



The Effect of Interventionist Dynamic Assessment on Language Learners' Reading Comprehension

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Received: December 30, 2020

Accepted: July 14, 2021

Abstract

Collaborative reading strategies could help language learners to develop a more teamwork environment for students. Moreover, in this research study, researchers investigate the effect of peer-assisted mediation versus. tutor intervention within the interventionist dynamic assessment on the reading comprehension of intermediate EFL learners. For this purpose, 60 language learners were recruited as the main participants of the study. They were divided into three groups: experimental group A as peer-mediation, experimental group B as tutor-intervention, group C as control. After this, a pretest of reading comprehension was given to all the groups. Each group of participants underwent the treatment which lasted 12 sessions. One session was allocated to the proficiency test and pretest and one session for the posttest. At the end of the treatment, the posttest was administered. The findings suggested that involving learners in literature peer mediation and tutor intervention in an interventionist dynamic atmosphere can significantly and positively affect their reading comprehension. The results of the findings could help language learners to decide their own learning experience. Furthermore, EFL teachers and materials developers can benefit from the findings of this study by providing students with practical tasks based on their assessment needs.

Keywords: Dynamic assessment; Peer-assisted mediation; Reading comprehension; Tutor-intervention

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INTRODUCTION

Alternative assessment can boost language learners' knowledge about their language learning needs and help them become more liable in the language learning process (Crick & Yu, 2008). Alternative assessment is also an easy task in language learning contexts because the teachers can check formative and summative evaluation types. Language learners are inactive participants in language classrooms; their needs could be usually overlooked (Broadfoot, 2005) as they save information for future usage (Freire, 1970). Various types of assessment, such as alternative assessment, can be practical and productive in comparison to traditional types of assessment. One of the essential types of alternative assessment is dynamic assessment originated from mediation theory connected with sociocultural theory in the language learning process. Considering the importance of the effect of mediation by more knowledgeable people, this study investigates the effect of peer-assisted mediation versus tutor-intervention within interventionist dynamic assessment on Iranian intermediate EFL learners' reading comprehension ability.

Nazari (2012) highlights that dynamic assessment is at early stages of its growth and further research, probably in reading comprehension, is required to investigate this. Few studies investigated the comparative effect of peer-assisted mediation versus tutor intervention within interventionist dynamic assessment on language skills. Therefore, examining the effect of interventionist dynamic

assessment either with the help of classmates (more knowledgeable peers) or teachers on language skills such as reading comprehension is worth investigating in an EFL context.

The results of this study can make the base for clarifying various dimension of developmental language learning. Additionally, there is enormous evidence regarding the role of classroom contexts. As Freire (1970) states most of the language learner's comprehension is not connected with what they have been instructed. Indeed, Freire is in opposition to this view that students should be considered a recipient box full of teacher's instructions and words. Accordingly, in this study, the researcher tries to focus on the type of language learning experience through which the role of language learners become active. This work was done through employing dynamic assessment which is rooted in Zone of Proximal Development of Vygotsky.

Iranian EFL teachers and materials developers can benefit from the findings of this study by providing students with suitable tasks based on their assessment needs. This study can also be significant for students in that they can choose and study the materials or tasks which are more pertinent to their interest for any language skill.

The study investigated the use of Dynamic Assessment (DA) and EFL learners' reading comprehension. Dynamic assessment is an interactive approach to assessment that embeds intervention within the assessment procedure. For example, there may be a pretest, then an intervention, and then a posttest.

The suppositions behind DA are (1) regular appraisal may not be appropriate for all students, (2) evaluation should be about what student could do in future to improve not in the past, and (3) data should be adjusted to student's condition (Grigorenko, 2009).

Dynamic Assessment: A Historical Overview

The chronicled foundation of second or foreign language learning has been depicted by a history of testing as the most solid technique to reveal language learners' limits. Begun by Vygotsky (1978), this type of students' language capacity raised doubt about the result of its underestimation of students' capacities by pointing out the formative contrasts among the students and, along these lines, all the more precisely representing their abilities. This was nearby the acknowledgment that collaboration is an objective and persuasive contraption of language evaluation (Swain, 2001).

