Dynamic Assessment in Brown's Graduated Prompts Model vs. Poehner's Model: Grammatical Accuracy in One-Paragraph Narrative Essays

Shohreh Bahrami Galenoee iD
EFL Teacher, Tehran, Iran

Jamileh Rahemi* iD
Assistant Professor of TEFL, Farhangian University, Tehran, Iran

Abstract

Over the past decades, writing assessment research has been concentrating on alternative methods with a social-oriented view of assessment, including dynamic assessment (DA). Given the lack of research juxtaposing the interventionist and interactionist DA frameworks in the area of narrative writing, this study sought to compare the effectiveness of Brown's graduated prompts model vs. Poehner's model in the development of one-paragraph narrative essays in terms of grammatical accuracy. The study followed a quasi-experimental design, with 15 Iranian EFL learners selected via convenient sampling from among the female students of a language institute in Tehran. The participants were then randomly divided into three groups: the interventionist group, in which mediation was based on Brown's model in the sandwich format; the interactionist group, where mediation was done using Poehner's model in the cake format; and the non-dynamic assessment (NDA) control group with no mediation involved. The research consisted of three pilot sessions and eleven sessions as the main phase. To analyze the data, both descriptive and non-parametric inferential statistics were run. The results conceded the superiority of both DA approaches to NDA, whereas no significant difference was observed between the two DA groups in their general performance on narrative tasks. However, the analysis of the number and types of required mediational moves over the DA sessions indicated the superiority of the interactionist model to the interventionist framework in the development of grammatical accuracy in narrative paragraphs. The study offers some theoretical and pedagogical repercussions for educators, curriculum designers, and L2 teachers.

***Keywords*:** Dynamic Assessment, Interactionist Model, Interventionist Model, Narrative Writing, Grammatical Accuracy, One-Paragraph Essays.

*Corresponding author's email: j.rahemi@cfu.ac.ir

INTRODUCTION

For long, writing has been viewed as one of the most basic skills in the process of learning a foreign or second language (L2). It is also considered the most difficult language component because it involves other interrelated skills. Thus, proper support and instruction is required to achieve the expected objectives in writing (Mauludin, 2018). However, for learning how to write effectively in L2, effective instruction, though important, is not sufficient. Rather, employing an effective assessment procedure is also crucial since testing can help evaluate the gained knowledge and promote the quality of teaching and learning (Pilipović, 2017).

Given the arguments against approaches viewing assessment as an activity that follows instruction in the form of static testing without any attempt to change, guide, or improve learner's performance (Tzuriel, 2000), there has recently been a tendency toward alternative assessment procedures that link assessment to instruction both in the realms of general education and L2 teaching; dynamic assessment (DA), as an alternative type of assessment, is aimed at mediating and giving assistance to students during the testing process (Lantolf & Poehner, 2004). To Lantolf and Poehner, DA is a procedure that "integrates assessment and instruction into a seamless, unified activity aimed at promoting learner development through appropriate forms of mediation that are sensitive to the individual's (or in some cases a group's) current abilities" (p. 12). That is, the combination of instruction and assessment in DA is so unified that it is hard for an observer of a DA session to recognize whether he is watching an assessment or instructional lesson (Poehner, 2005).

The two major approaches to DA are interventionist and interactionist DAs that are differentiated based on the type of mediation that learners are engaged in during the assessment process (Lantolf & Poehner, 2004). The distinctions between these two approaches will be fleshed out in details in the literature review section.

In line with the existing literature on DA, the present study was

designed to examine the comparative effectiveness of interactionist vs. interventionist assessment on the development of one-paragraph narrative essays in terms of grammatical accuracy, with a focus on both changes in learners' total performance and changes in the number and type of mediational moves required during the instructional course. The present study contributes to the DA research in several important aspects:

First, studies with a focus on the employment of DA in diverse L2 learning contexts can contribute to a growing body of research in the literature. Given the scarcity of DA application and a superfluous reliance on non-dynamic assessment (NDA) procedures in the educational context of Iran, the necessity of doing such studies is an absolute must.

Furthermore, although a plethora of research has been conducted in Iran on the effectiveness of DA in the development of different language components, particularly writing skills (e.g., Alavi, Kaivanpanah, & Shabani, 2012; Ebadi, 2016; Xian, 2020), the number of comparative studies that have juxtaposed the effects of both approaches is much less than research conducted on each approach individually. Thus, before making any strong claims for the superiority of one DA approach over the other, there is a need for more comparative studies such as the present one.

Besides, the comparative studies done so far have rarely focused on examining changes in the type and number of required mediational moves to determine the students' development, i.e., they have just focused on changes in learners' general performance. However, as Aljaafreh and Lantolf (1994) concluded in their pioneering work on DA, changes in the number and type of mediational moves are the main criteria for determining learner development. Accordingly, the current research made an attempt to use these criteria for measuring the learners' development in the accuracy of narrative paragraphs.

The significance of doing this study also lies in the paucity of research on how DA may contribute to the development of grammatical accuracy in narrative writings, given that most of the DA studies have focused on genres other than narrative, such as academic, expository, or argumentative writing.

Finally, in the DA literature, little attention has been paid to the development of one-paragraph essays, while they not only allow writers to devote their study time to write good paragraphs due to their short length, but also present them with long time to practice and display the basic principles of writing. Their more important merit is that writers can apply their knowledge about one-paragraph essays to larger writing tasks (Bailey & Powell, 1988).

LITERATURE REVIEW

Theoretical Underpinnings

The concept of alternative assessment was proposed to perform learning tasks in real contexts and to judge learning during its ongoing process (Ghoorchaei, Tavakoli, & Ansari, 2010). In other words, scholars started to discover the possible benefits of approximating the testing field to the second language learning and teaching areas (Bachman & Cohen, 1998). This link is completely incorporated within the Vygotsky's social constructivist theory (SCT) which blends linguistics, psycholinguistics and socio-cultural theories of language learning together (Brown, 2007). Vygotsky (1978) argued that learning firstly occurs inter-psychologically by interacting with other individuals, and then intra-psychologically within the child, where (s)he internalizes what (s)he has learned. One of the main constructs of SCT is the zone of proximal development (ZPD) which was defined by Vygotsky as "the distance between the actual developmental level as determined by independent problem solving and the level of potential development as determined through problem solving under adult guidance or in collaboration with more capable peers" (p. 86).

DA was originally rooted in the Vygotsky's SCT, and in turn, in ZPD, though Vygotsky never utilized the term DA in his proposals on individuals' cultural development or in his views on the significance of differentiating between diagnostic and prognostic tests in the schools or labs (Lantolf & Poehner, 2008). Mantero (2002) argued that an assessment that is in

agreement with SCT makes use of two practical techniques: dialogic instruction and authentic assessment. To Mantero, this kind of assessment develops learner's grammar through meaningful interactional activities and mutual dialogues by focusing on the dynamic quality of language learning in general and the gradual emergence of learner's grammar, in particular.

