

**Promoting Foreign Language Learners' Text Comprehension  
Through Dynamic Assessment**

By:

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## الخلاصة

من الاساليب الحديثة في مجال تدريس اللغة الثانية هو الدمج بين التدريس والتقييم، وقد مهدت النظرية الاجتماعية الثقافية للفكر ليفكوتسكي (١٩٨٦م-١٩٩٨م) الطريق لهذا الدمج. حيث ان التقييم الديناميكي يؤكد على ان التدريس والتقييم يتكاملان جدليا" (بونر ٢٠٠٧) ان استيعاب مهارات اللغة الثانية في التقييم الديناميكي يتم بتوفير نوع من الوساطة التي تكشف عن امكانيات المتعلم. ان هذه الدراسة تحاول تسليط الضوء على اهمية التقييم الديناميكي في دعم قابلية المتعلمين للغة الثانية، المشاركون في هذه الدراسة هم ثمانية طلبة عراقيين (انثى واحدة وسبعة ذكور) باعمار تتراوح بين (٢٥-٣٥) سنة يدرسون اللغة الفارسية لاغراض اكااديمية. حيث استخدم الباحث طريقة (الشطيرة) في التقييم الديناميكي. اظهرت النتائج التطور الملحوظ في استيعاب النصوص الفارسية لدى الطلبة بعد الوساطة التي جاءت بشكل تعليم استراتيجيات الاستيعاب. ان نتائج هذه الدراسة توفر معلومات عن تطور استيعاب نصوص اللغة الثانية وتوصي المدرسين بالاستفادة من التقييم الديناميكي في خططهم التدريسية.

كلمات مفتاحية: التقييم الديناميكي، استراتيجيات استيعاب النصوص، النظرية الاجتماعية الثقافية للفكر.

## **Abstract**

Integrating instructions and assessment is a revolutionary trend in Second Language Teaching (SLT) realm. Vygotsky's Socio-Cultural Theory of mind (1986, 1998) paved the road for this integration. Dynamic Assessment (DA) implies that assessment is not separated from instruction and they are dialectically integrated (Poehner, 2007). In DA procedures, internalization of the Second Language (L2) skills are achieved by the virtue of a convenient mediation that uncover the learner's learning potentials. The current study tried to shed light on the significance of DA in promoting adult learners' ability of the foreign language text comprehension. The subjects of the current study were 8 Iraqi MA students (7 males and 1 female with age range from 25-35 years) studying Persian as a foreign language for academic purposes. The researcher used an interventionist DA approach following sandwich format. The results revealed a significant progress for all the learners in reading comprehension performance after offering explicit mediation which took the form of reading comprehension strategies. The findings indicated that DA may provide more comprehensive information about the reading comprehension ability and progress of the learners. The findings of this study would call upon the teachers to utilize DA sessions during their routine schedules.

*Keywords: DA, text Comprehension Strategies, Socio-Cultural Theory.*

## **Introduction**

Evaluation serves different purposes in education and second language teaching realm. One of its objectives is to evaluate the learners' performance throughout different stages of the learning processes, and evaluate the students' achievement. The obtained information (usually numerical) gives the stakeholders (teachers, material developers, syllabus designers and etc.) insights about the effectiveness of the instructions and syllabus utilized. However, it seems that there is a contradiction between the traditional testing and the new paradigm of Evaluation. Moss (as cited in Poehner, 2011:p.245) stated that standardized traditional assessments suppose a disjunction between testing and teaching. Traditional testing, or Non-Dynamic Assessment (NDA) may produce information about what learner's had learnt before, and their independent performances. While, DA, enables the assessors to collect information about the process of learning and learning potential in the learner's ZPD. DA had changed our understanding of assessment since and ever. Assessment now is seen as a process other than a product. Kuhan (as cited in Gipps, 2003: p.1) stated "a paradigm shift or scientific revolution occurs when the old paradigm is unable to deal with an outstanding problem". Consequently, there was a shift in the language testing paradigm, and testing gradually lost its traditional trends. Vygotsky (1974) a Prominent Russian psychologist was the first who emphasized integrating assessment with instructions. Vygotsky argues that assessment cannot be separated from instructions. DA is bult upon Vygotsky's revolutionary theory (known as the Sociocultural Theory of Cognitive Development in the early twentieth century). Unlike traditional testing, Dynamic Assessment (DA) tries to provide the substantial support for development. It integrates assessment and instruction simultaneously to discover the learner's learning potential in his/her ZPD. From