Dynamic evaluation was, in this manner, made to offer a monistic strategy to both appraisal and guidance, which is established in Vygotsky's socio-social hypothesis of psyche and exceptionally in his idea of the Zone of Proximal Development. Williams and Weight (2002) stated that dynamic assessment (DA) "is a term in social constructivism, first presented by Feuerstein and characterized as a method for evaluating the genuine capability of students such that varies altogether from that of customary tests" (p. 36).

As Cumming (2009, cited in Fulcher, 2010) puts it, assessment has customarily concentrated almost exclusively on the ends

and continued in a linear or sequential order, that is identifying learning targets and teaching tasks and techniques in advance and implementing these predetermined tasks towards the objectives and afterward evaluating learners on what has been taught. The 'Assessment for learning movement', which began in the 1980s and the work of Black and Wiliam (1998, cited in Fulcher, 2010) and concentrated on formative rather than summative assessment, had an extraordinary impact on the paradigm shift approaches toward assessment. Despite summative assessments, which are given at the end of a learning course, formative assessments are those which are used during the learning process to improve teaching and learning. Assessment for learning movement and DA make the same assumptions, but the latter, despite the former, is rooted in an influential theory of learning and development. i.e. Vygotsky's sociocultural theory (SCT).

Utilizing ZPD, the essence of Vygotsky's sociocultural theory (SCT), to language learning has recently been oriented toward a new path by exhibiting the thought of Dynamic assessment. At the heart of all ZPD oriented research is this fine-tuned assistance which helps the individual move from his/her actual to the proximal level of development. Dynamic assessment (DA), a subcategory of interactive assessment, is an attempt to apply the essence of Vygotsky's ZPD to measurement, which rejects the traditional gap between assessment and instruction".

The Models of Dynamic Assessment (DA)



A short review on types of assessment can inform us with unmistakable models and techniques. Sternberg and Gregorenko (2002) create the Sandwich design and the Cake arrangement of Dynamic Assessment (DA). The Sandwich position is more likely traditional non-dynamic types of assessment. In this methodology, the students are controlled a test after which they get intercession for specific sessions and toward the end they get a posttest with a parallel structure to watch the adequacy of the treatment. Mediation in the Cake position, be that as it may, is coordinated by helping students view some foreordained criteria on the evaluation session itself.

Lantolf and Poehner (2008) perceived interventionist and interactionist models to speak to two primary directions of DA. They accept interventionist and interactionist models infrequently contain three phases: pretest → intercession → posttest. Though interventionist DA is identified with measuring the measure of help required for a student to arrive at a pre-determined endpoint, Interactionist DA focuses on an individual student. The interactionist approach has been called instructing in appraisal (Allal and Ducrey, 2000).

The interventionist approach, then again, stays somehow devoted to explicit characteristics of the conventional non-dynamic techniques and uses the institutionalized strategies and types of help with requests to concoct quantifiable outcomes to make the correlations between and inside the gatherings conceivable. Analysts like Sternberg and Grigorenko (2002) characterize the interventionist ways to deal with DA as either

in sandwich or cake design. It is essential to note here that inside interventionist and interactionist DA, the inspector examinee relationship depends on educating and aiding, i.e., students are allowed to suggest conversation starters and get immediate criticism. Inside the two arrangements of DA, the guidance might be given in individual or gathering settings (Poehner and Lantolf, 2004; Poehner, 2008; Sternberg and Grigorenko, 2002).

