

Original Article

Developing EFL Learners' Creativity in Writing Skill Through Dynamic Assessment-based Teaching

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Abstract

The development of students' creative potential is one of the objectives of educational programs in TEFL. The ability of TEFL teachers to achieve this objective to shape creative learning environments for their own students' creative potential depends on their training in such a learning environment. This study attempted to investigate the effect of dynamic assessment-inspired teaching on the creativity of the EFL students, going through creative writing. This study tried to notice which model of dynamic assessment best affects creativity. The creative thinking scale in writing (Torrance, 1990) was used by the researchers to score the descriptors of creative thinking subscales. One-hundred EFL adult learners of both gender who aged between 20 to 22 were recruited to take part in the present study at Soure art and Architecture University, and a sequential explanatory mixed-method design was utilized. The control group received no mediation, and the other two classes received sandwich and cake models of dynamic assessment-related mediations, respectively. A semi-structured interview was conducted with 12 students and three main questions were asked. A thematic analysis was done using qualitative MAXQDA Software which showed a positive attitude of the learners toward this. The results have shown that both the sandwich and cake model of dynamic assessment influenced the creativity of the learners in their writing. Besides, the sandwich model was more beneficial than the cake model.

Keywords: Creativity, Cake model, Dynamic assessment (DA), Sandwich model, Writing skill

1. Introduction

It has been for decades that many scholars (e.g., Ellis, 1994; Dörnyei, 2005; Larsen-Freeman & Long, 1991; Segalowitz, 1997; Skehan, 1989) have done researches on the relationship between second language acquisition (SLA) and psychological variables, i.e. individual differences like anxiety, self-esteem, motivation, and self-efficacy. Although creativity has been somehow a rather ignored variable in the research on the field of individual differences, Seddiq and Shokrpour (2016) gave special attention to the significant correlation which was found between creativity and vocabulary learning of the learners in their research. It can be justified from this perspective that “the creative performance or product, the creative person, the creative situation, the creative process, and the creative potential” could make a big difference in performances (Lubart, as cited in Albert & Kormos, 2011, p. 75). Sternberg (1985) puts forth several theoretical claims as creativity is an ability or some abilities carried mentally by all people to some extent. Hence, creativity, which includes imagination, literally, rather implicitly explains the terms unconventionality, risk-taking, and flexibility. Creating new hierarchies and classifying knowledge can be the important factors that put an impact on language learning acquisition. Albert and Kormos (2011) pinpoint “the cognitive underpinnings of the creative working of the mind” which focuses on the potential side of creativity (p. 75). Mounting EFL learners’ creativity in writing skills using dynamic assessment-based teaching has not yet been empirically and thoroughly clarified. Therefore, the current study was launched to carry out this inquiry.

The findings of this study contribute to research into dynamic assessment in general and the importance of creativity in particular. Secondly, research of this kind is pedagogically very helpful. The results of this study examined the effectiveness of dynamic assessment models to assess students in their zone of actual development to show their best and the strongest performance with the needed scaffolding in line with the use of creative strategies in the process of teaching and especially assessing which surely differs in different models from DA. As Pohner and Lantolf (2004) put, the cake metaphor is as the layering of the hints and the items of the test as required, for each problem before going to the next item on the test because metaphorically “when a layer of the cake is put no longer we could add anything else to the previous one which shows an on-going dynamic process as taking the steps of the exam respectively” which could be a great help for the best performance of the students (p. 5). In fact, the teaching, which also consists of the hints needed to be given

to the students in need of the mediation, is one of the other consequences of the test that hopefully ends in the development of the proficiency of the learners. As Poehner and Comronolle (2011) argued, DA-based teaching and assessment address fairness through the provision of mediation. The provision of mediation is sensitive to learners' needs and yields fine-grained diagnoses of development while supporting the ongoing development.

The researchers of this study tried to reveal the impact of dynamic assessment models which orient the type of teaching on the creativity of the participants' writing in EFL environments. The teachers and test instructors intend to evaluate the students at the ultimate level of their proficiency. Lidz (1987), as cited in Ajideh, Arrokh, and Nourdad (2012), assumes that the dynamic assessment as an interaction between an examiner who acts like an intervener and a learner or an active participant tends to find not an exact level of modifiability of the learner and how positive changes in cognitive functioning can be influenced and maintained. Therefore, how to select a creative type of dynamic assessment in our sampling group and how to assess the creativity in writing of participants through Zone of Proximal Development was our target. On the other hand, as Cimermanova (2015) mentioned "educational process should create conditions where learners are developed generally, i.e. not only intellectually, but also emotionally, socially etc." (p. 1969).

The present study, also, was an attempt to examine learners' perceptions of creative writing quantitatively and qualitatively. The study applied both quantitative and qualitative techniques to shed more light on this diagnostic experiment which embeds the washback effect. Finally and most importantly, the study examined the effect of teaching sessions guided by dynamic assessment models on the creativity of the EFL learners' writing.

2. Literature Review

The issue of poor achievement is a mutual problem in most of the educational systems which lead to finding solutions by many departments' trial (Casson & Kingdon, 2007). According to Pimsleur, Sunland, and McIntyre (1964), some low-achiever learners cannot perform the same as their potential. Therefore, they are not capable of meeting the minimum requirements to succeed in the types of assessment given. They are called underachievers because they are not able to show the optimum level of their skills. To make sure about this fact, the psychometric ability test came forward to prove this (Murphy, 2002). As Kuhn (1970) pinpointed, the old paradigms were unable to cope up with outstanding problems,

therefore, a paradigm shift from psychometrics to a broader model of educational assessments. Accordingly, assessments must be in support of learning as well as measuring it (Black & William, 2006). There is a group of assessments namely Dynamic Assessment (DA) that is rooted in Vygotsky's sociocultural theory. The learners are put in their ZPD which helps them perform their best even beyond their competence (Brown & French, 1979). As long as some issues such as utility, fairness, flexibility and relevance in EFL testing as well as the washback field are interwoven with the teaching process and yet they have been neglected from the scientific measurements' look, thus, there is a need to change the system which is indeed the effect of the modernism inspiration (Wyatt-smith & cumming, 2009).

Relatedly, Soleimani and Najafgholian (2014) conducted a study to see if there was any statistically significant correlation between high, mid, and low stages of creativity among male and female Iranian EFL learners and utilizing metaphor in descriptive writing tasks. To achieve this goal, they gave a validated creativity questionnaire to 50 intermediate and advanced EFL learners to measure their creativity levels. Accordingly, 22 men and 28 women with the age range of 20 to 30 whose scores ranged from 50 to 75 (as of low creativity), 75 to 85 (as of mid creativity), and 85 to 100 (as of high creativity) were chosen for the aim of the study based on the results of their performing questionnaire. Next, the questionnaire data were compared to the learners' scores on a descriptive writing task that encouraged the application of metaphors in their writing. Three raters scored the writings through Brown's (2007) rubric of assessment. In order to analyze the data, Pearson correlation and one-way analysis of variance were conducted. Finally, they concluded that the low, mid, and high stages of Iranian EFL learners' creativity and metaphor used in the process of descriptive writing tasks were associated.