Vygotsky's perspective, therefore, traditional assessment reflects only the students Zone of Actual Development (ZAD). Lantolf and Poehner (2004) stated that "from a DA perspective, good instruction involves assessment and good assessment involves instruction"(p. 2). Many studies are conducted concerning Vygotsky's theory. However, still little shed light on second language learning reading comprehension. Ajideh and Nourdad (2012) investigated the extent of improvement that Iranian university students can achieve in L2 reading comprehension with DA procedure, 197 Iranian EFL students with different proficiency levels were the subjects of the study. The researchers conclude that DA have a beneficial effect for improving reading comprehension for low, mid and high proficiency levels and that positive effect can remain over time. Naeini and Duvall (2012) conducted a research project aimed to study improvements university students' reading comprehension performance by applying mediations in dynamic assessment approach by integrating instruction and assessment. Participants took part in a pre-test-mediation-post-test design study. They offered a three phase mediation , three intervention sessions, each focused on a particular reading comprehension sub-skill the learners showed a great progress in reading comprehension performance. Kozulin and Grab (2001) investigated EFL learners' ability to utilize text comprehension strategies in processing target language (TL) texts. They supply the learners with sessions which involved special strategies that they need to answer the kinds of questions that the pre-test posed. The final phase was to conduct a post-test. The results of the study indicated more than one standard deviation improvement in the means of the learner's performance. They also operationalized learning potential scoring and categorized the learner's regards to their **LPS** scores. Their study revealed that the learners with individual instruction needs have different ability to learn and utilize reading strategies in text comprehension. Holding all this in mind, the current study question is to what

extent DA promotes text comprehension strategies of adult who try to learn foreign language for academic purposes. The current study will shed light on the effect of mediation on the adult foreign language learners' text comprehension development. The current study findings are inspirational for foreign language teachers, syllabus designers and ESP designers.

### **Vygotsky's theory of mind**

Vygotsky's theory implies that social interaction plays a fundamental role in the development of human cognition. It depicts learning as a social process and the origination of human intelligence stem from interaction of humans with/in their society and culture. Central to Vygotsky's theory is the concept of Zone of Proximal Development (ZPD). The ZPD has been described as the distance between learner's independent performance and what the learner is able to do with others cooperation and/or the brains functions that are ready but matured yet (Vygotsky, 1978). Vygotsky's believes strongly that community plays a central role in the process of "making meaning", and that teaching and assessment are considered as an integrated activity (Vygotsky, 1986, 1998; Poehner, 2007, 2009, 2011; Lantlof & Poehner, 2004). He noticed that children cognitive ability descend from their biological and shaped by the culture. Therefore the cognitive function appears twice, at first, when a person has an interaction with others and environment and in next level the person regulates his/her own behaviour (Vygotsky, 1978, p. 57). In Vygotsky theory mediation aims to create a situation a situation in which learners are able to operationalize their ZPDs. By mediation the assessor can discover cognitive functions that still are in progress or nor fully developed as well as what the learners know but the main goal is what the learners can do with mediator's assistance ( Poehner, 2007, 2009; Vygotsky 1986, 1998). Soon, Vygotsky's theory was applied successfully to the second language teaching

