited in Poehner, 2008) model of human action which consists of three stages of orientation (which had the main goal of familiarizing the learners with the writing tasks and how to do them), execution (in which the learners made use of the available resources and teacher mediation to perform the task and actually wrote about an assigned topic) and control (which has the main goal of determining the extent to which tasks are successfully being carried out and helping the learners to reflect upon their performance and verbalize the reason behind their choices) was used based on the principles of G-DA in the DA classroom. In fact, to play the role of a mediator in the writing class, as one of the main requirements of DA, the instructor, after giving the intended instruction and asking the learners to write on an assigned topic, observed the learners’ performance while circulating in the classroom and if necessary reviewed, negotiated, provided immediate and situated feedback and helped the learners. She conducted DA through group and individual interactions during whole-class activities and to the extent possible offered graduated, contingent and dialogic assistance (see Aljaafreh & Lantolf, 1994). Moreover, she tried her best to use mediating prompts ranging from the most implicit to the most explicit as an effective way to assist the learners in their performance. However, due to the flexible nature of the writing classroom and the learners’ emergent needs, the mediation offered took a dynamic nature. This feature demanded the use of an interactionist mode of DA manifested in a cumulative mode of G-DA in which the instructor negotiated with individual learners and in case of observing a common problem shared by a number of learners, she addressed the whole class in an attempt to move the ZPD of the entire group to higher levels. In addition, she used some mediation methods such as whole-class demonstration and evaluation of samples and strategy explanation for each phase of writing the drafts. Finally, in order to give an active role to the learners in the feedback practice and make them realize the objectives and benefits of feedback offered, they were required to revise their drafts based on the points mentioned in the scales attached to their drafts and return them to the instructor in the following session. However, the revised drafts were not analyzed for the present study.

As for the FA class, there was a careful sequencing of instruction, assessment and provision of feedback. The learners, similar to the DA participants, received instruction on different techniques of support and methods of paragraph development in writing and then were required to write about a very similar assigned topic on a specific mode as an assessment practice. They received little or no feedback on the quality of their performance until the assessment was finished. Afterwards, their written drafts were collected, assessed and commented on and they were also given an opportunity to see and reflect upon their graded and commented written drafts and subsequently revise them. Finally, as mentioned earlier, two non-dynamic writing tests were administered in
the two groups to assess and compare the extent of overall writing development in the two groups and to see whether or not the transcendence/transfer of knowledge and skills to new contexts had occurred in the DA group compared to the FA group.

**Data Analysis Procedure:** A quantitative analysis of the learners’ written drafts in DA and FA groups (from pretest to posttest) was conducted in order to assess the students’ overall writing development. In addition, the students’ performance on the pretest and the near/far-transfer tasks were carefully analyzed, assessed and compared to see whether the transfer of the acquired knowledge and skills had occurred in any of the two groups and if so, which group had been able to outperform the other one in this respect. In addition to descriptive statistics of the data gathered, in order to determine the statistical significance of the differences between the participants’ performances in different treatment groups, a series of two-way repeated measures ANOVAs (mixed between-within subjects analysis of variance) was run for the different scores obtained from the writing tasks. In order to gain a more comprehensive picture of the results of the study, the gain scores for the students’ performance on the pretest and the posttest/transfer tasks were also computed and compared using independent samples t-tests.

**Results and Discussion**

**Assessment of the Students’ Overall Writing Development:** In order to assess the impact of two different treatments (G-DA vs. FA) on the overall improvement of the students’ writing abilities, the gain scores of individual students in both groups based on their performance on the writing pretest and the posttest were computed and compared using the t-test procedure (see Table 1). As the results in Table 1 indicate, there was a statistically significant difference between the mean gain scores of the students in FA group (M=8.98, SD=4.01) and DA group (M=11.58, SD=2.29) from the pretest to the posttest (t (29.489) =2.396, p =.025, Eta square=.159). The results of the comparison of the mean gain scores of the two groups suggest that the students in the DA group have made greater improvement than the FA students and, thus, the DA-based instruction has been more effective in improving the students’ overall writing ability; in addition, magnitude of the difference between the mean gain scores of the two groups of learners is rather large.