Similarly, Seddiq and Shokrpour (2016) sought to examine if the psychological parameter of creativity plays any significant role in the utilization of vocabulary learning strategies (VLS) by EFL students. In addition, they attempted to discover whether gender plays any role in this relationship. In fact, for measuring the creativity of their participants that composed of 101 medical students studying at Shiraz University of Medical Sciences, the Torrance Test of Creative Thinking (Torrance, 1990) was administered. Afterward, the VLS questionnaire by Jones (2006) was administered to the participants to recognize their VLS use. Finally, the results indicated that the participants had a high level of creativity; however, there was no significant difference in terms of gender. Besides, they detected a

significant correlation between creativity and the overall VLS use of female participants, but not for the male ones. Generally, the correlation found between creativity and the overall VLS application of the participants was statistically significant.

In fact, the sociocultural theory that was developed from the work of Vygotsky (1978), has shifted the assessment practices in which the role of the environment of the assessment is no longer neglected. Keeping in line with Hamayan (1995) some views of language learning are not counted as a basis for current trends in assessments such as taking language learning as a passive collection of skills because there are contexts prepared for a more validated result interpretation. Clapham (2000), points out that although some of these alternative assessments are time-consuming, they offer considerable advantages. Achbacher and Winters (1992) shed light upon this by highlighting the features of these assessment types and the differences they make, out of those that could be mentioned as the matter of requiring the learners to create, perform, produce or in other words do something; going to a higher level of thinking to make a skilled problem solver in the tests which is in line with the creativity enhancement goal of this study.

According to some prominent figures of this field, Vygotsky is known as the father of DA (Hamers, Hessels, & Pennings, 1996). In addition to what was mentioned above, culture is a crucial concept in DA, which is conceptualized in the higher-order thinking process by Vygotsky who believes in the inseparability of learning culture and development (Mastergeorge, 2001). Essentially put, the main target of the DA is developing the performance of the learners under the assessment (Lidz & Macrineb, 2001). Learners' engagement in social interaction with a more capable peer is another building block of DA (Omidire, 2009).

To accomplish the objectives of the study, the following research questions were formulated:

RQ1. Is Iranian EFL learners' creativity in writing affected by dynamic assessment-based teaching?

RQ2. Which model of dynamic assessment best affects creativity?

RQ3. What is the attitude of EFL students toward dynamic assessment during creative writing teaching sessions?

3. Methodology

The quantitative design of the study is considered from different aspects. The first aspect considered the first question of how Iranian EFL learners' creativity in writing was affected by dynamic assessment-based teaching. As it is clear, these two variables, dynamic assessment as an independent variable and EFL students' creativity in writing as the dependent variable were under analysis. In fact, the effect of dynamic assessment models on creativity was investigated. The next aspect had to do with various models of dynamic assessment to find out which one outperforms the other one. Finally, the attitude of the students towards creative writing in different models of dynamic assessment was studied.

3.1. Design and Context of the Study

Trying to find out the effectiveness of the coaching design in the process, guided by the type of assessment (Sternberg & Grigorenko, 2002), researchers used the qualitative technique of interviewing and the participants were interviewed in their mother tongue. This aspect was qualitative as well since this interview was conducted to see the learners' attitude towards the coaching design by the teacher who played the role of a mediator and targeted the creativity enhancement.

As mentioned above, in addition to the quantitative design of the study, there was also a qualitative design to understand the effect of dynamic assessment instructed teaching on the creativity of the learners. The teacher's checklist was also a guide in order to record the feedbacks and the noticeable changes among the students through their performances. Therefore, it is safe to conclude that the present study, with its main focus on dynamic assessment, could be counted predominantly quantitative. However, to tap into the participants' writing, a mixed-method design was adopted by using the related interview. The interview's results shed light on the teacher's checklist of the preparation of the mediational lesson planning.

In fact, the interview contained questions to pinpoint the students' perception of creativity in their writing, too. It also contained questions related to the essentiality of the mediation given by the teachers and any possible change if they could make.

3.2. Participants

One-hundred EFL adult learners of ages ranging roughly from 20 to 22 were recruited to take part in the present study solely voluntarily. They were both male and female learners from Soure Art and Architecture University in Tehran. As for their language proficiency,

they were intermediate for the study to be compatible with similar studies conducted so far (e.g., Tavakoli, 2009; Tavakoli & Skehan, 2005).

3.3. Instruments

TOEFL IBT test was used to test the proficiency of the EFL learners taking part in the study because of two main reasons. First and foremost, in contexts such as the one in the present study, practicality is an important factor. Second, according to a study conducted by Sawaki, Stricker, and Oranje (2009), the TOEFL IBT test can be relied on to attain an estimation of the general proficiency score. As shown in Table 1, the reliability value for the Reading and Listening Parts of TOEFL IBT turned out to be 0.90 and 0.89, respectively using Cronbach's Alpha through the pilot study done with 35 intermediate EFL students who were similar to the main sample of this study. Moreover, the reliability value for the Speaking and Writing Sections of TOEFL reached 0.85 and 0.87, respectively through the inter-rater reliability method (Pearson Coefficient between the two raters' scores).

Table 1 indicates that the second used instrument of this study was the creativity scale in writing developed by the researcher. In fact, this scale was applied to score the descriptors of creative thinking subscales proposed by Torrance (1990). It had a Likert Scale ranging from 1 (very weak) to 5 (very strong). Two raters read the writing production of the students and scored creativity in writing. As seen in Table 1, the results revealed the reliability of .81 for creativity in writing scale estimated via inter-rater reliability method (Pearson Coefficient between the two raters' scores).

Seven multiple tests were made by the researcher by which the participants were given insights into a more creative writing task and the eight's session was planned for the posttest time. Challenging the students' minds firstly by the test, the right answers were shared so that they could note them in their later writing.

Finally, the interview contained questions to pinpoint the students' perception of creativity. Generally, they answered these questions: "how creative do you think you are" and also "how much do you think this dynamic assessment-oriented treatment enhanced your creativity in writing?". It also contained questions related to the essentiality of the mediation given by the teachers and any possible change if they could make.

Table 1

Reliability Statistics for TOEFL PBT and Creative Writing Thinking Scale

Instrument	Section	Number of Participants	Number of Items	Reliability Method	Reliability Index
1) TOEFL IBT	a) Reading	35	42	Cronbach's Alpha	.902
	b) Listening	35	34	Cronbach's Alpha	.893
	c) Speaking	35	1	Inter-rater	.854
	d) Writing	35	1	Inter-rater	.875
2) Creative Writing Thinking Scale		35	5	Inter-rater	.807

3.4. Data Collection Procedure

A pilot study was conducted to find out more about the participants' writing difficulties to have a needs analysis which guided the teacher's lesson plan regarding the creative writing task. The participants were selected from a population similar to those who took part in the main study. To recruit participants for the main study, the TOEFL IBT test was employed to estimate their general proficiency levels. Based on their proficiency scores, they were randomly assigned to take part in different models of dynamic assessment classes. Measures were taken to have participants of homogeneous proficiency levels but not the same genders.

The study involved the measurement of learners' creativity in writing using the Abbreviated Torrance Test for Adults (ATTA) in terms of features of fluency, elaboration, flexibility, and originality. In both dynamic assessment models, there was a pre-dynamic assessment as a pretest. In the sandwich format, there were pretest and intervention which consisted of a training period and a posttest. This model was taken into account as a more traditional research design for comparison, which was made between the performance of the participants' pretest, and posttest that proves the effect of the intervention period. The training period lasted eight sessions. The assessment was the most important part of the training period that included the pre-dynamic assessment part, which was the use of creativity evoking realia that highlighted the positive effect of the presence of imagination in students' writing tests. Seven multiple tests were made by the researcher by which the

participants are given insights into a more creative writing task and the eighth session was planned for the posttest.