process. Mediation is the process by which a teacher or a more expert person offers help by what Vygotsky calls (scaffolding) during the DA session. "Mediation may include leading questions, hints, prompts, feedbacks and examples" (Poehner, 2011, p. 246). Scholars like Lantolf and Poehner had observed and categorized the ways mediation is offered to the learners, they argue that DA procedure is either interactionist or interventionist or combination of both. The deference lays in the manner and time mediation is offered. But both of them have a same rule in utilizing prompts, they should provide from most implicit to most explicit one (Aljaafreh & Lantolf, 1994; Poehner, 2007). Another aspect of mediation mediation or assistant is that it should be contingent and only provided when it is necessary. When the learner would be able to perform the task independently it should be stopped. After offering mediations, the mediator would have a diagnosis about the independent performance besides the process of learning and learner's ability to learn based on receiving feedback and responses from the learner (Poehner, 2011). The teacher judge on a solo performance of the learner but by the cooperation with a learner during the process of solving a problem therefore the teacher utilizes mediation for discovering the ZPD of the learner and may predict about the development of learner as well as ZAD (Poehner, 2011; Lantolf & Poehner, 2004). Besides predicting future development in DA, assessors may promote the development (Lantolf & Poehner, 2004). The best evidence for development and ZPD of the learner that the assessor has is the form of responsiveness to the graduated prompts (Poehner, 2011). Assessor may record the responses to the mediations in different ways like scores or profiles based on the need of the results (Poehner, 2007). Vygotsky noticed that independence performance of children is a part of their mental ability because they can do more by other's assistance (Lantlof & Poehner, 2004). Vygotsky stated that we cannot consider mental and cognitive ability just biologically or environmentally (as cited

in Poehner, 2011, p. 247), From other regulation to self-regulation even when there is no external mediation and interaction, cognitive functioning works with memory of interactions (Vygotsky, 1986). Scholars like Feuerstein agreed with Vygotsky's ideas that past learnt material and achievements are not good predictor about future. DA procedures enable the learners to move through the ZPD toward self-regulation based on their observations which is called internalization. This movement is determined by the frequency and the quality of mediation offered. As the learning process continues the learners will encounter more complex tasks and less mediations, which require them to apply principles that they have already learned (Poehner, 2007).

### **Group Dynamic Assessment**

Vygotsky (1998) noticed that the ZPD is "the optimum time for teaching both the group and each individual" (p. 204), therefore teaching should target the ZPD and should not target complete shaped abilities. Poehner (2009) claims that "a major challenge to implementing DA in second language classrooms is that these contexts typically do not permit the one-to-one interactions that have characterized most DA work to date" (p. 471). Vygotsky (as cited in Poehner, 2007, p. 338) "himself seems to have recognized this problem and proposed the possibility of constructing ZPD with groups of learner rather than with individuals". While the group is working cooperatively, the instructor is able to present assistance and mediation to individuals, in G-DA, teacher tries to develop class's ZPD and individual's ZPD simultaneously and connect these two ZPDs. Poehner (2009) argues when the assessor offer mediation in a group, the interaction works in two levels: between the mediator and a student (primary interaction) and at the same time it happened in front of group (the secondary interaction). DA tries to understand individuals' abilities by using instruction and assessment as complementary factors. Therefore



G-DA is used for groups of individuals with same principles which student's current abilities, when there is necessary, the teacher would provide mediation. The teaching should be adjusted by ZPD of learners. The move from one to one interaction needs to understand the relationship between individual and group development (Poehner, 2009).

### **Text comprehension**

Text comprehension is the ability to process text. Chastain (1988) defined reading as "a process involving the activation of relevant knowledge and related language skills to accomplish an exchange of information from one person to another" (p. 216). She states that reading underpins mental processes to achieve the intended information. Reading is an active and receptive activity to understand a topic or topics (Mckee, 2012,). Elsewhere, he defines " reading comprehension as a complex activity that involves several variables" (p. 45). He investigated these variables and reviewed how "reading strategies" are related to reading comprehension in some researches. He also discussed reading comprehension measurements. Brown (2007) stated that "strategies are specific methods of approaching a problem or task, modes of operation for achieving a particular end, planned designs for controlling and manipulating certain information" (p. 119). Chamot (2005) stated that strategies are "procedures that facilitate a learning task" (p. 112). Pang (2008) stated that for comprehending a text in L2, a reader should have word-level and structure knowledge, reading strategy knowledge and knowledge of application reading strategies. The current study seeks to uncover the advantages of reading strategies mediation sessions in improving students reading comprehension strategies. Those strategies have been identified by the L2 researchers. For instance, RAND Reading Study Group (2002) introduced reading comprehension strategies include: (a) identifying the main idea, (b) summarizing,