Various definitions have been offered for DA, but the common ground of all is "active intervention by examiners and assessment of examinees' response to intervention" (Haywood & Lidz, 2007, p. 1). To Lantolf and Poehner (2004), DA is different from NDA in two aspects: understanding the future and methodology. That is, learners' performance level resulting from mediation helps us not only understand the learners' extent of ability for taking advantage of mediation and come up with further details about mediational procedures in the future, but also directs us toward anticipation of the learners' success in academic environment (Panahi, Birjandi, & Azabdaftari, 2013).

Two major approaches to DA are the interventionist (psychometric) and interactionist (clinical) ones, reflecting the two different types of mediating and responding to learners' language problems: standardized clues vs. cooperative dialoging. While in the interventionist models, such as the Brown's graduated prompts (GP) model, the mediator follows some fixed rules, the mediator in the interactionist DA can freely mediate and trace learners' difficulties and give them different forms of assistance (Lantolf & Poehner, 2008). In other words, the interventionist mediation is standardized, and the focus is on the psychometric aspects of assessment to come up with computable data that can be utilized for comparing and contrasting purposes as well as anticipating learners' future performance (Poehner, 2005).

In the Brown's GP model, the learners are provided with a graduated sequence of standardized and predetermined hints and prompts arranged from the most implicit to the most explicit through scaffolding. The mediator's assistance continues until the learners master the rules that they require in order to independently solve a problem. What distinguishes GP

from other interventionist models is its transfer tasks. Deducing from the Vygotsky's view, Brown and her co-workers argued that "an additional and crucial feature of development is that an individual's performance change not only on a repetition of the original test (or a parallel test) but on different kinds of tasks" (Poehner, 2008, p. 51).

To Poehner (2005), the GP model is far away from the Vygotskian perspective in that Vygotsky centers upon ideally developing the learners' cognitive abilities through mediation, while Brown and her co-workers center upon learning efficiency metrics. Accordingly, Poehner borrowed some principles from the Vygotsky's SCT and some from the Feuerstein's mediated language experiences model, integrated them, and then came up with his interactionist model. To him, both perspectives give more priority to developing learners' cognitive abilities than to psychometrically measuring learners' performance; they advocate the flexible application of mediation in which the mediator is allowed "to respond to problems as they arise, tuning interventions to the learner's needs, observing the learner's responsiveness, and making changes to the amount and kind of assistance provided" (81). Their difference lies in that advocates of the Vygotsky's view center on human mediators to the great extent, but Feuerstein and his co-workers mainly focus on the non-human mediator, including artifacts or instruments.

Related Studies

After the pioneer research done by Aljaafreh and Lantolf (1994) and a small-scale research conducted by Nassaji and Swain (2000) on the notion of ZPD and L2 development, no other important empirical studies were carried out for about a decade. However, with the completion of Poehner's (2005) dissertation, researchers resumed to work on the ZPD, but this time with a specific focus on the new concept of DA (Atkinson, 2011). In fact, researchers started to examine the effectiveness of DA for the development of different L2 components, including reading, listening, speaking,

vocabulary, grammar, pragmatic, and discourse or genre features (e.g., Ajideh & Nourdad, 2012; Ebadi & Asakereh, 2017; Ebadi & Yari, 2017; Ghonsooly & Hassanzadeh, 2019; Hidri, 2014; Kamali, Abbasi, & Sadighi, 2018; Kozulin & Garb, 2002; Malmir, 2020; Safdari & Fathi, 2020; Shrestha, 2017).

Over the recent decades, the field of DA research has been extended to some new areas, including computerized DA, on-line DA, mobile-based DA, hybrid DA, as well as group DA (e.g., Ahmadi & Barabad, 2014; Ebadi & Bashir, 2021; Ebadi & Saeedian, 2015; Ebadi & Saeedian, 2016; Estaji & Saeedian, 2020; Heidari & Izadi, 2020; Kao & Kuo, 2021; Rezaee, Alavi, & Razzaghifard, 2020; Tuluk & Yurdugul, 2020; Wang & Chen, 2016). In all these studies, the superiority of DA to NDA approaches has been acknowledged.

As for writing skills, which was the concern of this research, there is a plethora of DA research too (e.g., Heidari, 2019; Khorami Fard & Derakhshi, 2019; Khoshsima, Saed, & Mortazavi, 2016; Kushki, Rahimi, & Davin, 2022; Miao & Mian, 2013; Rahimi, Kushki & Nassaji, 2015; Shafipoor & Latif, 2020; Xian, 2020; Xiaoxiao & Yan, 2010). However, as stated earlier, most of these studies have focused on either the interventionist or the interactionist DA as the individual assessment approaches, and the number of studies aimed at juxtaposing and comparing the effectiveness of the two DA models for the development of L2 writing is really scarce. Due to space limitation and given the fact that the current comparative study aimed at examining the role of the two DA models in the development of grammatical accuracy in narrative writing, only a few existing comparative writing-related studies are reviewed here.

Hassaskhah and Javan Haghparast (2012) attempted to explore the impact of the interventionist and interactionist DAs on the improvement of writing abilities and attitudes of EFL learners. Twenty nine pre-intermediate EFL female students were randomly assigned into the interventionist and interactionist groups. Following a pretest-mediation-posttest model, students in each group received different kinds of

mediation. The findings suggested that neither of the DA approaches was superior over the other. Besides, the learners felt more satisfied with DA than the traditional testing techniques in which their individual voices are not usually heard.

Khodabakhsh, Abbasian, and Rashtchi (2018) developed a comparative study to examine how differently the two DA models might develop EFL learners' level of language awareness and metacognitive strategy use in writing. The quantitative analysis of the data indicated that both of the experimental groups could gain higher levels of language awareness than the control group, but no significant differences were observed between the two models, neither in language awareness nor in strategy use.

Targeting the development of argumentative essay writing of EFL teachers, Rahmani, Rashtchi, and Yazdanimoghaddam (2020) compared the effectiveness of DA for both frameworks. To this end, 66 novice EFL teachers were chosen using convenient sampling and were randomly assigned to the interactionist and interventionist groups and a control group who received the NDA writing instruction. The results evidenced that both groups outperformed the NDA group, but the effects of the two approaches came out to be the same.

Through a case study, Nassaji, Kushki, and Rahimi (2021) compared the diagnostic capabilities of the interactionist and interventionist DA for the exploration of the problems that five Farsi-speaking EFL learners faced in argumentative writing. Following The Toulmin's model, their study aimed at exploring the process rather than the product of learning and also improving learners' ability to make strong arguments. The findings revealed that the interactionist DA could provide a fuller understanding of the learners' ZPDs.

In a mixed methods research study, Daneshvar, Bagheri, Sadighi, Yarmohammadi, and Yamini (2021) targeted at investigating the potential effect of the interactionist and interventionist models and static assessment on IELTS candidates' performance in academic writing task 2. Employing an experimental pretest-treatment-posttest design, the experimental groups

received treatments based on the DA models, while the control group was instructed via the conventional static method. The results indicated the outperformance of both DA models to NDA, but no significant differences were reported between the DA models in the development of IELTS writing task 2.

Finally, in their most recent exploratory case study, Kushki, Nassaji, and Rahimi (2022) tracked the developmental effects of the interventionist and interactionist approaches on the argumentative writing ability of five Iranian EFL learners. They aimed to investigate which of the two types of DA would improve the subjects' writing ability and which one would produce better transcendence results. Findings revealed that the interactionist DA had more potential for the improvement of the participants' responsiveness to mediatory prompts as well as their writing quality.