Actually, as a teacher and as an assessor, the researchers dynamically assessed the students in their ZPD, evoking their creativity simultaneously. It is also important to be noted that the sandwich model of dynamic assessment was more likely to be counted as a more traditional assessment for the process that did not contain every-session-assessment like the cake model. This is the assessment model's power which is couching the lesson planning in both models. To explain more about the treatment sessions, it is needed to highlight the role of pre-assessment lesson planning which is already elaborated as the realia usage section, by which, the teacher started creative storytelling. Showing topic-based short films each session, the students became familiar with the test requirements which they were going to take right away.

To give a clearer image of the creative short-story-writing test, the researcher analyzed three creative thinking sections from the story available on the board which was related to the short film just watched. In these four treatment sessions based on Torrance Tests of creative thinking, items such as creative fluency (the number of ideas the learner can present within a specific time period), creative originality (the extent to which these ideas are distinctive), creative elaboration (the number of details that the learner can produce adding to the initial idea, creative flexibility (what range of ideas can be made for tackling a problem were going to be under deep consideration (Torrance, 1996). As a mediator or better say the facilitator it was there for students to elicit their best hope in the posttest story writing test. In the last part of the class, knowing how to perform the writing test, while they were put in their ZPD, the students were asked to do a creative writing test based on the topic I gave them each session. In this section, the students' feedback in case of any changes needed to be performed in the lesson plan was elicited accordingly. On the other hand, the sandwich assessment lacked the creative writing test each session. They took part in the post-test and the differences they had made in their creative writing between the pre-dynamic assessment and the post-dynamic assessment were analyzed.

Considering that, "a full picture of language development in L2 writing can be gained by involving fluency, accuracy, and complexity measures at various linguistic levels" (Lu, 2011, p. 38), measures of Complexity, Accuracy, and Fluency (CAF) were used in the present study to assess the quality of the learners' written productions at last, in the posttest

story writing. To do this analysis, all written outputs were initially coded for T-units and clauses. A T-unit was characterized as “one main clause plus whatever subordinate clauses to be embedded in it” (Hunt, 1966, p. 735). For the measurement of complexity and accuracy, the writings were analyzed for independent and dependent clauses.

The students were asked to write a paragraph as storytelling, so that the researchers could investigate the cases in which they needed to be scaffolded via different creative strategies, to include in the lesson plan to see and also to record the results. There were some pictures and cartoons to be shown to the participants that triggered their creativity in this storytelling process. The needed mediation was given to two different experimental groups to see the results of different DA models. Besides, it is needed to mention that the type of mediation, amount of it, and how it was going to be layered or sandwiched were surely related to the chosen cake or sandwich model sample. Finally, the participants were asked to answer the interview questions in their mother tongue after they have finished the writing. The aim was to elicit the participants’ perception of their creativity to be digitally recorded.

3.6 Data Analysis Procedure

To analyze the quantitative data, a one-way analysis of variance (ANOVA) was performed to check the homogeneity of language proficiency of the participants in the three groups. According to Mackey and Gass (2005), a one-way ANOVA prepares information on whether or not the three (or more) groups differ. In addition, one-way Analysis of Covariance (ANCOVA) and LSD Post Hoc pairwise comparisons was used to answer the first and second research questions to see if Iranian EFL learners’ creativity in writing was affected by dynamic assessment-based teaching or not. In fact, "ANCOVA can be used when you have a two-group pre-test/post-test design. The scores on the pre-test are treated as a covariate to 'control' for pre-existing differences between the groups” (Pallant, 2013, p. 308). Besides, to analyze the qualitative data, thematic analysis was done using the Maxqda software. Thematic analysis is “a way of seeing” and “making sense out of seemingly unrelated material” (Boyatzis, 1998, p. 4).

4. Results

As it is clear, these two variables, dynamic assessment as an independent variable and EFL students’ creativity in writing as the dependent variable were under analysis. In fact,

the effect of dynamic assessment models on creativity was investigated. The next aspect had to do with various models of dynamic assessment in order to find out which one outperformed the other one. Finally, the attitude of the students towards creative writing in different models of dynamic assessment was studied.

Sternberg and Grigorenko (2002) argued that the coaching design in his process, which is guided by the type of assessment directly influenced the design (Sternberg & Grigorenko, 2002). To this end, the qualitative technique of interviewing was used and the participants were interviewed in their mother tongue. This aspect was qualitative as well since this interview was conducted to see the learners' attitude towards the coaching design by the teacher who played the role of a mediator as well which targeted the creativity enhancement.

As mentioned above, in addition to the quantitative design of the study, there was also a qualitative design to understand the effect of dynamic assessment-instructed teaching on the creativity of the learners. The teacher's checklist is also a guide to record the feedbacks and the noticeable changes among the students through their performances. Therefore, it is safe to conclude that the present study, with its main focus on dynamic assessment, could be counted predominantly quantitative. However, to tap into the participants' writing, a mixed-method design was adopted by using the related interview. The results of the interview shed light on the teacher's checklist of the preparation of the mediational lesson planning.

4.1. Quantitative Phase Results

4.1.1. TOEFL Proficiency Test Results

Table 2 displayed the descriptive statistics of TOEFL IBT scores that were used to prove the homogeneity of the students in the three groups. Table 2 is a display of the mean score of the Sandwich Group ($M = 69.06$, $SD = 4.78$), Cake Group ($M = 70.73$, $SD = 4.75$), and Control Group ($M = 69.94$, $SD = 4.23$) on TOEFL.

Table 2

Descriptive Statistics for TOEFL Scores in the Three Groups

Group	<i>N</i>	Mean	<i>SD</i>	<i>Std. Error</i>	Skewness Rascio	Kurtosis Rascio
Sandwich	33	69.06	4.782	.833	-.316	-.841
Cake	33	70.73	4.752	.827	.060	-.873
Control	34	69.94	4.235	.726	-.504	.456

As explained above, TOEFL was administered to the three intact groups to ensure that the participants were homogeneous regarding language proficiency. One-way ANOVA was conducted to compare the English proficiency scores in the three groups. Thus, the researcher of this study performed one-way ANOVA since there were three groups (i.e. Sandwich, Cake, and Control Groups) and we wanted to see whether or not the three groups differed in terms of English proficiency.

Before discussing the results of ANOVA, homogeneity of variance was checked; the results of which are manifested in the following table. Table 3 indicates that the assumption of homogeneity of variance was met as the significant value associated with Levene's test (0.49) is above 0.05.

Table 3

Levene's Test of Equality of Error Variances (TOEFL Test)

Levene Statistic	<i>df1</i>	<i>df2</i>	<i>Sig.</i>
0.717	2	97	0.491

As outlined in Table 4, ANOVA failed to find a statistically significant difference in proficiency scores among the three groups ($F(2, 97) = 1.08, p = .34, p > .05$). Thus, it was uncovered that the students in the three groups (i.e., Sandwich, Cake, and Control) were homogeneous intermediate students regarding English language proficiency at the beginning of the study.

Table 4

ANOVA for Comparing Three Groups' TOEFL Scores

	Sum of Squares	<i>df</i>	Mean Square	<i>F</i>	<i>Sig.</i>
Between Groups	45.883	2	22.942	1.085	.341
Within Groups	2046.307	97	21.096		
Total	2092.190	99			

Figure 1 below was a Line Chart that displays results of proficiency test results (TOEFL) in the Sandwich, Cake, and Control Groups. As the figure showed clearly, the means of the three groups were almost at the same level.