(c) drawing inferences, (d) generating questions, (e) creating visual images, and (f) looking for clues. Janzen and Stoller (as cited in Mckee, 2012) identified ten processes or strategies of reading comprehension: "Identifying a purpose for reading, previewing, predicting, asking questions, checking predictions or finding and answer to the questions, connecting the text to prior knowledge, summarizing, connecting one part of the text to another, and recognizing text structure". Testing the learners' comprehension of a text is a hard endeavor to take. The readers' comprehension of a text was measured through the amount of the text that the readers can remember (Allington, 2001). Mckee (2012) claimed that this kind of measurement is restricted to measure "the readers' ability to think like we expect them or want them to think" (p. 50). Kobayashi (2002) investigated "the effect of test method on reading comprehension", between type and format of the test and performance of the students, he found the type and format of the test had a significant effect on the readers' performance. By applying new technologies in L2 teaching and testing, the researcher have been tried to utilize DA in new formats.

## **Method**

### **Participants (subjects)**

The subjects of current study were 8 Iraqi M.A. students (7 males & 1 female aged 25 to 35) who were studying Persian language at Razi University in Kermanshah-Iran. The students had studied Persian language for four months, five days a week. Two hours session every day. There was no opportunity for regrouping the participants or adding new members, therefore the researcher used intake class as experimental group because there was no random sampling procedures.

### **Instruments**

Proficiency test: since the research is quasi-experimental without random sampling, the researcher designed a proficiency test which made of two short excerpts which

were retrieved from teaching Persian text-book followed by 6 questions (open ended and true-false questions) besides there were two words grouping, antonyms and filling the blanks. All questions and their instructions were given in Persian. Pretest: Based on results of the proficiency test, the researcher designed another test, a pre-test which contained two texts from the teaching Persian book which. Each text was followed by 8 questions which were in different formats (open-ended, true-false). There were two words grouping questions besides two structure questions. The items were designed in a way that encompasses reading strategies which presented in TOEFL book. Post-test: the post-test was an equivalent of the pre-test format, and it was at the same level of difficulty. It was designed based on the same course books that the students were supposed to cover in the Persian language course. Statistical Package for the Social Science (SPSS) software (version 19) was used for the analyzing the collected data. (see table 1&2).

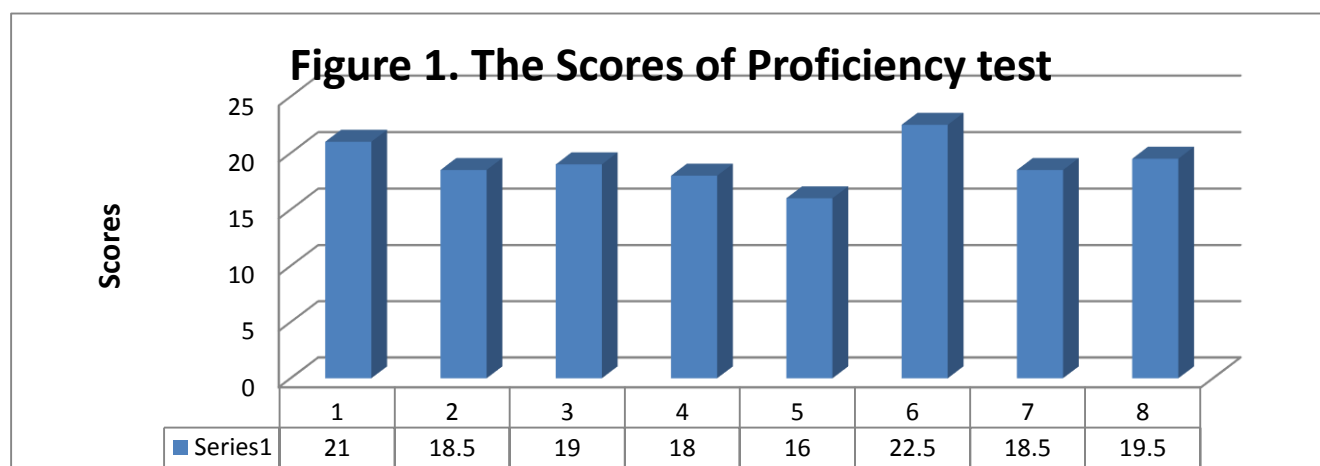
### **Procedure**

The researcher chose to follow a sandwich DA format, hence, the procedure consist of three phases: pre-test, mediation then post-test. The class consist of eight M.A Iraqi students who were learning Persian language for academic purposes. They were enrolled in a four-month course in Persian Language in Iran. In order to make sure of the students level, and to reduce the effect of proficiency and background knowledge. The researcher administrate a sixty-minute proficiency test at the first session. Unexpectedly the participants showed a valuable proficiency level. Based on the proficiency test outcomes, the researcher used more difficult items in designing the pre-mediation test. The pre-test was designed to uncover the areas that might be problematic to the students. Depending on the pre-test outcomes, the researcher started coaching and providing mediations sessions on the next session. The mediation session focused on reading comprehension strategies and the most