PURPOSE OF THE STUDY

Given the existing gaps highlighted earlier in the 'introduction section' of this paper, the current comparative study sought to compare the effectiveness of the Brown's GP interventionist model vs. the Poehner's interactionist model in developing the Iranian EFL learners' grammatical accuracy in writing one-paragraph narrative essays. Accordingly, the following research questions were posed:

1. Are there any significant differences among the interactionist DA, interventionist DA, and NDA control groups in improving the EFL learners' narrative writing in terms of grammatical accuracy?
2. Are there any significant differences between the interactionist and interventionist groups in the *number* of mediational moves required in the course of DA1-DA2?

3. Are there any significant differences between the interactionist and interventionist groups in the *types* of mediational moves required in the course of DA1-DA2?

METHOD

Participants

Using convenient sampling, 19 EFL female learners (age range: 15-21 years old) from the National Institute of English Language, Tehran, Iran, were invited to attend a free writing course. Based on the placement policy of the institute, they were ranked at the intermediate level in terms of their general language proficiency. Four of these participants were randomly chosen to take part in the pilot phase of study, while the other 15 volunteers were considered the target participants for the main phase of the research. To ensure that they were homogeneous in terms of their writing ability, the researchers administered the writing section of the Preliminary English Test (PET) to them (Quintana, 2003). Subsequently, they were randomly divided into three groups of the interactionist, interventionist, and control groups, each including five participants. All the participants signed a consent form to meet the ethical issues of the research.

Instrumentation

Instructional Packages

An instructional booklet on one-paragraph essays, including narrative paragraphs, was developed by the researchers using the instructions in Bailey and Powell (1988) to provide the participants with some basic information about how to write narrative paragraphs. The quality and the structure of narrative writing were not of any concern to the study, though.

Moreover, an instructional grammar pamphlet, containing some brief explanations as well as examples on the target structures, was prepared based on the Murphy's (2004) book. The structures were the most

problematic ones, as reflected in the participants' answers to the writing section of the PET: past tenses (past simple, past continuous, & past perfect), subject and object pronouns, possessive adjectives, articles, and word order. None of these structures was new to them, but they still had problems in using them correctly.

In addition, six episodes of the 150-episode silent animation of "Lolek and Bolek" were used as the writing prompts. Each episode, lasting for nine minutes, was chosen according to the female participants' common interests, but there was no specific reason behind choosing the order of their presentation.

Finally, six vocabulary handouts, containing the content words needed in narrating the silent cartoons, were prepared to ensure that a lack of vocabulary knowledge would not interfere the subjects' writing performance in the six DA sessions.

Assessment Measures

As mentioned earlier, the writing section of the PET was used both to ensure the homogeneity of the participants in their writing ability and to identify the most problematic structures as the target features (The writing section was composed of sentence completion, e-mail writing, and story writing sections).

Besides, the groups' performances on the four writing tasks that they did in the pretest and the posttest as well as in DA1 and DA2 sessions were used as the measures of assessing their progress in the grammatical accuracy of narrative writing and comparing the number and type of the mediational moves required over the DA sessions. More detailed explanations about these measures are given in the following sections.

Data Collection Procedure

The current research followed a quasi-experimental (pretest–treatment-posttest) design with a control group. The interactionist and interventionist

DA as well as the NDA approach served as the independent variables, and learners' performance on narrative writing served as the dependent variable.

Pilot Study

Of the main concerns for the researchers of the present study were to examine the practicality of the mediational moves of the Poehner's typology (Poehner, 2005) in the context of the current study, to decide on the language of mediation (English or Farsi), to determine the amount of time required for the mediation phase in each group, and eventually, to make a decision about using animation as the writing prompt. Thereupon, four out of 19 participants were randomly chosen and divided into two groups of the interventionist and interactionist DAs, with two in each, to trial the study procedure. The pilot stage took three sessions; During the first DA session, the participants were made to watch the first episode of "Daddy Long Leg" talking animation in Persian language, lasting for 20 minutes, and to write a 100-word paragraph narrating the story. Then each group was mediated within the target framework in English language. The required amount of time in each group was recorded. The second pilot session was held like the first one, but this time both groups watched the eighth episode of the silent cartoon, "Lolek and Bolek", lasting for nine minutes, and the language used for mediation was Persian.

Based on the feedback received from the two sessions, it was decided to conduct the third pilot session by making the following changes in the procedure: (a) Using the silent animation of "Lolek and Bolek instead of the talking one as the writing prompt; (b) Using the Persian language for mediation due to the role that L1 application could have in creating psychological and social context and in facilitating to do activities through 'intersubjectivity' (Ebadi, 2011); (c) Adopting and adapting some of the Poehner's typology moves to make them more compatible with the research context and also with the students' needs and abilities. Accordingly, some

of the mediational moves were skipped, and one was reworded (See the Appendix). Considering that no negative feedback was received from the participants in the pilot phase this time and no practical problems were observed, the accuracy of the decisions on how to implement the main study was confirmed.

Main study

The main study commenced with the PET administration, and continued for 10 more sessions. Table 1 summarizes the procedure and the order of the sessions in each group.

Table 1: Main Study Procedure

Common Sessions	Specific Sessions			
1.PET **2. Training** **3.Structure Review** **4.Pretest** **11. Posttest**	Groups	5 DA1	6-9 DA Sessions	10 DA2
	.. Interventionist	Brown's GP/ Sandwich Format	Brown's GP/ Sandwich Format	Brown's GP/ Sandwich Format
	Interactionist	Poehner's Model: Cake Format	Enrichment Program	Poehner's Model: Cake Format
	Control	NDA	NDA	NDA

The procedure in some sessions was totally the same in all the groups. Thus, to avoid repetition, first, the sessions with common procedures are described; then, the sessions specific to each group are explained. As for the common sessions, the writing section of the PET was administered to the three groups in the first session of the study to achieve the aims described earlier. To score their performance on the PET test, the

researchers used the general mark schemes for writing (Quintana, 2003). Based on this scheme, there is a total of 25 marks in the writing component which weighted to 25% of the marks available for the whole test. The results of the descriptive as well as inferential statistical analyses confirming their homogeneity in terms of writing performance before the commencement of the study are reported in the Result section.

In the second session of the main phase, a brief explicit explanation was given to all the subjects on one-paragraph essays, including narrative ones, by using the instructional booklet developed by the researchers so that the participants could have a basic familiarity with one-paragraph narrative essays. The third session was allocated to reviewing the target grammatical structures by providing the participants with a copy of the concise grammar pamphlet prepared by the researchers. As for the pretest administration session, all the groups were made to watch the second episode of "Lolek and Bolek" silent cartoon for nine minutes. They were given the related vocabulary handout too. Then, they were asked to write a 100-word narrative paragraph without teacher's assistance in 20 minutes. The aim was to compare their independent performance on this test with that of the posttest after receiving the treatments. In the last common session (session 11), the posttest was administered, with the same procedure used for the pretest administration.