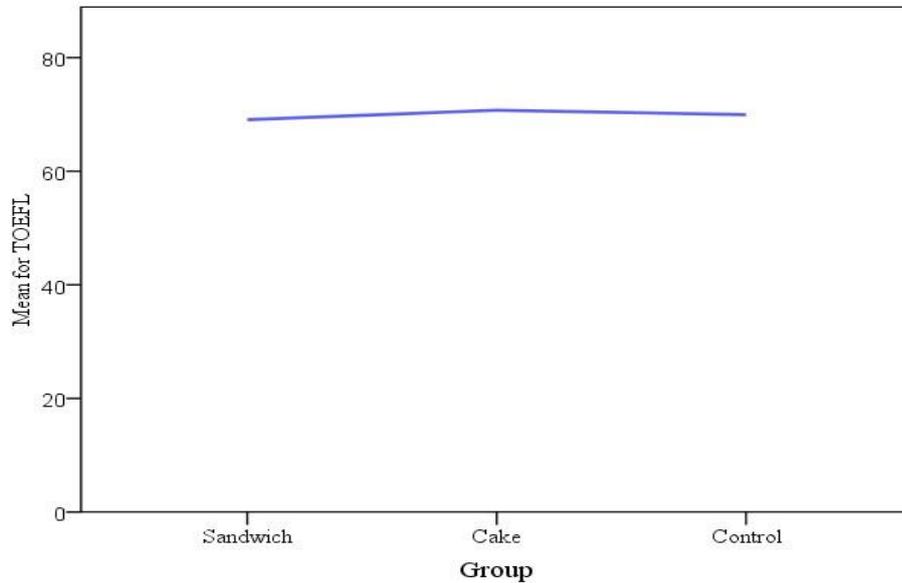


Figure 1. Line Chart of TOEFL proficiency means in the three groups.

4.1.2. Addressing Research Question One and Two

The first research question of this study inquired if Iranian EFL learners' creativity in writing is affected by dynamic assessment-based teaching or not. And the second research question asked which model of dynamic assessment best affects creativity? Analysis of Covariance and LSD Post Hoc pairwise comparisons were used to examine these research questions. Table 5 represents the descriptive statistics for creativity in writing scores in the Sandwich Group ($n = 33$), Cake Group ($n = 33$) and Control Group ($n = 34$).

Table 5

Descriptive Statistics of Creativity in Writing Scores on Pretest and Posttest by Group (Scores out of 20)

Test administration	Group	<i>N</i>	Mean	<i>SD</i>	<i>SEM</i>
Pretest	Sandwich	33	11.864	4.260	.741
	Cake	33	12.081	4.279	.745
	Control	34	12.212	4.085	.701
Posttest	Sandwich	33	13.167	4.480	.778
	Cake	33	14.348	3.945	.704
	Control	34	12.632	4.097	.703

As demonstrated in Table 5 and Figure 2, the mean of creativity in writing in the Sandwich Group ($M = 11.86$, $SD = 4.26$), Cake Group ($M = 12.08$, $SD = 4.28$), and Control Group ($M = 12.21$, $SD = 4.08$) did not look far from each other on the pretest, however the mean of creativity in writing in the Cake Group ($M = 14.35$, $SD = 3.94$) was the highest one followed by the mean in the Sandwich Group ($M = 13.17$, $SD = 4.48$) and then Control Group ($M = 12.63$, $SD = 4.10$) on the posttest.

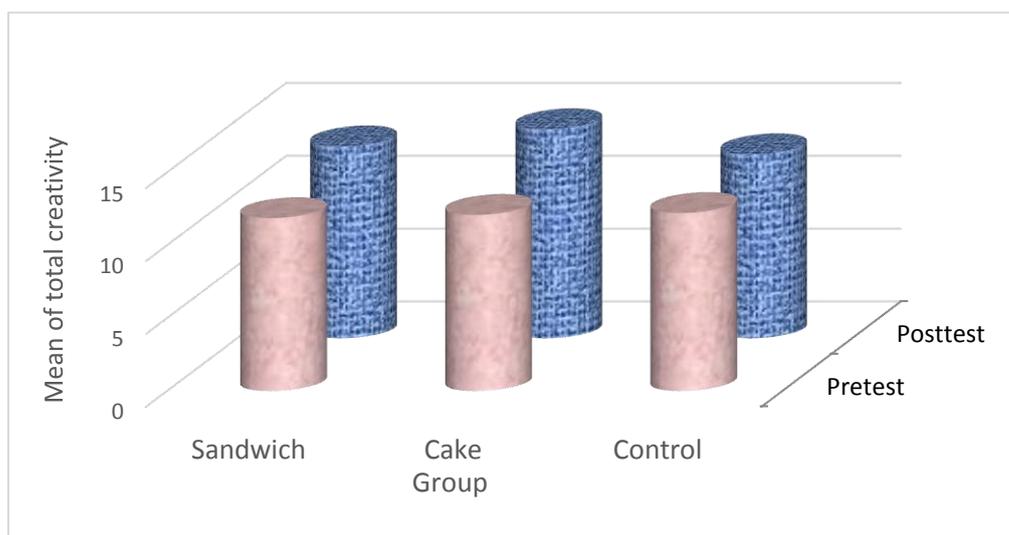


Figure 2. Three groups' means of creativity in writing (pretest & posttest).

Testing assumptions: According to Hatch and Lazaraton (1991), the assumptions of linearity, homogeneity of variances and homogeneity of regression slopes must be examined before applying ANCOVA. To assess the assumption of the linear relationship between the

dependent variable (posttest of creativity in writing) and the covariates (pretest of creativity in writing) in the three groups, the current researcher checked the general distribution of scores for each group (Figure 3). The distribution of creativity in writing scores indicated that there was a linear (straight-line) relationship among the three groups. Therefore, the data for creativity in writing has enjoyed the assumption of a linear relationship.

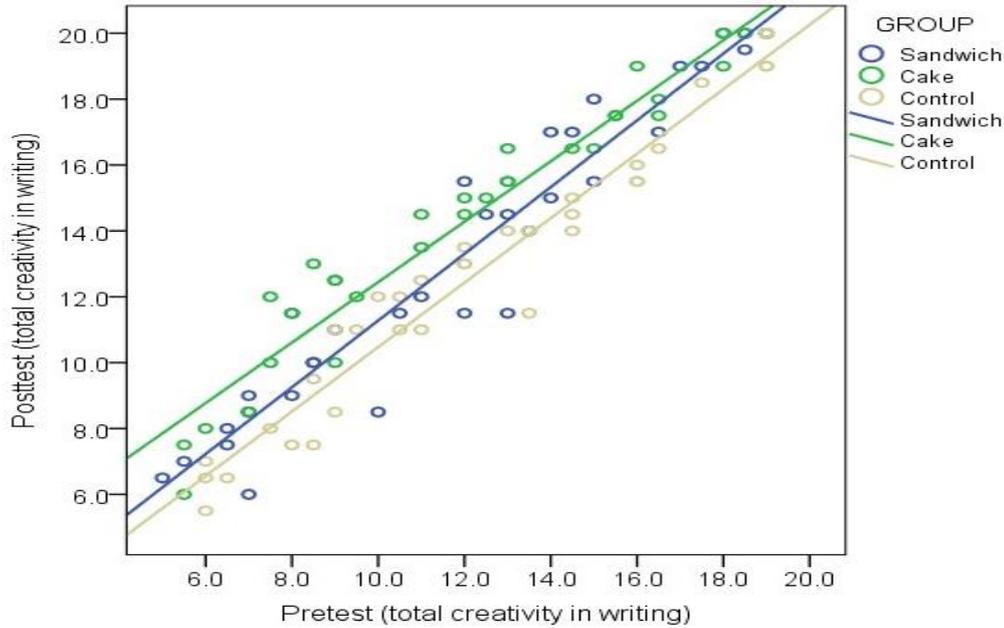


Figure 3. Linearity distribution between the pretest and posttest of creativity in writing scores by group.