Research Questions

In the present research study, the following research questions were addressed:

Q1: *Does peer-mediation have any significant effects on EFL learners' reading comprehension?*

Q2: *Does tutor intervention have any significant effects on EFL learners' reading comprehension?*

Q3: *Is there any significant difference between the effects of peer-mediation and tutor intervention regarding reading comprehension?*

METHODS

The participants of this study include 60 EFL students at two English language institutes. They were male and female learners, aging from 18 to 23 and their learning background ranged from 3 to 4 years. Their mother tongue was Persian. The participants were homogenized through administering the Oxford

Placement Test (OPT). In the direction of scores in the area of 1-17 are considered Beginners, 18-27 (Elementary), 28-36 (Lower-intermediate), 37-47 (Upper- intermediate), 48-55 (Advanced), and 56-60 (very advanced). Those language learners whose scores fell in 28-36 were considered the primary sample of the study. Their first language was Farsi. After conducting OPT, the participants were divided into three groups: Experimental group A: Peer-mediation, Experimental group B: Tutor-intervention, Group C: Control

The pretests were given to participants to capture the initial differences among them. And also, it evaluated the student's ability in reading comprehension. Before the treatment, a researcher-made pretest was administered to the participants to elicit language learners' ability in reading comprehension skill. The pretest consisted of 20 multiple-choice reading items selected from *Select Readings (Intermediate)* by Lee and Gundersen (2013). To prepare passages of appropriate level of difficulty for reading comprehension, the readability of the texts was assessed. In effect, the passages were selected from reliable sources (e.g., *Reading Through Interaction*, Farhady & Mirhassani, 2004), which offer passages of appropriate length, content, and difficulty. The participants were asked to answer the pretest within an hour. In order to establish the reliability of the pretest, it was piloted before the central administration.

Next, the treatment began. Each group of participants received their own treatment. The

treatment of group A (Peer-mediation) was considered based on this point that this approach focused on the individual learner or learners with no predetermined end points (Poehner, 2008). The treatment of group B (Tutor-intervention) was remained loyal to specific characteristics of the traditional procedures and was used the standardized procedures and forms of assistance of teaching in order to come up with quantifiable results to make the comparisons between and within the groups possible. In the control group the researcher brought reading passages which was followed by comprehension questions every session. He asked the participants to read the text and answer the questions; in fact, the researcher followed traditional teaching reading which was confined to read the text, answered comprehension questions and taught new difficult words and grammatical structures of the text. The treatment took 12 sessions. One session was allocated to proficiency test and pretest and one session for posttest. At the end of the treatment the post tests were administered.

RESULTS

Descriptive Statistics for the Groups

Table 1 below summarizes the descriptive indexes obtained for the pretest and posttest scores for the groups.

Table 1
Descriptive Statistics for the Groups in the Pretest and the Posttest

	N	Minimum	Maximum	Mean	Std. Deviation	Skewness	Std. Error	Kurtosis	Std. Error
Groups	60	1.00	3.00	2.0000	.82339	.000	.309	-1.526	.608
Pre. Reading	60	8.00	18.00	13.2500	2.40497	-.025	.309	-.354	.608
Post. Reading	60	10.00	20.00	15.3000	2.40268	-.230	.309	-.553	.608
Peer.Pre. Reading	20	8.00	17.00	13.3000	2.53606	-.074	.512	-.377	.992
Peer.Post. Reading	20	12.00	19.00	15.9500	1.98614	-.327	.512	-.953	.992
Tutor.Pre. Reading	20	10.00	18.00	13.0500	1.90498	.530	.512	1.109	.992
Tutor.Pos t. Reading	20	13.00	20.00	16.4500	1.90498	-.016	.512	-.688	.992
Cont.Pre. Reading	20	8.00	18.00	13.4000	2.79850	-.282	.512	-.687	.992
Cont.Post .Reading	20	10.00	19.00	13.5000	2.25948	.426	.512	.361	.992

From Table 1 above, it can be seen that Skewness and Kurtosis values obtained for the scores were between -2 and +2. This, according to Tabachnick and Fidell (2007), indicates that the data were, descriptively average. However, to obtain a higher degree of certainty, it was

decided to expose the data to inferential normality statistics.