**Table 1.** Descriptive statistics and results of independent samples t-test for FA and DA groups’ gain scores from pretest to posttest

<table>
<thead>
<tr>
<th>Group</th>
<th>N</th>
<th>Mean</th>
<th>SD</th>
<th>t</th>
<th>df</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>FA</td>
<td>19</td>
<td>8.98</td>
<td>4.01</td>
<td>-2.369</td>
<td>29.489</td>
<td>.025</td>
</tr>
<tr>
<td>DA</td>
<td>15</td>
<td>11.58</td>
<td>2.29</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The effectiveness of DA in helping the learners to promote their learning is confirmed by several studies conducted on writing (e.g., Afshari, et al., 2020; Alavi & Taghizadeh, 2014; Aljaafreh & Lantolf, 1994; Rahimi et al. 2015; Shi, Matos, & Kuhn, 2019; Shrestha & Coffin, 2012; Xiaoxia & Yan, 2010). In fact, the results of the present study corroborated the findings of previous studies conducted on DA in writing and indicated that DA by integrating assessment and instruction can systematically provide some insights into the learners’ problems and capabilities, can enable the mediators to more accurately assess the learners’ performances which in turn can promote their learning and development. In other words, the mediation offered to the learners can give an opportunity to the mediators to learn more about learners’ strengths and weaknesses
and to provide an appropriate level of assistance which can help the learners learn the required knowledge and skills and perform autonomously on the similar or more complex tasks later on. The effectiveness of DA in improving the writing competence of the learners can also be interpreted in terms of the appropriacy of the corrective feedback provided and meeting the conditions of CF that needs to be “contingent,” “graduated,” and “dialogic” (Aljaafreh & Lantolf, 1994, p. 468). Furthermore, the collaborative atmosphere provided during the DA sessions can possibly reduce the learners’ stress while working on the assessment tasks and the ZPD-sensitive mediation/assistance, which can systematically unravel the learners’ current status and their learning potentials, can prevent misinterpretations of the learners’ abilities and, if appropriately implemented, can enhance the quality of their performance on the intended assessment tasks (Ajideh & Nourdad, 2012).

Moreover, in order to obtain a more comprehensive picture of the overall writing development of the students in the two groups, a mixed between-within subjects analysis of variance was run to compare the students’ performances on all the writing tasks they did throughout the semester (i.e., the writing pretest, task 2, task 3, task 4, task 5, near-transfer task, task 7, task 8, task 9, task 10, posttest and far-transfer task). Table 2 presents the descriptive statistics derived from this analysis.

<table>
<thead>
<tr>
<th>Writing Tasks</th>
<th>Group</th>
<th>Mean</th>
<th>SD</th>
<th>Writing Tasks</th>
<th>Group</th>
<th>Mean</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Task 1 (Pretest)</td>
<td>FA</td>
<td>28.28</td>
<td>3.82</td>
<td>Task 7</td>
<td>FA</td>
<td>32.51</td>
<td>4.32</td>
</tr>
<tr>
<td></td>
<td>DA</td>
<td>27.86</td>
<td>3.36</td>
<td></td>
<td>DA</td>
<td>34.40</td>
<td>3.37</td>
</tr>
<tr>
<td>Task 2</td>
<td>FA</td>
<td>28.74</td>
<td>5.32</td>
<td>Task 8</td>
<td>FA</td>
<td>34.09</td>
<td>3.73</td>
</tr>
<tr>
<td></td>
<td>DA</td>
<td>32.95</td>
<td>3.25</td>
<td></td>
<td>DA</td>
<td>33.45</td>
<td>3.96</td>
</tr>
<tr>
<td>Task 3</td>
<td>FA</td>
<td>28.94</td>
<td>4.11</td>
<td>Task 9</td>
<td>FA</td>
<td>35.15</td>
<td>4.19</td>
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<td></td>
<td>DA</td>
<td>31.29</td>
<td>4.83</td>
<td></td>
<td>DA</td>
<td>38.06</td>
<td>3.02</td>
</tr>
<tr>
<td>Task 4</td>
<td>FA</td>
<td>29.69</td>
<td>6.25</td>
<td>Task 10</td>
<td>FA</td>
<td>38.71</td>
<td>5.93</td>
</tr>
<tr>
<td></td>
<td>DA</td>
<td>29.79</td>
<td>2.18</td>
<td></td>
<td>DA</td>
<td>40.46</td>
<td>3.12</td>
</tr>
<tr>
<td>Task 5</td>
<td>FA</td>
<td>29.56</td>
<td>5.89</td>
<td>Task 11 (Posttest)</td>
<td>FA</td>
<td>37.26</td>
<td>4.38</td>
</tr>
<tr>
<td></td>
<td>DA</td>
<td>31.11</td>
<td>5.71</td>
<td></td>
<td>DA</td>
<td>39.44</td>
<td>3.29</td>
</tr>
<tr>
<td>Task 6 (Near-transfer)</td>
<td>FA</td>
<td>37.07</td>
<td>4.81</td>
<td>Task 12 (Far-transfer)</td>
<td>FA</td>
<td>38.97</td>
<td>4.07</td>
</tr>
<tr>
<td></td>
<td>DA</td>
<td>38.83</td>
<td>3.75</td>
<td></td>
<td>DA</td>
<td>39.00</td>
<td>3.20</td>
</tr>
</tbody>
</table>