As seen in Table 6, the significance value associated with Levene’s test (.73) was larger than the selected significant level (0.05). For this reason, the homogeneity of variance assumption was not violated for creativity in writing scores in the three groups.

Table 6

Levene's Test of Equality of Error Variances for Creativity in Writing Scores by Group

Levene Statistic	df1	df2	Sig.
.308	2	97	.735

The third assumption relates to the homogeneity of regression slopes. As laid out in Table 7, the results showed that the significance level of the interaction (group*pretest)

between the group and the pretest of creativity in writing was below 0.05 ($F = 12.25$, $p = 0.29$) which was not statistically significant. Thus, the homogeneity of regression slopes assumption was met as well.

Table 7

Tests of Between-Subjects Effects for Creativity in Writing by Group for Checking Homogeneity of Regression Slopes

Source	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Corrected Model	1668.917	5	333.783	306.791	.000	.942
Intercept	30.535	1	30.535	28.066	.000	.230
GROUP	13.323	2	6.662	6.123	.003	.115
PRETEST	1614.610	1	1614.610	1484.039	.000	.940
GROUP * PRETEST	2.718	2	1.359	1.249	.291	.026
Error	102.270	94	1.088			
Total	19660.250	100				
Corrected Total	1771.188	99				

A one-way ANCOVA was utilized to explore the effectiveness of dynamic assessment on creativity in writing of the Iranian intermediate EFL learners' writing. The independent variable is the implementation of dynamic assessment (Group), and the dependent variable is creativity in writing. Participants' scores on the pretest of creativity in writing are used as the covariate in this analysis. The results of ANCOVA are summarized in Table 8 below.

As shown in Table 8, after adjusting for the creativity in writing scores on the pretest, there was a significant difference among the three groups' creativity in writing scores on the posttest, $F(2, 96) = 25.99$, $p = .000$, $p < .05$, partial eta squared = .35. Accordingly, it can be claimed that dynamic assessment-based teaching affects Iranian EFL learners' creativity in their writing.

Besides, as it is observable from Table 8, a strong relationship was seen between the pre-intervention and post-intervention scores on the creativity in writing test, as shown by a p -value of .000, $F(1, 96) = 1476.49$, and a partial eta squared value of .94.

Table 8

ANCOVA: Tests of Between-Subjects Effects for Creativity in Writing by Group

Source	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Corrected Model	1666.199	3	555.400	507.848	.000	.941
Intercept	30.612	1	30.612	27.991	.000	.226
Pretest	1614.741	1	1614.741	1476.493	.000	.939
GROUP	56.867	2	28.434	25.999	.000	.351
Error	104.989	96	1.094			
Total	19660.250	100				
Corrected Total	1771.188	99				

For further analysis, responding to the second research question, LSD Post Hoc pairwise comparisons were carried out to compare the creativity in writing between each possible pair of groups (Table 9). Table 9 indicated that there was a statistically significant difference ($p = .001, p < .05$) in creativity in writing measures between the Sandwich and Control Groups with a mean difference of .87 (out of 20).

Moreover, as seen in Table 9, LSD Post Hoc uncovered that there was a statistically significant difference ($p = .000, p < .05$) in creativity in writing between the Cake and Control Groups with the mean difference of 1.84 (out of 20).

Besides, Table 9 reflects that there was a statistically significant difference ($p = .000, p < .05$) in creativity in writing measures for the Cake and Sandwich Groups with the mean difference of .98 (out of 20). Consequently, it can be concluded that both sandwich and cake models of dynamic assessment can influence creativity in writing, though, the cake model ($M = 14.35, SD = 3.94$) is more effective than the sandwich model ($M = 13.17, SD = 4.48$) in improving creativity in writing of Iranian EFL learners.

Table 9

LSD Post Hoc Pairwise Comparisons for Three Groups' Scores of Creativity in Writing

(I) GROUP	(J) GROUP	Mean Difference (I-J)	Std. Error	Sig.
Cake	Sandwich	.976	.258	.000
	Control	1.842	.256	.000
Sandwich	Control	.866	.256	.001

4.2. Qualitative Phase Results

4.2.1. Addressing Research Question Three

The purpose of the third research question of this study was to investigate the attitude of EFL students toward dynamic assessment during creative writing teaching sessions. To investigate this research question, the qualitative phase of the study was conducted. The semi-structured interview was conducted with 12 students and three main questions were asked. A thematic analysis was done using qualitative MAXQDA Software to analyze the qualitative data. Thematic analysis has been defined broadly as "a way of seeing" and "making sense out of seemingly unrelated material" (Boyatzis, 1998, p. 4). According to Joffe (2012), outcomes of a thematic analysis will highlight the most outstanding constellation of meanings existent in the text.

A recursive six-phase process for thematic analysis proposed by Braun, Clarke, and Rance (2014) was used to analyze the qualitative data in the present study; (a) Familiarizing oneself with the data (text; maybe transcriptions) and identifying items of potential interest; (b) Generating initial codes that identify important features of the data relevant to answering the research question(s); applying codes to the dataset (segmenting and tagging) and collating codes across segments of the dataset; (c) Searching for themes; examining the codes and collated data to identify broader patterns of meaning; (d) reviewing themes such as applying the potential themes to the dataset to determine if they tell a convincing story that answered the research question(s). Themes may be refined, split, combined, or discarded; (e) Defining and naming themes, as well as, developing a detailed analysis of each of them; and 6) Producing a report by weaving together the analytic narrative and data segments, relating the analysis to extant literature. The results of this thematic analysis for each main interview question are provided below along with some pertinent supportive response samples mentioned.

From 12 verbatim Transcripts, 105 significant statements were extracted. Examples of significant statements with their formulated meanings were available in appendix A. Each statement was read carefully to draw the underlined meaningful notion behind it. For instance, in the statement uttered by one of the interviewees as <<To me, something that was very effective and I enjoyed it was the fact that the teacher provided us with the correct response directly after the test, so I soon found the answer of the questions and was ready

and informative. The dynamic assessment provides instant and pertinent corrective feedback for writing>>

For the final themes to emerge, the researchers examined the formulated meanings pondering over them. They wanted to arrive at larger categories signifying the main ways dynamic assessment-inspired teaching affects Iranian EFL learners' creativity in writing. For example, as outlined in Appendix B, from the formulated meaning Dynamic assessment is exciting and ground-breaking the theme Interesting and Innovative emerged, and from the meaning Dynamic assessment activated and improved curiosity in writing, the category Generating curiosity was drawn.