Testing the Research Hypotheses

To do so, the multivariate analysis of covariance (MANCOVA) was run to check whether involving the participants in portfolio

assessment by themselves and assisted by their tutor could have had any significant effects on their reading performance after considering the

effects of the covariate. The results of this test are summarized in Tables 2 below.

Table 2
Multivariate Tests

Effect		Value F	Hypothesis df	Error df	Sig.	Partial Eta Squared	Noncent. Parameter	Observed Power ^d	
Intercept	Pillai's Trace	.634	46.833 ^b	2.000	54.000	.000	.634	93.666	1.000
	Wilks'	.366	46.833 ^b	2.000	54.000	.000	.634	93.666	1.000
	Lambda								
	Hotelling's Trace	1.735	46.833 ^b	2.000	54.000	.000	.634	93.666	1.000
	Roy's Largest Root	1.735	46.833 ^b	2.000	54.000	.000	.634	93.666	1.000
Pre.Reading	Pillai's Trace	.017	.455 ^b	2.000	54.000	.637	.017	.911	.121
	Wilks'	.983	.455 ^b	2.000	54.000	.637	.017	.911	.121
	Lambda								
	Hotelling's Trace	.017	.455 ^b	2.000	54.000	.637	.017	.911	.121
	Roy's Largest Root	.017	.455 ^b	2.000	54.000	.637	.017	.911	.121
Groups	Pillai's Trace	.327	5.384	4.000	110.000	.001	.164	21.536	.969
	Wilks'	.673	5.923 ^b	4.000	108.000	.000	.180	23.692	.981
	Lambda								
	Hotelling's Trace	.487	6.451	4.000	106.000	.000	.196	25.803	.988
	Roy's Largest Root	.487	13.387 ^c	2.000	55.000	.000	.327	26.774	.997

a. Design: Intercept + Pre.Reading + Groups

However, although the F-values obtained indicated significant differences between the mean scores of the groups on the posttest scores of reading after removing the possible effect of

the pretest, the post-hoc comparison tests were run to compare the groups on each of the variables and to answer the research questions raised at the beginning of the study. The results

of these comparisons are displayed in Table 3 and 4 below.

Table 3

Estimated Marginal Means

Dependent Variable	Groups	Mean	Std. Error	95% Confidence Interval	
				Lower Bound	Upper Bound
Post.Reading	Peer-Mediation	15.953 ^a	.463	15.026	16.880
	Tutor-Intervention	16.420 ^a	.463	15.491	17.348
	Control	13.527 ^a	.464	12.597	14.457

a. Covariates appearing in the model are evaluated at the following values: Pre.Reading = 13.2500.

Table 4

Pairwise Comparisons

Dependent Variable	(I) Groups	(J) Groups	Mean Difference (I-J)	Std. Error	Sig. ^b	95% Confidence Interval for Difference ^b	
						Lower Bound	Upper Bound
Post.Reading	Peer-Mediation	Tutor-Intervention	-.466	.655	1.000	-2.083	1.150
		Control	2.426*	.656	.002	.806	4.046
	Tutor-Intervention	Peer-Mediation	.466	.655	1.000	-1.150	2.083
		Control	2.892*	.658	.000	1.268	4.517
	Control	Peer-Mediation	-2.426*	.656	.002	-4.046	-.806
		Tutor-Intervention	-2.892*	.658	.000	-4.517	-1.268

Now based on the results of pair wise comparisons, we turn to answering the research questions and to investigate their respective hypotheses.

Testing Research Hypotheses

The first research hypothesis was: H₀₁: Peer-mediation does not significantly affect EFL learners' reading comprehension. Post hoc comparisons using Bonferroni correction summarized in Table 4 above indicated the mean difference score for the peer-mediation and control conditions (MD = 2.42, P <.05). Therefore, these results suggested that peer-mediation would positively affect EFL learners' reading performance.

The second research null hypothesis was: H₀₂: Tutor-intervention does not significantly affect EFL learners' reading performance. As the results of pairwise comparisons presented in Table 4 indicated, there was a significant difference between the mean difference scores for the tutor-intervention and the control condition (MD=2.89, P<.05). Therefore, these results suggested that tutor intervention would positively affect EFL learners' reading comprehension.