Regarding the sessions specific to each group, the participants went through six instructional sessions in which they were treated differently in terms of receiving feedback on their writings. As for the NDA control group, the learners watched one episode of the target cartoon in each session. Then, they were assigned to write a 100-word narrative paragraph individually in 20 minutes. The teacher took the writings home, assessed them non-dynamically by just underlining the errors and writing the correct answers without giving any explanation or any other form of feedback, and finally, gave back the sheets to each student in the following session.

The interventionist and interactionist groups both went through six DA sessions, i.e., DA1- 4 DA sessions- DA2, during which they were requested

to watch the same episodes that the control group watched and to write a 100-word narrative paragraph. Similar to the NDA control group, they were free to use the related vocabulary handouts whenever required. However, they were individually assessed within the two different mediational frameworks of the interventionist and interactionist DAs. It is necessary to mention that the learners in both treatment groups were made to watch episode 8 twice, once in the DA1 and again in DA2 sessions. Since examining changes in the number and type (explicit/implicit) of the mediational moves over the time can help to "establish the learners' ZPDs at these two points in time" (Poehner, 2005, p. 209), it was decided to make a comparison between DA1 and DA2 in terms of the frequency of the number and type of the mediational moves.

Mediation in the course of all DA sessions for the interventionist group was in accordance with the Brown's GP model. Drawing upon this model, one of the researchers, as the DA mediator, provided each learner with the predetermined and fixed mediational moves arranged from the most implicit move to the most explicit one. However, contrary to the Brown's GP model in which the cake format is suggested, this study made use of the sandwich format, that is, the learners read their independently completed work line by line loudly and were assessed with the help of the mediator who stopped them whenever any of the target problems occurred. As explained earlier, the mediational moves contained a collection of hints, leading questions, and prompts adopted from the Poehner's mediation typology (2005). The mediator was not free to skip any moves, and the learners were not allowed to ask any questions in the course of mediation. The mediator's assistance continued until the learners became independent in providing the correct response. It is worth mentioning that the mediator offered the same mediational moves for everyone, and the mediational moves were also administered in the same order for everyone. A voice recorder was used to record the 30-minute learner-mediator interactions. Afterward, the recordings were transcribed to make the mediation protocols.

For the interactionist group, mediations in the DA1 and DA2 were based on the Poehner's cake model (2005), i.e., the mediation was carried out individually as each learner was doing the writing task. The mediation in each session lasted for 50 minutes, but near the end of the treatment course, most of the learners needed less time to finish the job. However, an Enrichment Program (EP) was run in the four DA sessions between the DA1 and DA2 to mediate the target problems occurring in the learners' written tasks. To Poehner, in the course of EP, the underlying reasons of the learners' poor performance are scrutinized, and mediator-learner's cooperative dialoguing also clarifies the extent to which the learners are able to independently control their performance and the kinds of mediation they need to enhance their control.

The mediation within EP of the interactionist group was of two types: symbolic mediation (pamphlets) and human mediation. That is, the learners were free to use their pamphlets while completing their writing tasks. After completing each line with the help of the symbolic mediator in EP, the human mediator presented the learners with the mediational moves according to their responsiveness. It is essential to point out that contrary to EP, in the DA1 and DA2, the learners were not allowed to use symbolic mediation while completing their writing tasks; however, the human mediator used exactly the same procedure in the DA1, EP, and DA2. The learners were free to ask questions; To help the learners reach the correct answer, the mediator presented each learner with mediational moves including hints, leading questions, and prompts. Mediation in this approach began at the most implicit level and then gradually moved toward explicit mediation, and it continued until the learner was able to respond correctly. The mediational moves offered during mediation was not predetermined but was offered according to the learner's responsiveness.

In other words, what differentiated mediation in the interactionist DA from mediation in the interventionist DA was that in the former, the mediator was free to skip some moves according to the responsiveness of the learners, and the learners were free to ask questions, but in the latter, the

learners were not free to ask any questions, and the mediator was not allowed to skip any moves even if they looked inappropriate. Similar to those of the interventionists, the 50-minute learner-mediator interactions were recorded with a voice recorder and transcribed later to make the mediation protocols.

Data Analysis

To score the participants' performance on the PET test, the general mark schemes for writing (Quintana, 2003) was used. Based on this scale, there is a total of 25 marks in the writing component which weighted to 25% of the marks available for the whole test. Similarly, the essay scoring rubric of the Georgia State Test of English Proficiency (Weigle, 2004) was utilized to score the participants' performance on both the pretest and posttest. The analytic scale is composed of four subsections of content, organization, language accuracy, as well as language range and complexity, each with 10 points. The rubric was chosen because its reliability and validity have been confirmed in the context of Iran (Hassaskhah & Javan Haghparast, 2012). The scores obtained by applying both scales rubrics were submitted to both descriptive (group medians) and non-parametric inferential Statistics, i.e. one-way Kruskal-Wallis, Wilcoxon-Signed Rank, as well as Chi-square tests.

RESULTS

The PET Results

Due to the low number of subjects in each group, the medians of their performance on the PET were calculated rather than their mean scores (Table 2).

Table 2: Descriptive Statistics for PET

Groups	N	Median
Interactionist	5	10.50
Interventionist	5	14.50
Control	5	12.50

As displayed in Table 2, the interventionist group (Med = 14.50) had the highest median score on the PET, followed by NDA (Med = 12.50) and interactionist (Med = 10.50) groups. To see if the median differences were statistically significant or not, a one-way Kruskal-Wallis was run to compare the groups' medians prior to the main study (Table 3)

Table 3*: Kruskal-Wallis Test; PET Results by Groups

Total N	**15**
Median	12.00
Test Statistic	2.14
Degrees of Freedom	2
Asymtotic Sig. (2-sided test)	0.34

As it is clear, there were not any significant differences among the medians of the three groups on the PET test (H (2) = 2.14, p > .05), implying that they were homogenous in terms of their writing language ability before the commencement of the study.

Research Question One

To explore whether there were any significant differences among the interactionist DA, interventionist DA, and NDA groups in improving the learners' narrative writing abilities in terms of grammatical accuracy, within-group as well as between-group comparisons were made. The obtained scores were applied to three sets of the Wilcoxon-Signed Rank test to examine the performance of each group separately (Table 4).

As shown in Table 4, both the experimental groups [Interactionist: (Z = -2.03, p < .05); Interventionist (Z = -2.04, p < .05)] had significantly higher median scores on the writing posttest, as compared with the pretest. That is, both the DA approaches improved in their writing accuracy over time. However, the performance of the NDA group [Control (Z = 1.06, p < .05] did not change significantly from the pretest to the posttest.

Table 4: Pretest and Posttest Medians: Related Samples Wilcoxon-Signed Rank Tests

	Interactionist	Interventionist	Control
Total N	5	5	5
Pretest Median	6	4	5.50
Posttest Median	8.50	8	5.50
Test Statistic	0.000	0.000	5.000
Standard Error	3.69	3.67	1.87
Standardized Test Statistic	-2.03	-2.04	1.06
Asymptotic Sig.(2-sided test)	0.04	0.04	0.28

As for between-group comparisons, first a non-parametric test of Kruskal-Wallis was run on their pretest scores to check the homogeneity of the groups in their writing performance prior to the treatment (Table 5).