Finally, after arranging the formulated meanings into clusters, the results revealed 6 themes as the main ways dynamic assessment-inspired teaching affects Iranian EFL learners' creativity in writing; (a) Interesting and innovative, (b) Instant corrective feedback, (c) Initiating and improving creativity, (d) Generating curiosity, (e) Objectivity of tests, and (f) Valuable hints and mediations. These main aspects or reading problems were organized from the highest frequently mentioned one (as the most important one) to the lowest expressed by the interviewees in terms of frequencies and percentage (Appendix B). These emerged themes are explained in detail below along with some pertinent supportive direct quotations mentioned.

4.2.1.1. Interesting and Innovative

The first theme that emerged from the qualitative data was Interesting and Innovative. In fact, at the end of the 8 sessions, almost all of the participants expressed their positive interest in learning via testing and asserted that it was an interesting and very innovative method in comparison with traditional ones. For example, two of the students maintained that:

<<In my opinion, learning writing in this class was very different from the other classes I've attended before; actually, it was new and pleasurable making me feel enjoyable in the writing class.>> (S50)

<<I didn't expect and am accustomed to such a method of writing instruction since I thought that tests are at the end of the courses for evaluations not before or during the courses. I think this kind of teaching is exciting and I would like to participate in these kinds of classes and recommends my friends to do so.>> (S1)

Most of the interviewees believed that learning through testing is one of the advantages of dynamic assessment, but it would make some kinds of anxiety for some of the students who cannot respond to the questions in the first few attempts. For instance, two of the students noted that:

<<During the first and second class in which I couldn't find the answers to the questions, I felt worried and anxious, I felt that I lack enough knowledge and ability to learn writing, but gradually, after some sessions, this kind of feeling passed away and I got my self-confidence to find answers to the questions and ask the teacher or classmates for help and guidance.>> (S11)

<<At first that I wasn't familiar with learning by use of taking the test, I was doubtful and held, to some extent, negative feeling, but after passing some sessions, I changed my mind starting to feel positive and motivated.>> (S3)

4.2.1.2. Instant Corrective Feedback

The second theme was the Instant Corrective Feedback in writing that was provided as the result of dynamic assessment. Analyzing the qualitative data showed that the majority of the students asserted that receiving the correct response immediately after the tests is the other merit of this method. A few first sessions, some of the learners thought that dynamic assessment would not improve their writing, however, after having passed four or five sessions, they noticed their progress in their writing and therefore they changed their mind reflecting that using dynamic assessment to learn writing in class would result in good results. To quote, two of the participants mentioned that:

<<To me, something that was very effective and I enjoyed it was the fact that the teacher provided us with the correct response directly after the test, so I soon found the answer to the questions and was ready and informative to write the essay while using the results of the test.>> (S8)

<<Actually in the first sessions I felt disappointed and was not accustomed to this kind of learning writing, and thought that this method would not increase the quantity and quality of my writing skill, but little by little, I saw the improvement and progress in my essays and got motivated.>> (S12)

4.2.1.3. Initiating and Improving Creativity

Another theme that emerged from the interview responses was Initiating and Improving Creativity in writing. Most of the respondents reported that multiple-choice tests were effective in aiding them to improve their writing skills as the results of practicing creativity in their writing. After passing two or three sessions, their writings became more creative and comprehensive. They included more ideas in their essays, made their ideas more distinctive, produced more details to the primary idea, and generated a broader range of ideas to cope with a problem. To quote:

<<After taking the multiple-choice test, I was informed and confident to write more broadly, precisely, and uniquely than ever before. Actually, I could remember much of the information and guides learned from the tests.>> (S2)

<<During the beginning sessions I thought that I couldn't write well, the ideas didn't come to my mind, I couldn't organize the paragraphs, but little by little I could write more freely, I expanded my ideas, generated varied notions, and opinions around a mentioned problem.>> (S10)

4.2.1.4. Generating Curiosity

Generating Curiosity was the next category elicited from the interview data. In many instances, the test takers expressed that the multiple-choice tests made them think deeply about the questions that made them more willing and interested to figure out and discover the responses. Accordingly, they attained awareness of the lessons and points leading to the application of the learned information in their written productions. For example, two of the interviewees stated that:

<<When I read the questions and came across a problem or hint, it caused a challenge that made me curious to know about and find the response or solution.>> (S4)

<<As far as I'm concerned, multiple-choice tests were efficient and helpful since they made me focus on a specific topic trying to find the answer. Also, different response choices caused me to compare them and analyze the correctness of them. Therefore, I could remember the responses and use them while writing my composition.>> (S6)

4.2.1.5. Objectivity of Tests

Another main theme found to be the Objectivity of Tests. A large number of subjects maintained that multiple-choice tests were objective and provided the exact answer to the raised questions and problems. In reality, after providing the answer to the questions, the students were sure enough that they have understood the answer and points without any doubt instead of possible wrong interpretation or misunderstanding. The following two quotes support these points:

<<I think that the questions and therefore their answers were exact and factual and related to using imagination and creativity to write better and more beautifully. In other words, we were sure that there were all the information and facts about the creative writing within the questions.>> (S9)

<<To me, in the multiple-choice tests, there is access to the answer of them, and there is write or wrong answer, so we could learn about our problems or faults, and tried to solve them and replace them with the facts and understanding.>> (S7)

4.2.1.6. Valuable Hints and Mediations

The last important theme emerged to deal with Valuable Hints and Mediations. The respondents mainly revealed that hints and mediations were valuable and useful. In many cases, they reported that the tests made challenges that assisted them to memorize the hints and points of the questions better. Moreover, a great number of interviewees affirmed that the hints and mediations were easy, understandable, and related to their true level of writing ability. In other words, the hints, points, and mediations fit into the students' true needs and knowledge level. In there were some mismatches, the teacher mediated and provided more precise responses and hints by interacting and associating with the learners. To affirm this, one of the students responded that:

<<I could answer almost half of the questions in the test quickly. The other half of the questions that I was not sure of were answered and explained by the instructor well and I understood them with not much effort. If one or perhaps two questions were difficult to learn, I asked for more clarification and the teacher explained them making more examples and illustrations.>> (S5)

<<In my opinion, the hints and writing points and instructions were straightforward and I could get the gist of the talk. In case of any misunderstanding, the teacher's explanation and model of writing sample resolved my questions and problems.>> (S11)

Other interviewees found the hints and mediations beneficial and useful in that they were instructive and illuminating. Moreover, after some sessions, the method of providing hints was efficient as whenever the students face mistakes, they don't have to enquire the instructors or classmates and the hints, points, and mediations would be provided spontaneously. The following two quotes illustrate these points:

<<When I learned the points and new lessons I felt that they are important and made me write better than before.>> (S1)

<<I remember that in the first instructional sessions we frequently asked more questions about the points and lessons of writing more creatively from the teacher or other students, however, gradually the number of questions decreased because we learned how to catch the point.>> (S8)

Besides, nearly all of the interviewees confirmed that there was sufficient opportunity of reviewing hints and mediations through examining some excellent models of writing by the instructor. After giving the test, the instructor presented a perfect sample of IELTS writing, reviewing the hints of the ways to employ creativity in writing. Two examples are provided to confirm the findings:

<<During the exemplification of a writing model by the teacher, I could review all the points mentioned in the tests and see them in the real outcome of writing. If I had a problem with some, I asked for more explanation.>> (S12)

<<In this writing course, we faced the points and lessons repeatedly. In the test phase, checking the responses, seeing a writing model, analyzing the model, and finally, during the writing essay exercise, we could review and study the hints and receive the teacher's mediation and help.>> (S10)