A close examination of the students’ performance on these assessment tasks and the comparison of mean scores of the two groups indicate that the students in the DA group have performed better than their counterparts in the FA group in most cases. However, in some cases the differences are negligible and some fluctuations are observed in the learners’ performance during the assessment tasks, yet as Vygotsky (1978) maintains development involves both progressive and regressive moves, and regressive moves are also helpful in moving forward. Therefore, even if there is no dramatic change in the learners’ writing after the implementation of DA, it should not be interpreted as an indication of lack of development; instead, it indicates impacts on the learner development (Mardani & Tavakoli, 2011). In fact, since learners have different ZPDs and may require different levels of assistance, they may undergo different changes in the assessment tasks (Poehner, 2008; Rahimi et al., 2015). Nevertheless, the ZPD-sensitive mediation offered within the DA framework can respond to the learners’ individual needs and can contribute to their writing development (Aljaafreh & Lantolf, 1994; Poehner & Infante, 2015; Poehner & Lantolf, 2013; Shabani, 2018). This finding further corroborate Shrestha and Coffin’s (2012) assertion that the focused tutor mediation is an effective way of providing the kind of reflective, dynamic mediation that is able to effectively support students’ academic writing development. Generally, the findings reported in the present study supports Shabani’s (2018) assertion that “the G-DA serves as a precise, teacher/learner-friendly and, thus, ethical procedure for the assessment of learners’ writing
Furthermore, according to the results of the repeated-measures analysis (mixed between-within subjects analysis of variance), which are presented in Table 3, there was a significant interaction between time and groups (different interventions) (Wilk’s Lambda=.438, F (11, 22) =2.566, p=.029, Partial eta squared=.562). This suggests that the writing scores of the students in the two groups have experienced different changes over time/across the twelve tasks. Also, there was a significant main effect for time (Wilk’s Lambda=.061, F (11, 22) = 30.525, p=.000, Partial eta squared=.939). This finding indicates that the students in both DA and FA groups have shown substantial improvement in their writing ability through time and, as the value of Partial Eta squared shows, the effect of (the treatments over) time has been large. However, the main effect of treatments was not significant (F (1, 32) =1.974, p=.170, Partial Eta Squared=.058). This suggests that the intended treatments (G-DA and FA) were rather equally effective in helping the students to improve their writing ability over time and across different assessment tasks.

Table 3. Results of repeated-measures for scores on all writing tasks completed by DA and FA groups

<table>
<thead>
<tr>
<th>Effect</th>
<th>Wilk’s Lambda value</th>
<th>F</th>
<th>Hyp. df</th>
<th>Error df</th>
<th>p</th>
<th>Partial Eta Squared</th>
</tr>
</thead>
<tbody>
<tr>
<td>Multivariate tests (of within-subject effect)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Time</td>
<td>.061</td>
<td>30.525</td>
<td>11.000</td>
<td>22.000</td>
<td>.000</td>
<td>.939</td>
</tr>
<tr>
<td>Time*Group</td>
<td>.438</td>
<td>2.566</td>
<td>11.000</td>
<td>22.000</td>
<td>.029</td>
<td>.562</td>
</tr>
<tr>
<td>Tests of between-subject effect</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Group</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Type III Sum of Squares</td>
<td></td>
<td>df</td>
<td>Mean Square</td>
<td>F</td>
<td>p</td>
<td>Partial Eta Squared</td>
</tr>
<tr>
<td>217.758</td>
<td>1 (32)</td>
<td>217.758</td>
<td>1.974</td>
<td>.170</td>
<td>.058</td>
<td></td>
</tr>
</tbody>
</table>