Table 5: Kruskal-Wallis Test; Pretest Results by Groups

Total N	**15**
Median	5.50
Test Statistic	1.66
Degrees of Freedom	2
Asymtotic Sig. (2-sided test)	0.43

The results indicated no significant differences between their medians ($Z = 1.66$, $p > .05$), implying their homogeneity in terms of grammatical accuracy prior to the administration of the treatment. Then, another one-way Kruskal-Wallis was run to compare the medians of the three groups on the posttest to find out whether they showed any significant differences in their narrative writing after receiving instruction on the target structures (Table 6).

Table 6: Kruskal-Wallis Test; Posttest Results by Groups

Total N	**15**
Median	15.50
Test Statistic	9.30
Degrees of Freedom	-2.36
Asymtotic Sig. (2-sided test)	0.01

The results indicated that there were statistically significant differences between the medians of the groups on the writing accuracy of the posttest (Z = -2.36, $p < .05$). In order to indicate where the significant differences lay, a post hoc comparison test was run (Table 7).

Table 7: Pairwise Comparison Tests; Posttest Results by Groups

Sample1- Sample2	Test Statistic	Std. Error	Std Test Statistic	Sig.	Adj. Sig
Control-Interventionist	1.000	4.69	-2.44	0.000	0.02
Control-Interactionist	0.000	4.61	-2.71	0.000	0.01
Interventionist-Interactionist	14.50	4.61	0.43	0.66	1.000

The results suggested that both DA groups significantly outperformed the NDA group on the posttest [Interventionist: ($Z (1) = -2.44$, $p < .05$, $r = .77$); (Interactionist: $Z (1) = -2.71$, $p < .05$, $r = .85$)]. The effect size figures (r) for the effect of both approaches suggested large effect size for the results, too. However, no significant differences were observed between interventionist and interactionist groups on the grammatical accuracy of the posttest ($Z (1)$ = .43, $p > .05$, $r = .13$), representing a weak effect size, though.

Research Question Two

To examine whether there were any significant differences between the interventionist and interactionist groups regarding the number of mediational moves over the course of DA1 to DA2, the number of moves required for mediating writing accuracy problems were separately counted for each DA group. Then, an analysis of Chi-square was run on, the results of which are reported in Tables 8 and 9.

Table 8: Frequencies, Expected and Residual Values; Number of Moves

	Observed N		Expected N		Residual	
Group/Sessions	DA1	DA2	DA1	DA2	DA1	DA2
Interventionist	349	200	325.5	172.5	23.5	27.5
Interactionist	302	145	325.5	172.5	-23.5	-27.5
Total	651	345				

As shown in Table 8, the interventionist group (DA1: N = 349, Residual = 23.5; DA2: N = 200, Residual = 27.5) used more mediational moves than the interactionist group (DA1: N = 302, Residual = -23.5; DA2: N = 145, Residual = -27.5) in both the DA1 and DA2 sessions. However, the chi-square tests (Table 9) yielded different results; While in DA1, Chi-square (χ^2 (1) = 3.39, p > .05) suggested no significant difference between the two groups regarding number of mediational moves required for mediating grammatical problems, in DA2 Chi-square (χ^2 (1) = 8.76, p > .05) revealed a significant difference between the interactionist and interventionist groups in the number of mediational moves. That is, the researcher had to use fewer moves in the interactionist group rather than in the interventionist one in DA2.

Table 9: Chi-Square; DA1 & DA2 by Groups

	Group	
	DA1	DA2
Chi-Square	3.39a	8.76[a]
Df	1	1
Asymp. Sig.	.06	.00

Research Question Three

Similarly, to find out whether there were any significant differences between the interventionist and interactionist groups regarding the type of mediational moves used for mediating writing accuracy problems over the course DA1 to DA2, first the level of implicitness and explicitness of the

required moves in the DA1 and DA2 were determined using the typology scale described earlier (see the Appendix). The first half of the moves (moves one to four) were considered the implicit moves while the second half of them (moves five to 11) were considered the explicit ones. Then, the frequencies as well as the percentages and standardized residuals regarding the types of mediational moves required during both DA sessions were calculated (Table 10).

Table 10*: Frequencies, Percentages and Std. Residuals; Types of Moves*

Move Type			Group					
			Interventionist		Interactionist		Total	
			DA1	DA2	DA1	DA2	DA1	DA2
Group	**Explicit**	Count	116	59	126	46	242	105
		% within Group	47.9%	56.2%	52.1%	43.8%	100.0%	100.0%
		Std. Residual	-1.2	-.2	1.3	.3		105
	Implicit	Count	233	141	176	99	409	240
		% within Group	57.0%	58.8%	43.0%	41.3%	100.0%	100.0%
		Std. Residual	.9	.2	-1.0	-.2		
Total		Count	349	200	302	145	651	345
		% within Group	53.6%	58.0%	46.4%	42.0%	100.0%	100.0%

As it is indicated in Table 10, in the DA1, the interactionist group made more use of the explicit mediational moves (52.1 %) than the implicit ones (43 %), while the interventionist group made more use of the implicit mediational moves (57 %). than the explicit ones (47.9%). However, none of the Std. Residual values were significant, i.e. > +/- 1.96. As for DA2 session, the interventionist group needed both types of moves [explicit: 56.2 %; implicit 58.8 %] more than interactionist group [explicit: 43.8 %; implicit: 41.3 %]. Similar to DA1 results, none of the Std. Residual values

were significant, i.e. > +/- 1.96.

The chi-square test (Table 11) revealed the same results as well, i.e., there were significant differences between the interventionist and interactionist groups' use of the implicit and explicit mediational moves for mediating grammatical accuracy problems in DA1 [DA1: (χ^2 (1) = 4.63, p < .05].

Table 11: Chi-Square Tests for DA1 & DA2

	Value		Df	Asymp. Sig. (2-sided)		Exact Sig. (2-sided)		Exact Sig. (1-sided)	
	DA1	DA2		DA1	DA2	DA1	DA2	DA1	DA2
Pearson Chi-Square	4.99	.19	1	.02	.65				
Continuity Correction	4.63	.10	1	.03	.74				
Likelihood Ratio	4.98	.19	1	.02	.65				
Fisher's Exact Test						.028	.72	.01	.37
Linear-by-Linear Association	4.98	.19	1	.02	.65				
N of Valid Cases	651	345							

As for the results of Chi-square tests run for the DA2 session, no significant differences were observed between the two DA groups [DA2: (χ^2 (1) = .10, p > .05], as reported in Table 11.

DISCUSSION

As for the first research question, i.e. whether there are any significant differences among the interactionist DA, interventionist DA, and NDA control groups in improving EFL learners' narrative writing in terms of grammatical accuracy, the within-group as well as between-group comparisons revealed that the interactionist and interventionist groups

significantly improved in their grammatical accuracy of narrative writing, while the performance of NDA group did not change over time; Besides, both DA groups outperformed the NDA. This is in line with the results of most DA studies, including those of Aljaafreh and Lantolf (1994), Kozulin and Garb (2002), Poehner (2005), Antón (2009), Hassaskhah and Javan Haghparast (2012), Birjandi, Estaji, and Deyhim (2013).