5. Discussion and Conclusion

Having considered all the findings discussed above, it was concluded that the application of dynamic assessment-based teaching enhances the EFL learners' creativity in writing therefore, the first question of the research was successfully answered. Addressing the second research question the findings revealed that, going through the cake model of

dynamic assessment we would surely find a more beneficial process in boosting the learners' creativity in writing. The researchers could certainly find out the answer to the third research question which was questioning the attitude of the learners towards the whole different process they went through during the treatment sessions with the help of the interview questions and the related analysis which demonstrated a significant positive attitude of the learners towards DA. The sequential explanatory mixed-method design which the researchers went through was a real help. Vygotsky believed that the interaction among people would enhance learning development, which enlightens the existence of the Zone of Proximal Development (ZPD) explaining that "the learned functions are transferred from the social dimension to cognitive dimension" (p. 10). This theory has several considerable aspects such as the fact that learners can learn under the supervision of an experienced person such as a mediator who prepares enough help and support for the tackling of the challenges of the task cooperatively (Akbarnejad et al., 2019, p. 10).

Furthermore, the study done by Rashidi and Bahadori Nejad (2018) confirms our findings in that they found out that dynamic assessment significantly affected participants' writing scores, improved their writing ability, and demonstrated that the experimental group's dynamic assessment scores were, in general, greater than the control group's dynamic assessment scores. Besides, the results of the learners' interview approved that dynamic assessment could progress the learners' EFL process writing and their writing confidence as well. Besides, dynamic assessment enhanced their motivation in their writing ability.

As far as the research was done in an EFL context, the concluding elements chosen from this study may propose several pedagogical implications which can be presented as guidelines for enhancing creativity in writing instruction. As the most prominent one, dynamic assessment-based teaching interaction making methods such as mediating, recording teachers' checklist, hints, and prompts-giving aims at meeting needs of the learners for a better performance whilst they are believed from the teacher's side to be able to perform even better potentially. Being exposed to such a teaching methodology which is in line with the tests-teach-test technique, EFL learners enjoy being challenged and then guided by the test-taking phase, therefore, the findings may also urge EFL syllabus designers and material developers to consider this effect in practice.

Additionally, dynamic assessment, with its predictable nature, attempts to realize that learners are struggling. Furthermore, it helps to prepare appropriate information about the problem source, progress, and transcendence ability of learners to aid teachers in designing more effective remedial courses, which, according to Ajideh, Farrokhi, and Nourdad (2012), is the final aim of education.

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References

- Ajideh, P., Arrokhi, F., & Nourdad, N. (2012). Dynamic assessment of EFL reading: Revealing Hidden Aspects at Different Proficiency Levels. *World Journal of Education*, 2(4). <http://dx.doi.org/10.5430/wje.v2n4p102/>
- Akbarnetaj-e shoob, N., & Abbasi, Gh., & Mirzaian, B. (2019). Comparing the efficiency of task-based interactive language teaching and task-based language teaching on language learners' fear of negative evaluation in university heterogeneous classes. *The Journal of English Language Pedagogy and Practice*, 12(24), 1-16.
- Albert, A., & Kormos, J. (2011). Creativity and narrative task performance: An exploratory study. *Language Learning*, 61(1), 73-99. <http://dx.doi.org/10.1111/j.1467-9922.2011.00643.x/>
- Bailey, K. M. (1996). Working for washback: A review of the washback concept in language testing. *Language Testing*, 13 (3), 257-279.
- Black, P., & Wiliam, D. (2006). Developing a theory of formative assessment. In J. Gardner (Ed.) *Assessment and learning*. London: Sage.
- Boyatzis, R. E. (1998). *Transforming qualitative information: Thematic analysis and code development*. London: Sage.
- Braun, V., Clarke, V., & Rance, N. (2014). How to use thematic analysis with interview data. In A. Vossler & N. Moller (Eds.), *The counseling & psychotherapy research handbook* (pp. 183-197). S London: Sage. age.
- Brown, A. L., & French, L. A. (1979). The zone of potential development: Implications for intelligence testing in the year 2000. *Intelligence* 3, 255-273.
- Brown, S. (2007). *Teaching by principles: An interactive approach to language pedagogy*. Pearson Education.
- Casson, R., & Kingdon, G. (2007.). Tackling low educational achievement', Joseph Rowntree Foundation, <http://www.jrf.org.uk/sites/files/jrf/2063-education-schools-achievement.pdf>
- Cimermanova, I. (2015). Creativity in EFL teacher training and its transfer to language teaching. *Social and Behavioral Sciences*, 197, 1969-1975.

- Clapham, C. (2000). Assessment and testing. *Annual Review of Applied Linguistics*, 20, 147-161.
<https://doi.org/10.1017/S0267190500200093>
- Dörnyei, Z. (2005). *Motivational strategies in the language classroom*. Cambridge University Press.
- Ellis, R. (1994). *The study of second language acquisition*. Oxford University Press.
- Gaies, S. (1980). T-Unit analysis in second language research: Applications, problems, and limitations. *TESOL Quarterly*, 14(1), 53-60. doi:10.2307/3586808
- Gipps, C. V. (1994). *Beyond testing: Towards a theory of educational assessment*. RoutledgeFalmer.
- Guilford, J. P. (1959). Three faces of intellect. *American Psychologist*, 14, 469-479.
- Hamayan, E. V. (1995). Approaches to alternative assessment. *Annual Review of Applied Linguistics*, 15, 212-226.
- Hamers, J. H. M., Hessels, M. G. P., & Penning, A. H. (1996). Learning potential in ethnic minority children. *European Journal of Psychological Assessment*, 12(3), 183-192.
- Hatch, E., & Lazaraton, A. (1991). *The research manual: Design and statistics for applied linguistics*. Heinle & Heinle Publication.
- Hunt, K. (1966). Recent measures in syntactic development. *Elementary English*, 43, 732-739
- Joffe, H. (2012). Thematic analysis. In D. Harper & A. R. Thompson (Eds.), *Qualitative research methods in mental health and psychotherapy* (pp. 209-223). Wiley-Blackwell.
- Jones, R. (2006). Vocabulary learning strategy use among tertiary students in the United Arab Emirates. *Perspective*, 14(1), 4-8.
- Kuhn, T. S. (Ed.). (1970). *The structure of scientific revolutions*. (2nd ed). University of Chicago Press Ltd.
- Lantolf, J.P. & Poehner, M.E. (2004). Dynamic assessment: Bringing the past into the future. *Journal of Applied Linguistics*, 1, 49-74.
- Lantolf, J. P. (2009). Dynamic assessment: The dialectic integration of instruction and assessment. *Language Teaching*, 42(2), 355-368.
- Larsen-Freeman, D., & Long, M. (1991). *An introduction to second language acquisition*. Longman.
- Lidz, C. S., & Macrine, S. (2001). An alternative approach to the identification of gifted culturally and linguistically diverse learners. *School Psychology International*, 22, 74-96.
- Lidz, C. S. (1987). *Dynamic assessment: An interactional approach to evaluating learning potential*. Guilford.
- Lu, X. (2011). A corpus-based evaluation of syntactic complexity measures as indices of college-level ESL writers' language development. *TESOL Quarterly*, 45(1), 36-62.
- Lubart, T. I. (1994). *Creativity*. In R. J. Sternberg (Eds.), *Handbook of perception and cognition (2nd ed.)*. *Thinking and problem solving* (pp. 289-332). Academic Press. <https://doi.org/10.1016/B978-0-08-057299-4.50016-5>
- Macky, A., & Gass, S. M. (2005). *Second Language Research, methodology and design*. Lawrence Erlbaum Associates, Inc., Publishers.
- Mastergeorge, A. M. (2001). Guided participation in sociocultural learning: Intervention and apprenticeship. *Topics in Language Disorders*, 22(4), 74-87.
- Murphy, R. (2002). *A review of South African research in the field of dynamic assessment* Unpublished Master's thesis, University of Pretoria, South Africa.