However, as can be clearly observed in Figure 1, the students in the DA group have shown a better performance compared to the FA ones in most assessment tasks, but, as was mentioned, this difference has not been large enough to reach a significant level. As the following figure shows, the students in the DA group scored a bit lower than the students in FA in the pretest, but as soon as they were introduced to the DA intervention, especially in the first task, they improved and showed a rather similar superiority trend in the following assessment tasks as well. This figure also shows the regressive and progressive moves in the learners’ writings while performing on different writing tasks during the whole semester.
Moreover, as the results of the study revealed, FA treatment similar to DA can also result in the learners’ overall writing development and their improvement in different aspects of writing through time. Several factors can account for this trend. As one of the possible justifications, we can point to the nature of the tasks to which the students were required to respond. In fact, in spite of the fact that the students in the DA group may have reached the level of internalization and individualized performance, the independent performance of the students in the FA group on the writing tasks throughout the course and the level of self-regulation they have possibly achieved due to the type of instruction and feedback received have made them more hard-working and highly resistant against failure or succumbing when encountering a more complex and challenging task. This finding may be accounted for by the level of self-regulation the learners may have achieved. In fact, according to Nicol and Macfarlane-Dick’s (2006) idea, the main argument for feedback and formative assessment in higher education is that they should help the learners to reach the level of self-regulation, which refers to the extent to which learners during the learning process can regulate and have a control over different aspects of their thinking, motivation and behavior. In addition, since these learners were highly encouraged by the instructor to improve their performance/writing, this positive affective factor and their own positive attitudes towards learning can be regarded as other reasons for their writing development. In fact, it is quite clear that positive attitude in the learners can foster increased motivation and engagement with the learning tasks which, in turn, can lead to successful attainment of proficiency in the language skill of concern (Brown, 2007).

The finding of the present study concerning the capability of FA in improving the learners’ writing further confirms Poehner and Lantolf’s (2005) idea that “FA is not necessarily low-stakes and that it can be carried out quite systematically, yielding results that may be more systematic and revealing with regard to learner development than summative assessment” (p. 233). This finding support the idea that FA is an effective tool to enable learners to effectively convey their thoughts and ideas in writing assessment and to “allow teachers to gauge the effectiveness of their instructional practice, modify instruction as needed, and provide students with feedback on writing strengths and areas in need of further development” (Graham, et al. 2011, p. 5).

Assessment of the Students’ Transfer of Acquired Knowledge and Skills to New Context
As for the comparison of the students’ level of transfer in their writing ability due to the impact of the two
types of treatments, a mixed between-within subjects analysis of variance was carried out to compare the students’ performance in the writing pretest, the near transfer and the far-transfer tasks. Table 4 presents the descriptive statistics for this analysis.

**Table 4. Descriptive statistics for writing pretest and near- and far-transfer tasks**

<table>
<thead>
<tr>
<th>Writing Tasks</th>
<th>Groups</th>
<th>N</th>
<th>Mean</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pretest</td>
<td>FA</td>
<td>19</td>
<td>28.28</td>
<td>3.82</td>
</tr>
<tr>
<td></td>
<td>DA</td>
<td>15</td>
<td>27.86</td>
<td>3.36</td>
</tr>
<tr>
<td>Near-transfer task</td>
<td>FA</td>
<td>19</td>
<td>37.07</td>
<td>4.81</td>
</tr>
<tr>
<td></td>
<td>DA</td>
<td>15</td>
<td>38.83</td>
<td>3.75</td>
</tr>
<tr>
<td>Far-transfer task</td>
<td>FA</td>
<td>19</td>
<td>38.97</td>
<td>4.07</td>
</tr>
<tr>
<td></td>
<td>DA</td>
<td>15</td>
<td>39.00</td>
<td>3.20</td>
</tr>
</tbody>
</table>

As for the results of repeated measures presented in Table 5, there was a significant main effect for time (Wilk’s Lambda=.079, F (2, 31)=180.795, p=.000, Partial eta squared=.921). This is indicative of the fact that the students in both groups considerably improved in their writing ability and equally well transferred their acquired knowledge through time, which is further confirmed by the effect size which is highly large. However, there was no significant interaction between time and treatment (group) (Wilk’s lambda=.930, F (2, 31) =1.169, p=.324, Partial eta squared=.070). This suggests that the students in the two groups underwent similar changes in their scores from the writing pretest to the transfer tasks. Moreover, the main effect of treatment was not significant (F(1, 32)=.162, p=.690, Partial eta squared=.005). This means that transfer of acquired writing knowledge/skills has rather equally happened in the two groups and both treatments were effective in this regard.