The superiority of DA to NDA is possibly expounded by the SCT tenets (Vygotsky, 1978), which highlight the role that mediation and interaction can play in providing learners with prompts. As Lantolf and Poehner (2008) argued, the information acquired by learners via the process of dynamic and literal engagement is collected and leads to internalization of the new cognition. To Shrestha and Coffin (2012), DA is more instructive than NDA in that learners remember the guidance hints and prompts presented during DA. In fact, this kind of interactive feedback encourages reflection on errors, which by itself paves the way for writing improvement.

The outperformance of DA to NDA might also be the result of a rise in the learners' notice and attention to particular linguistic features, given that notice and attention are the starting points of learning and acquisition (Mackey, 2006).

In addition, the higher performance in both the DA models might be due to the effects of this approach on increasing learners' independence, autonomy, and self-confidence as well as on reducing their writing anxiety, which could lead to better achievement. The fact that learners see DA as less stressful and more motivating than conventional assessment methods of writing was confirmed earlier by Shrestha and Coffin (2012) who concluded that the assessment atmosphere in the DA-oriented classes is more promising and supportive. In fact, by creating a pleasurable learning setting and bringing instructional benefits to learners, DA yields immediate learning outcome, while the traditional testing methods put the learner's development on hold (Naeini & Duvall, 2012).

The results of this study can also be interpreted in relation to Xian's

(2020) explanation for the effectiveness of DA with a focus on the declarative nature of explicit input given in NDA. To him, since in the NDA group, the mediation is explicit with no revision afterward, the received feedback remains declarative and is not transformed into implicit. In contrast, DA, adopting graduated mediation, enjoys the benefits of both implicit and explicit knowledge. That is, language learners should first deal with the implicit knowledge provided, through which critical thinking is conducted. Then, explicit knowledge makes up those areas that the implicit knowledge cannot handle.

Although both DA approaches yielded higher results than NDA, they seemed to have similar effects on the learners' overall writing accuracy. This is consistent with the results obtained by Hassaskhah and Javan Haghparast (2012), Khodabakhsh et al. (2018), Rahmani et al. (2020), and Daneshvar et al. (2021) who found no statistically significant differences between the two DA groups as far as learners' overall writing development was concerned.

The equal effects of both DA models on the participants' overall writing performance is, however, inconsistent both with the findings of Nassaji et al. (2021), revealing that interactionist DA could provide fuller understanding of learners' ZPDs in comparison with interventionist DA, and also with the results of the exploratory study conducted by Kushki, Nassaji, and Rahimi (2022), confirming the higher efficacy of interactionist format, compared with the interventionist version, in improving the writing accuracy. The differences in the results may arise from some other incentives, such as cultural factors, task types, the type of prompts and hints, quality of interaction influenced by the adopted DA models, type of mediation typology, hierarchical ordering of mediational moves, the targets of mediation, the learners' responsiveness to feedback, and their efforts to become independent.

Moreover, these discrepancies may lie in the span of the intervention and imprecision of the measures. The difference in the type of statistical procedures chosen based on the sample size might have been another reason

for the inconsistency of the results. Moreover, some limitations in this study, including inability in controlling the participants' mental, emotional, and physical states during the assessment sessions, the size of the given tasks, and the small sample might have overshadowed the results of the study.

However, while the two versions of DA in this study showed similar effects on participants' overall writing accuracy, analyzing the number and type of required mediational moves over the course of DA1 to DA2 in the two versions, which was the target of the second and third research questions, supported the superiority of interactionist DA to the interventionist one. The results that in DA2 more moves were required in the interventionist group might imply they still needed more help to find their errors and correct them, whereas the interactionist group needed fewer mediational moves, which reflected they had possibly got more independent and competent in writing over the DA sessions.

As for the type of moves needed in DA2, the interactionist group seemed to need fewer explicit moves than implicit ones, implying that the learners could reach the correct answers just after receiving a few implicit hints and the mediator was less required to continue to the explicit end of typology to help them correct their errors. In contrast, the interventionist learners still needed both more explicit and implicit moves in DA2, which showed their reliance on the mediator to come to correct answers. This can be interpreted as the superiority of the interactionist model in developing learners' ZPDs and making them more independent in writing.

Considering Aljaafreh and Lantolf's (1994) assertion that for an assessment to be complete, the scope of modifiability in learner's performance should be recognized by examining the frequency of the number and type of mediational moves, the conclusion that interactionist DA in this study was more beneficial in the development of writing accuracy is validated by considering the fact that the interactionist group needed fewer mediational moves in DA2, as compared with the interventionist one.

The beneficial effects of interactionist DA in this study might be expounded by what Kushki e al. (2022) asserted based on the findings of their exploratory research. Their study similarly revealed the higher efficacy of this model, as compared with the interventionist version. To them, the superiority of the interactionist format might be rooted in four main reasons: First, the interactionist version of DA can provide "contingent and more tailored help" (p. 10) because negotiations conducted during the mediation phase are more extended; second, as more time is afforded in this kind of mediation, when compared to the interventionist model, it increases the depth of engagement with it; third, since interactionist DA has an interactive nature, it is a more valid way of assessing learners' ZPDs, which results in more effective and tailored mediation; and finally, the superiority of interactionist DA might be explained in terms of the role it has in "advancing the learner across the other-regulation-to-self-regulation path" (p. 10). That is, since mediation provided in interactionist DA is more probable to be relevant and 'ZPD-sensitive', it seems to have more potential for providing opportunities for self-regulation. It is obvious that self-regulated learners can better transfer learning to new contexts and to unfamiliar and unaided tasks. They continued that this feature is less possible in interventionist mediation due to its weaker 'social-individual interconnection'.

For Poehner (2005), the interactionist format is much closer to the Vygotskian perspective since it centers upon developing learners' abilities via mediation rather than centering upon learning efficiency metrics. Thus, the superiority of interactionist DA in the current research might be justified by the unique features that Poehner's version of DA possesses.

However, the higher efficacy of the interactionist DA in this study does not mean the interventionist DA was not beneficial at all, given the fact that it also had positive effects on learners' overall writing performance. To Kushki et al. (2022), learners' individual differences influence the way they respond to mediation, and mediation in the interventionist model could yield results as effectively as the interactionist format for some learners. In fact,

as Davin and Kushki (2022) emphasized, a great number of variables can influence the effectiveness of approaches to grammar instruction so that it can never be argued that one instructional approach is more effective than another. Similarly, in the case of SCT perspective, learning and development should be analyzed in terms of contextual as well as individual factors which can potentially affect the efficacy of different approaches.

CONCLUSIONS AND IMPLICATIONS

Given the paucity of writing-related DA comparative studies as well as the inconsistency in the results of the existing studies, the current research was carried out to compare the relative effectiveness of the interactionist and interventionist DAs, with each other and with NDA, in developing the Iranian EFL learners' grammatical accuracy of narrative writing.

Although this study supported the more effective role of the interactionist DA in improving the learners' narrative writing accuracy, it should not be interpreted as a total rejection of the role that the interventionist framework could play in enhancing learners' writing ability. In fact, given that implementing a one-to-one interaction within the Poehner's interactionist model is more time-consuming than applying the interventionist GP model, using the interventionist format is also recommended to overcome the problem of time shortage, particularly in large classrooms. Even a combination of alternative assessment and conventional ones could lead to more reliable evaluation of learners' abilities.