- Naeini, J. (2013). *Graduated prompts and mediated learning experience: A comparative study of the effects of two approaches of dynamic assessment on the reading comprehension of Iranian EFL learners*. Unpublished doctoral dissertation, Islamic Azad University, Science and Research Branch, Iran.
- Rashidi, N., & Bahadori Nejad, Z. (2018). An investigation into the effect of dynamic assessment on the EFL learners' process writing development. *SAGE Open*, 1-14.
- Segalowitz, N. (1997). Individual differences in second language acquisition. In A. M. B. de Groot & J. F. Kroll (Eds.), *Tutorials in bilingualism: Psycholinguistic perspectives* (pp. 85–112). Lawrence Erlbaum Associates Publishers.
- Omidire, M. F. (2009). *Investigating dynamic assessment as a means of addressing the assessment dilemma of additional language learner*, Unpublished doctoral dissertation, University of Pretoria, South Africa.
- Pallant, J. (Ed.). (2013). *SPSS survival manual* (5th ed.). Australia: NSW.
- Pimsleur, P., Sunland, D. M. & McIntyre, R. (1964). Underachievement in foreign language learning. *International Review of Applied Linguistics*, 2, 113-150.
- Poehner, M. E. (2008). *Dynamic assessment a Vygotskian approach to understanding and promoting L2 development*. The Pennsylvania State University
- Poehner, M.E., & Compennolle, R. A. V. (2011). Frames of interaction in Dynamic Assessment: developmental diagnoses of second language learning. *Assessment in Education: Principles, Policy & Practice*, 18(2), 183-198. <http://dx.doi.org/10.1037/1931-3896.2.2.97/>
- Sawaki, U. Stricker, L. J., & Oranje, A. H. (2009). Factor structure of the TOEFL Internet-based test. *Language Testing*, 26, 5-30.
- Seddigh, F., & Shokrpour, N. (2016). Creativity and Its Relationship with Vocabulary Learning Strategy Use of EFL Students. *Journal of Studies in Education*, 3(2). <https://www.researchgate.net/publication/>
- Segalowitz, N. (1997). Individual differences in second language acquisition. *Tutorials in Bilingualism*, (pp. 85-112). Lawrence Erlbaum Associates.
- Skehan, P. (1989). *Individual differences in second language learning*. Edward Arnold.
- Soleimani, h., & Najafgholian, S. (2014). The relationship between creativity in thinking and writing performance of Iranian EFL learners on comparison/contrast. *International Journal of English Language and Literature Studies, Asian Economic and Social Society*, 3(3), 223-233.
- Sternberg, R. J., & Grigorenko, E. L. (2002). *Dynamic testing: The nature and measurement of learning potential*. Cambridge University Press.
- Sternberg, R. J. (1985). Implicit theories of intelligence, creativity, and wisdom. *Journal of personality and social psychology*, 49, 607-627. <http://dx.doi.org/10.1037/0022-3514.49.3.607/>
- Tavakoli, P., & Skehan, P. (2005). Strategic planning, task structure, and performance testing. In R. Ellis (Eds.), *Planning and task-performance in a second language* (pp. 239-73). John Benjamins.
- Tavakoli, P. (2009). Researching task difficulty: towards understanding L2 proficiency. In A. Benati (Eds.), *Issues in second language proficiency* (pp. 216-232). Continuum.
- Torrance, E. P. (1966). *Torrance tests of creative thinking*. Personnel Press.
- Torrance, E. P. (1967). *Understanding the fourth-grade slump in creative thinking. Final Report*. The University of Georgia.

Research in English Language Pedagogy (2021) 9(2): 309-338

- Torrance, E. P. (1971). Are the Torrance tests of creative thinking biased against or in favor of “disadvantaged” groups? *Gifted Child Quarterly*, 15, 75-80.
- Torrance, E. P. (1976). Students of the future: Their abilities, achievements, and images of the future. *Creative Child and Adult Quarterly*, 1, 76-90.
- Torrance, E. P. (1978). Giftedness in solving future problems. *Journal of Creative Behavior*, 12, 75-89.
- Torrance, E. P. (1979). *The search for satori and creativity*. Bearly Limited.
- Torrance, E. P. (1990). *The Torrance test of creative thinking norms-technical manual figural (streamlined) forms A & B*. Bensenville: Scholastica Testing Service, Inc.
- Tzuriel, D. (1992). The dynamic assessment approach: A reply to Frisby and Braden. *Journal of Special Education*, 26, 302-324.
- Vygotsky, L. S. (1987). The development of imagination in childhood. *The collected works of L. S. Vygotsky*. Minick, Trans.
- Wyatt-Smith, C., & Cumming, J. (2009). *Educational assessment in the 21st century*. Springer.

Appendices

Appendix A

Selected examples of significant statements of EFL learners about the ways to influence creativity in writing by dynamic assessment-inspired teaching

<i>Significant Statement</i>	<i>Formulated Meaning</i>
I didn't expect and accustomed to such method of writing instruction. I think this kind of teaching is exiting and I would like to participate in these kinds of classes and recommends my friends to do so.	Dynamic assessment is really exciting and ground-breaking.
To me something that was very effective and I really enjoyed it was the fact that the teacher provided us with the correct response directly after the test, so I soon found the answer of the questions and was ready and informative.	Dynamic assessment provides instant and pertinent corrective feedback for writing.
During the beginning sessions I thought that I couldn't write well, I couldn't organize the paragraphs, but little by little I could write more freely, I expanded my ideas, generated varied notions and opinions around a mentioned problem.	Dynamic assessment initiates and improves creativity in writing.
When I read the questions and came across a problem or hint, it caused a challenge that made me curious to know about and find the response or solution.	Dynamic assessment activates and improve curiosity in writing.
The questions and therefore their answers were exact and factual and related to using imagination and creativity to write better and more beautiful. In other words, we were sure that there were all the information and facts about the creative writing within the questions	Dynamic assessment provides objective responses and lessons for the learners.
The hints and writing points and instructions were straightforward and I could get the gist of the talk. In case of any misunderstanding, the teacher's explanation and model of writing sample resolved my questions and problems.	Dynamic assessment prepares beneficial hints and mediations.

Appendix B

Example of five theme clusters with their associated formulated meanings

<i>Formulated Meaning</i>	<i>Theme cluster</i>
Dynamic assessment is really exciting and ground-breaking.	Interesting and innovative
Dynamic assessment provides instant and pertinent corrective feedback for writing.	Instant corrective feedback
Dynamic assessment initiates and improves creativity in writing.	Initiating and improving creativity
Dynamic assessment activates and improve curiosity in writing.	Generating curiosity
Dynamic assessment provides objective responses and lessons for the learners.	Objectivity of tests
Dynamic assessment prepares beneficial hints and mediations.	Valuable hints and mediations