**Table 5. Results of repeated-measures for writing pretest and near- and far-transfer tasks**

<table>
<thead>
<tr>
<th>Effect</th>
<th>Wilk's Lambda value</th>
<th>F</th>
<th>Hyp. df</th>
<th>Error df</th>
<th>p</th>
<th>Partial Eta Squared</th>
</tr>
</thead>
<tbody>
<tr>
<td>Multivariate tests (of within-subject effect)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Time</td>
<td>.079</td>
<td>180.795</td>
<td>2</td>
<td>31</td>
<td>.000</td>
<td>.921</td>
</tr>
<tr>
<td>Time*Group</td>
<td>.930</td>
<td>1.169</td>
<td>2</td>
<td>31</td>
<td>.324</td>
<td>.070</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Tests of between-subject effect</th>
<th>Type III Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>p</th>
<th>Partial Eta Squared</th>
</tr>
</thead>
<tbody>
<tr>
<td>Group</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>5.141</td>
<td>1 (32)</td>
<td>5.141</td>
<td>.162</td>
<td>.690</td>
<td>.005</td>
</tr>
</tbody>
</table>
This finding is further illustrated in Figure 2 which indicates a rather interesting trend of growth and transfer in the writing knowledge and ability of the individuals in the two groups from the writing pretest (1) to the near transfer task (2) and then the far-transfer task (3). As it is depicted in the following figure, the DA students have a rather better performance than the FA ones in the near-transfer task but an equal level of performance in the far-transfer task. In fact, the FA students showed a surprising growth from the near to the far-transfer task and performed equally well in the far transfer task.

Some other studies have also explored transfer of knowledge and skills acquired during the scaffolding/mediation sessions to new and more complex assessment tasks in the domain of writing assessment (e.g., Rahimi et al., 2015; Shabani, 2018; Shrestha, 2011) and other language skills (e.g., Davin, 2013; Kozoulin & Garb, 2002; Poehner, 2007). Shrestha (2011) believes that the results of previous research in writing on this under-researched concept are mixed and inconclusive. The equal level of transfer in the two groups can be explained in terms of several factors. The first explanation can be the assessment context itself; since the students in both groups were informed that they would sit an exam, naturally, they tried their best to have an acceptable level of performance. As for the FA group, this equal level of transfer again can be attributed to the level of self-regulation they achieved as a result of the instruction and feedback that they had received. In other words, they were able to effectively regulate their thinking and performance during the assessment tasks and, hence, they could apply effective strategies to reach the self-determined goals and the required standards for the intended assessment tasks (Nicol & Macfarlane-Dick, 2006).

Furthermore, the successful transfer of the acquired knowledge and skills related to writing to more complex tasks in the DA group can be indicative of the fact that these learners successfully internalized the systematic feedback offered to them in the intervention sessions. Indeed, the tutor’s mediation and the learners’ own engagement with the writing tasks resulted in their academic writing development, which, in turn, enabled them to show an acceptable level of performance in the transfer tasks. Just as Poehner (2007) argued, previous interactions with the mediator had made the learners able to internalize their conceptual understanding of the issues of concern and, thus, they could perform almost independently in the transcendence sessions. This

![Figure 2. Comparison of pretest (1), near-transfer task (2) and far-transfer task (3) scores of FA and DA groups](image-url)
finding further confirms Kouzolin and Garb’s (2002) conclusion that the students benefiting from the DA mediation can transfer and apply the acquired strategies while working on the new assessment tasks. Moreover, the successful level of transfer in the performance of DA students’ further supports Rahimi et al.’s (2015) idea that the diagnostic and developmental potentials of DA can assist learners in internalizing and transferring the acquired knowledge and skills to more challenging assessment contexts.

The second, but less robust, reason can be attributed to the fact that although these two transfer tasks were non-dynamic and the learners did not benefit from the instructor’s mediation, the collaborative frame created (Aljaafreh & Lantolf, 1994) and the instructor’s presence by itself could have acted as a form of implicit mediation for the DA students. In fact, it is this inter-psychological activity that drives development (Poehner & Infante, 2015). In other words, the mediatory exchanges between the instructor and learners could move the entire class forward in its ZPD while constructing ZPDs with individual learners, which could assist the learners’ in internalizing the knowledge and performing adequately well in transcendence sessions (Shabani, 2018). As for the results of studies which have examined and compared the extent of transfer in the (writing) performance of DA vs. NDA students, reference can be made to Shrestha’s (2011) study in which he found that although the NDA student developed her academic writing and conceptual knowledge, the DA students were more successful in transferring the academic writing and conceptual knowledge to the transfer tasks. On the contrary, in the present study most probably due to the high level of self-regulation that the FA students gained in their academic writing, they were equally able to transfer the acquired knowledge of academic writing to the transfer tasks.