problematic areas that the students couldn't handle by themselves. After three days, the researcher conducted the post-test. The results of pre-test and post-test were analyzed and compared.

## Results

The proficiency test results were analyzed utilizing a descriptive measure (number, mean, and standard deviation) and interpretive measure. The results revealed that the students were at advanced level of Persian language as it is shown in (figure 1). The maximum score was 25 and the achieved scores by the range of 6.5 and a low standard deviation of 1.959 indicated that the data tend to be very close to the mean therefore the group was homogenous (see tables 1 and 2).



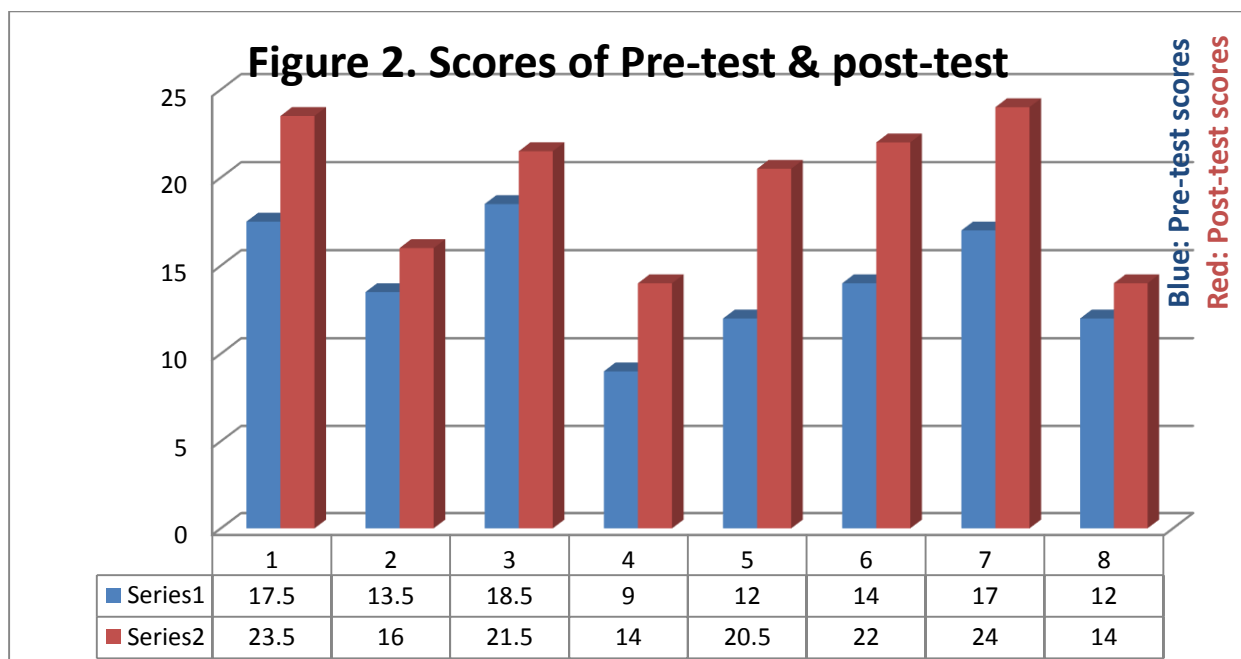
**Table 1. Descriptive Statistics of proficiency Test-One-Sample Statistics**

	N	Mean	Std. Deviation	Std. Error Mean
results	8	19.13	1.959	.693

**Table 2. Results of One-Sample Test related to Proficiency test**

	Test Value = 0					
	t	df	Sig. (2-tailed)	Mean Difference	95% Confidence Interval of the Difference	
					Lower	Upper
results	27.607	7	.000	19.125	17.49	20.76

The pre-test and post-test analysis shows the scores of the learners on the pre-test and post-test, and the achieved scores were analyzed and compared by utilizing descriptive measure (number, mean, standard deviation) and interpretive measure (T-test) through Statistical Package for the Social Science (SPSS) software (version 19) (Figure 2). As mentioned in table 3 and 4, the mean was improved 0.882 SD in post-test after mediation.