It should be reminded that there are some limitations in this study, including the inability to control the participants' mental, emotional, and physical states during the assessment sessions which might have overshadowed the results of the study. Furthermore, this study targeted a small number of participants due to the large consumption of time, which is the nature of the interactive DA, and the impracticality of using it in large classrooms. Thus, it lacks population generalizability. However, further

research might contribute to the literature by employing group DA, which makes assessment in larger contexts possible.

The outcomes of this study have repercussions both at theoretical and pedagogical levels. Theoretically, the study contributes to a growing body of research suggesting that DA is an effective way to promote different components of language, including writing. At the pedagogical level, the potentiality of both DA approaches is an encouraging result for EFL teachers in that they can use DA, along with other kinds of assessment, to get a deeper picture of their learners' ZPD and exert stronger effects on their language development. Finally, teacher development programmers and curriculum designers who have the responsibility of designing courses and also training student teachers can benefit from the results by paving the way for familiarizing them with DA approaches.

Disclosure statement
No potential conflict of interest was reported by the authors.

ORCID
Shohreh Bahrami Ghalenoee   ⓘD   http://orcid.org/0000-0003-4440-953X
Jamileh Rahemi   ⓘD   http://orcid.org/0000-0002-3784-8510

References
Ahmadi, A., & Barabad, E. (2014). Examining Iranian EFL learners' knowledge of grammar through a computerized dynamic test. *Issues in Language Teaching, 3*(2), 161-183.

Ajideh, P., & Nourdad, N. (2012). The effect of dynamic assessment on EFL reading comprehension in different proficiency levels. Language. *Testing in Asia, 2*(4), 101-122.

Alavi, S. M., Kaivanpanah, S., & Shabani, K. (2012). Group dynamic assessment: An inventory of mediational strategies for teaching listening. *Journal of Teaching Language Skills, 3*(4), 27-58.

Aljaafreh, A., & Lantolf, J. P. (1994). Negative feedback as regulation and second language learning in the zone of proximal development. *The Modern Language Journal, 78*(4), 465-483.

Antón, M. (2009). Dynamic assessment of advanced second language learners. *Foreign Language Annals, 42*(3), 576–598.

Atkinson, D. (2011). *Alternative approaches to second language acquisition.* New York, US: Routledge.

Bachman, L. F., & Cohen, A. D. (1998). *Interfaces between second language acquisition and language testing research*. Cambridge: CUP.

Bailey, E. P., & Powell, P. A. (1988). *The practical writer with readings*. New York: Holt, Rinehart and Winston.

Birjandi, P., Estaji, M., & Deyhim, T. (2013). The impact of dynamic assessment on reading comprehension and metacognitive awareness of reading strategy use in Iranian high school learners. *Iranian Journal of Language Testing, 3*(2), 60-77.

Brown, H. D. (2007). *Principles of language learning and teaching*. New York, US: Pearson Education.

Daneshvar, A., Bagheri, M. S., Sadighi, F., Yarmohammadi, L., & Yamini, M. (2021). A probe into Iranian learners' performance on IELTS academic writing task 2: Operationalizing two models of dynamic assessment versus static assessment. *Journal of Modern Research in English Language Studies, 8*(2), 58-24.

Davin, K. J., & Kushki, A. (2022). A sociocultural perspective: Seeking evidence of development in a pace approach to grammar instruction. *Language Learning, 72*(S1), 165-202.

Ebadi, S. (2011). *Exploring learners' microgenetic development in SCMC-based l2 dynamic assessment via web 2.0* (Unpublished doctoral dissertation). Allameh Tabatabi'e University, Tehran, Iran.

Ebadi, S. (2016). Mediation and reciprocity in online L2 dynamic assessment. *CALL-EJ, 17*(2), 16-40.

Ebadi, S & Asakereh, A (2017). Developing EFL learners' speaking skills through dynamic assessment: A case of a beginner and an advanced learner. *Education Assessment and Evaluation, 4*, 1-18.

Ebadi, S., & Bashir, S. (2021). An exploration into EFL learners' writing skills via mobile-based dynamic assessment. *Education and Information Technologies, 26*(2), 1995-2016.

Ebadi, S., & Saeedian, A. (2015). The effects of computerized dynamic assessment on promoting at-risk advanced Iranian EFL students' reading skills. *Issues in Language Teaching, 4*(2), 1-26.

Ebadi, S., & Saeedian, A. (2016). Planning future instructional programs through computerized L2 dynamic assessment. *Teaching English with Technology*, *16*(4), 12-32.

Ebadi, S., & Yari, V. (2017). Investigating the effects of using dynamic assessment procedures on the EFL learners' vocabulary knowledge development. *Journal of Modern Research in English Language Studies, 4*(3), 49-72.

Estaji, M., & Saeedian, A. (2020). Developing EFL learners' reading comprehension through computerized dynamic assessment. *Reading Psychology*, *41*(4), 347-368.

Ghonsooly, B., & Hassanzadeh, T. (2019). Effect of interactionist dynamic assessment on English vocabulary learning: Cultural perspectives in focus. *Issues in Educational Research, 29*(1), 70-88.

Ghoorchaei, B., Tavakoli, M., & Ansari, D. N. (2010). The impact of portfolio assessment on Iranian EFL students' essay writing: A process-oriented approach. *Gema Online Journal of Language Studies, 10*(11), 35-51.

Hassaskhah, J., & Javan Haghparast, M. (2012). A comparative study of the impact of DA models on the writing ability and attitude of Iranian EFL learners. *The Buckingham Journal of Language and Linguistics, 5*, 38-51.

Haywood, H. C. & Lidz, C. S. (2007). *Dynamic assessment in practice: Clinical and educational applications*. New York: CUP.

Heidari, F. (2019). The effect of dynamic assessment of Toulmin model through teacher-and collective-scaffolding on argument structure and argumentative writing achievement of Iranian EFL learners. *Iranian Journal of Applied Language Studies, 11*(2), 115-140.

Heidari, F., & Izadi, M. (2020). The potentiality of dynamic assessment in massive open online courses (MOOCs): The case of listening comprehension MOOCs. *Iranian Journal of English for Academic Purposes, 9*(2), 1-13.

Hidri, S. (2014). Developing and evaluating a dynamic assessment of listening comprehension in an EFL context. *Language Testing in Asia, 4*(1), 1-19.

Kamali, M., Abbasi, M., & Sadighi, F. (2018). The effect of dynamic assessment on L2 grammar acquisition by Iranian EFL learners. *International Journal of Education and Literacy Studies, 6*(1), 72-78.

Kao, Y.T., & Kuo, H.C. (2021). Diagnosing l2 English learners' listening difficulties and learning needs through computerized dynamic assessment. *Interactive Learning Environments*, *1*, 1-25.

Khodabakhsh, S., Abbasian, G.R., & Rashtchi, M. (2018). Incorporation of dynamic assessment models into developing language awareness and metacognitive strategy use in writing classes. *Journal of Modern Research in English Language Studies, 5*(4), 55-79.

Khorami Fard, S., & Derakhshi, Z. (2019). On the role of dynamic assessment on promotion of writing linguistic accuracy among EFL learners: An interventionist model. *International Journal of Research in English Education*. *4*(2), 14-28.