Finally, it should be reiterated that, in the present study, the mediator conducted the DA sessions in the writing course based on the principles of G-DA and the findings of the study supported the feasibility of DA in the classroom setting while working with the ZPD of the entire group. In fact, the mediator provided a systematic mediation and support that benefited all the learners and almost all of them improved their writing over time. In spite of the large class size (including 15 students) and the limited class time, which did not allow extended and extensive mediation for all the learners, the DA intervention improved the learners’ writing ability. On the whole, it can be claimed that this ‘daunting’ task has been successfully conducted in the present study and the paradigm of DA has been influential in promoting the students’ learning and improving their writing ability. Moreover, as it was observed in the present study, evidence suggests that incorporation of FA in classroom settings, in which the instructor monitors the students’ progress and provides them with feedback, can lead to improvement in the students’ writing ability. Therefore, the findings of the present study regarding the improvement of the students’ writing in the DA and FA groups provide empirical support for the decision to develop and include such assessment procedures as central parts of instruction in writing or other language skills in (EFL) classroom contexts.

**Conclusion and Implications of Study**

The findings of the present study contributed to the area of feedback in writing and confirmed the feasibility of implementing both DA and FA procedures in classroom settings and working with a group of students in an attempt to assess and promote their learning. In fact, both types of treatments appeared to be effective in obtaining information on the students’ problem areas and learning potentials and, by providing systematic methods of instruction and feedback, assisted their internalization of the acquired knowledge, and independent
performance even in new and more complex writing tasks. Providing feedback through these frameworks (i.e., based on dialogue and negotiation) can give the learners more opportunities to understand their own problems, reach the solutions to resolve them, revise their performance immediately, improve the quality of their performance and final output and thus enhance their motivation and eagerness to participate in classroom activities. Kao (2020) also maintain that “because DA has a pedagogical function, it can minimize the risk of erroneous evaluation and promote the very development that it seeks to assess” (p. 272). Therefore, teachers are recommended to follow a systematic framework in their instruction, selection of methodology and materials, evaluation process and provision of feedback that assist the students with suitable and interactive engagement in the learning process and improve their performance on various skills and components of language. In addition, EFL writing instructors should no longer consider writing “as a static, unilateral skill but as a social ability which can be jointly developed through co-constructing supportive interactions in their classes” (Ahmadi & Besharati, 2017, p. 27).

Moreover, the present study successfully implemented a G-DA approach in a writing course; the procedures employed and the insights gained can assist the writing practitioners in learning how such an approach can be used to improve a group of students’ writing in a classroom setting. However, in implementing the intended treatments, the instructor faced a number of obstacles and also some shortcomings were identified which can be regarded as the limitations of the study. For example, the large number of students in the class and the time-constraints did not allow for extensive and extended tutor-learner interactions; consequently, sometimes the instructor did not find the opportunity to engage all the learners and there was not enough time for all the learners to ask their questions and resolve their problems. Furthermore, the present study investigated the transfer of the acquired knowledge only to two transfer tasks which may not show whether the learners are able to sustain their knowledge over time or not, an enterprise that the future research in DA can attend to.

The results obtained and the limitations of the present study led the researchers to suggest some avenues for future research in DA and FA, in general, and writing instruction, in particular. DA studies have mainly focused on working with individual learners and few studies have been conducted to examine the feasibility of applying DA in classroom contexts working with the ZPD of an entire group and offering an array of mediational strategies to promote their learning (Lantolf & Poehner, 2011; Poehner, 2009; Poehner & Infante, 2015). Therefore, more studies need to be conducted in writing and other language skills applying the principles of G-DA, like standardized mediations, to substantiate the results of the studies previously conducted. An analysis of DA literature shows that some DA practitioners/researchers have conducted studies using computer medium (known as computer-based DA) to implement the intended interactions and to provide mediations using special programs or through emails/chats. A promising line of research can be the use of both computer-assisted and face-to-face G-DA classroom sessions to compensate for the time-constraints of offering mediation to all the learners and to respond to their ZPDs more effectively (Shrestha, 2017). Alternatively, FA is another under-researched area in writing; therefore, further investigations can be done to assess how it can be implemented more systematically and how it can be applied to assist learners’ achievement of a satisfactory level of self-regulation and in promoting and enhancement of their learning.
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