The third research null hypothesis was: H₀₃: There is not a significant difference between the effects of peer-mediation and tutor-intervention on EFL learners' reading comprehension. As the results summarized in Table 4 showed the mean difference between the scores obtained by the first experimental group, who were involved in peer-mediation, and those obtained by the second experimental group, whose learning had been intervened by the tutor, was not significant at P<.05 (MD= .466).

DISCUSSION

In this research study, the researchers investigated the effects of peer-assisted mediation versus tutor intervention within interventionist dynamic assessment on Iranian intermediate EFL learners' reading comprehension ability. As the results indicate, both peer assisted mediation and tutor-intervention within interventionist dynamic assessment positively affect Iranian EFL learners' reading comprehension ability.

These findings align with what Moffett and Wagner (1983) concluded from some studies conducted in the dynamic assessment arena. Test results progress after teaching or mediation; this point is recommended by almost everyone who has conducted research on the effects of dynamic assessment techniques on promoting reading comprehension. Furthermore, the mediation of language learners and teachers can boost the students' performance during the comprehension process.

In parallel with the above findings, several scholars have methodically investigated the relative usefulness of various mediatory activities, consisted of peer assisted mediation and teacher intervention. Usually mediation leads to more significant performance gains (e.g., Lantolf & Poehner, 2008; Sternberg & Grigorenko, 2002; Allal & Ducrey, 2000).

As Sternberg and Grigorenko (2002) state, there are several essential features of employing dynamic assessment to promote language learners' reading comprehension. First, dynamic assessment, which is conducted through mediation between teacher and students or between language learners, is

process-oriented rather than product-oriented. Second, employing dynamic assessment techniques consists of teaching, not just reviewing the current language abilities. Third, dynamic assessment permits the teachers to check the language learner's set of reactions to a group of mediated teaching techniques developed to boost one's reading abilities, rather than pinpointing the students' performance by employing indices like percentiles and points.

CONCLUSION

Improving the learners' capability to reflect on their own learning procedure could help them become responsible for their own learnings. Higher-order thinking skills increase higher order learning skills that will make the learners to reach higher levels of language proficiency (Renner, 1996). Different English language art programs in the United States have been performed to promote language learning and cognitive evolution in a complimentary manner and research findings have demonstrated that many aspects of reading and writing are relevant to significant thinking skills (Moffett & Wagner, 1983; Pearson & Tierney, 1984; Stanford & Roark, 1974; Staton, 1984).

In the present study the effects of peer-assisted mediation versus tutor-intervention within interventionist dynamic assessment on Iranian intermediate EFL learners' reading comprehension ability was investigated. As the results indicate, both peer assisted mediation and tutor-intervention within interventionist dynamic assessment have positive effects on

Iranian EFL learners' reading comprehension ability.

Findings of the study suggested that English teachers should introduce activities, which can have positive effects on language learners' reading comprehension. To achieve this purpose, they should pay special attention to the teaching techniques. Also, they should consider that their role in the class should be marginal because the language learners should not have stress or anxiety.

Employing interventionist dynamic assessment could help language learners to make decision about their own learning experience. Learners could also become autonomous.

The findings of the present study could have some benefits for language teachers, language learners and material developers. As the findings of the present study show involving learners in literature peer mediation and tutor intervention in an interventionist dynamic atmosphere can have positive effects on their reading comprehension.

Collaborative Reading Strategies (CRS) can be useful for language learners in a way that they can participate in group work and have interaction with their classmates. Also, CRSs have the following benefits for language learners: first, language learners can make decision about their own learning experience second, they become autonomous learners who will have enough courage to participate in group discussion.

Material developers should consider students' needs in designing education materials. For reading comprehension

activities, they should be familiar with the content of the learning outcome and the details of the language learning program. Materials should be selected, graded and sequenced in a way that helps language learners to become more autonomous.

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