Khoshsima, H., Saed, A., & Mortazavi, M. (2016). The impact of interactionist dynamic assessment on explanation writing ability of intermediate EFL learners. *International Journal of Language and Linguistics, 4*(5), 183-189.

Kozulin, A., & Garb, E. (2002). Dynamic assessment of EFL text comprehension. *School Psychology International, 23*, 112-127.

Kushki, A., Nassaji, H., & Rahimi, M. (2022). Interventionist and interactionist dynamic assessment of argumentative writing in an EFL program. *System, 107*, 102800.

Kushki, A., Rahimi, M., & Davin, K. J. (2022). Dynamic assessment of argumentative writing: Mediating task response. *Assessing Writing, 52*, 100606.

Lantolf, J. P., & Poehner, M. E. (2004). Dynamic assessment of L2 development: Bringing the past into the future. *Journal of Applied Linguistics*, 1(2), 49-72.

Lantolf, J. P., & Poehner, M. E. (2008). Dynamic assessment. In E. Shohamy, & N. H. Hornberger, (Eds.), *Encyclopedia of language and education* (pp. 273-284). Berlin: Springer.

Mackey, A. (2006). Feedback, noticing and instructed second language learning. *Applied Linguistics*, 27(3), 405-430.

Malmir, A. (2020). The effect of interactionist vs. interventionist models of dynamic assessment on L2 learners' pragmatic comprehension accuracy and speed. *Issues in Language Teaching, 9*(1), 279-320.

Mantero, M. (2002). Evaluating classroom communication: In support of emergent and authentic frameworks in second language assessment. *Practical Assessment, Research & Education, 8*(1), 8.

Mauludin, L. A. (2018). Dynamic assessment to improve students' summary writing skill in an ESP class. *Southern African Linguistics and Applied Language Studies, 36*(4), 355-364.

Miao, T., & Mian, L. (2013). *Dynamic assessment in ESL writing classroom.* Paper presented at the International Conference on Education Technology and Management Science (ICETMS). Beijing, Technology and Business University.

Murphy, R. (2004). *English grammar in use: A self-study reference and practice book for intermediate students of English with answers*. Cambridge: CUP.

Naeini, J., & Duvall, E. (2012). Dynamic assessment and the impact on English language learners' reading comprehension performance. *Language Testing in Asia, 2*(2), 1-20.

Nassaji, H., Kushki, A., & Rahimi, M. (2021). The differential diagnostic affordances of interventionist and interactionist dynamic assessment for L2 argumentative writing. *Language and Sociocultural Theory*, *7*(2), 151–175.

Nassaji, H. & Swain, M. (2000). A Vygotskian perspective on corrective feedback in l2: The effect of random versus negotiated help on the learning of English articles, *Language Awareness, 9*(1), 34-51.

Panahi, P., Birjandi, P. & Azabdaftari, B. (2013). Toward a sociocultural approach to feedback provision in L2 writing classrooms: The alignment of dynamic assessment and teacher error feedback. *Language Testing in Asia*, *3*(13), 1-10.

Pilipović, T. (2017). *The effect of testing on teaching*. New York: Sage Publications.

Poehner, M. E. (2005). *Dynamic assessment of oral proficiency among advanced L2 learners of French* (Unpublished doctoral dissertation). The Pennsylvania State University. Retrieved from https://etda.libraries.psu.edu/paper/6627/1890.

Poehner, M. E. (2008). *Dynamic assessment: A Vygotskian approach to understanding and promoting second language development.* Berlin: Springer.

Quintana, J. (2003). *PET practice tests: Learner-friendly testing with explanatory key*. New York: OUP.

Rahimi, M., Kushki, A., & Nassaji, H. (2015). Diagnostic and developmental potentials of dynamic assessment for L2 writing. *Language and Sociocultural Theory, 2*(2), 185-208.

Rahmani, A., Rashtchi, M., & Yazdanimoghaddam, M. (2020). Employing tasks to improve argumentative essay writing of EFL teachers: A case of interactionist versus interventionist dynamic assessment. *Iranian Journal of English for Academic Purposes, 9*(1), 57-75.

Rezaee, A. A., Alavi, S. M., & Razzaghifard, P. (2020). Mobile-based dynamic assessment and the development of EFL students' oral fluency. *International Journal of Mobile Learning and Organization, 14*(4), 511-532.

Safdari, M., & Fathi, J. (2020). Investigating the role of dynamic assessment on speaking accuracy and fluency of pre-intermediate EFL learners. *Cogent Education, 7*(1), 1818924.

Shafipoor, M., & Latif, F. (2020). A mixed-methods study of interventionist DA: A case of introvert vs. extrovert EFL learners' academic essay writing. *Journal of English Language Pedagogy and Practice, 13*(26), 118-139.

Shrestha, P. (2017). Investigating the learning transfer of genre features and conceptual knowledge from an academic literacy course to business studies: Exploring the potential of dynamic assessment. *Journal of English for Academic Purposes*, 25, 1–17.

Shrestha, P., & Coffin, C. (2012). Dynamic assessment, tutor mediation and academic writing development. *Assessing Writing, 17*(1), 55-70.

Tuluk, A., & Yurdugul, H. (2020). Design and development of a web-based dynamic assessment system to increase students' learning effectiveness. *International Journal of Assessment Tools in Education, 7*(4), 631-656.

Tzuriel, D. (2001). *Dynamic assessment of young children*. New York, US: Kluwer Academic Plenum Publisher.

Vygotsky, L.S. (1978). *Mind in society*: *The development of higher psychological processes*. Cambridge, MA: HUP.

Wang, J. R., & Chen, S.F. (2016). Development and validation of an online dynamic assessment for raising students' comprehension of science text. *International Journal of Science and Mathematics Education, 14*(3), 373-389.

Weigle, S. C. (2004). Integrating reading and writing in a competency test for non-native speakers of English. *Assessing Writing, 9*, 27–55.

Xian, L. (2020). The effectiveness of dynamic assessment in linguistic accuracy in EFL writing: An investigation assisted by online scoring systems. *Language Teaching Research Quarterly, 18*, 98-114.

Xiaoxiao, L., & Yan, L. (2010). A case study of dynamic assessment in EFL process writing. *Chinese Journal of Applied Linguistics, 33*(1), 24-40.

Appendix

Mediational Moves

Mediational Moves from Poehner \(2005)'s Typology	Adopted/Adapted Meditational Moves
1. Helping Move Narration Along	1. Helping move narration along
2. Accepting Response	……………………
3. Request for Repetition	2. Request for reading
4. Request for Verification	……………………
5. Reminder of Directions	……………………
6. Request for Re-narration	……………………
7. Identifying Specific Site of Error	3. Identifying specific site of Error
8. Specifying Error	4. Specifying error
9. Metalinguistic Clues	5. Metalinguistic clues
10. Translation	6. Translation
11. Providing Example or Illustration	7.Providing example or illustration
12. Offering a Choice	8. Offering a choice
13. Providing Correct Response	9. Providing correct response
14. Providing Explanation	10. Providing explanation
15. Asking for Explanation	11. Asking for explanation