**Table 3. Group Statistics**

results of pretest	N	Mean	Std. Deviation	Std. Error Mean
pre-test	8	14.19	3.262	1.153
post-test	8	19.44	4.144	1.465

**Table 4. Independent Samples Test**

	Levene's Test for Equality of Variances		t-test for Equality of Means							
	F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference		
								Lower	Upper	
Equal variances assumed	1.391	.258	-2.816	14	.014	-5.250	1.865	-9.249	-1.251	
Equal variances not assumed			-2.816	13.267	.014	-5.250	1.865	-9.270	-1.230	

Even though all the learners had better performances on post-test but with regard to pre-test scores, they had different amount progress after mediation, for example students 5 and 8 both got the same score on the pre-test but after teaching they had different levels of progress and different performances on the post-test, it indicated that the scores of pre-test indicate of ZAD or actual performance of the learners therefore for achieving more comprehensive information based on ZPD in dynamic assessment, the researchers utilized learning potential scoring method (LPS) which was introduced and operationalized by Kozulin and Grab (2001) to calculate the learner's learning potential as following:

$$LPS = \frac{(S_{post} - S_{pre})}{S_{max}} + \frac{S_{post}}{S_{max}} = \frac{2S_{post} - S_{pre}}{S_{max}}$$

Smax refers to the maximum score that a student can attain; Spre and Spost are attained scores on pre-test and post-test. The learner's LPSs are presented in table 5.

**Table 5. The results of the study**

Student	Proficiency test	Pre-test	Post-test	LPS
1	21	17.5	23.5	1.18
2	18.5	13.5	16	0.74
3	19	18.5	21.5	0.98
4	18	9	14	0.76
5	16	12	20.5	1.16
6	22.5	14	22	1.2
7	18.5	17	24	1.24
8	19.5	12	14	0.64

## Discussion

In the current study, the researcher investigated implementing group dynamic assessment (GDA). The main motivation behind conducting the study was to discover the effectiveness and feasibility of implementing DA procedure in a class of Persian language learners, and how DA procedure can improve their reading comprehension ability. It was proved that students with a similar performance level demonstrate different, and in some cases dramatically different learning potential ability to learn and use new text comprehension strategies. Consequently, we can affirm that the new paradigm of DA is beneficial not only in the field of general cognitive performance but also in foreign language teaching domain. In DA procedures the quality of the mediation sessions would always be a limitation. Because DA is a situation of instruction rather than examination (kozluin and Garb 2002). And the improvement that the learners achieve depends significantly on the assessor's skill and style. Therefore, it is safe to say that the results of the current study give an insight not only of the learners learning potential, but it also reflects the quality of the provided mediation sessions. The score of the test conducted after

Mediation indicated the learner's score. Those scores were based on the number of mediation sessions that the learners needed to perform the task. Transfer score on the other hand represents the learner's performance on the more complex tasks. Learning potential score which was introduced by Kozulin and Grab (2002) indicates learner's progress after offering mediation. The LPS scores were interesting, for instance students 5 and 8 got the same scores on the pre-test. In NDA situation, both students were considered of an equal level of proficiency in Persian language text comprehension. Surprisingly, they had different performance at the post-test after mediation session. Their LPSs were 1.16 and 0.64 respectively. Which means that they had different learning potentials, which was uncovered by DA coaching. Similarly, when we compare students 4 and 8 performance based on pre-test score, we can conclude that student 8 had better performance than student 4. Still, student 4 showed a significant progress in his LPS at the post-test (by LPS= 0.76). From above we can conclude that the pre-test scores (the NDA scores) indicated the student's ZAD. Those scores reflect information about what learner's learnt before and their products and their independent performances. On the other hand, the post-test scores which is the fruit of DA procedure reflect the process of learning and learning potential in the learner's ZPD plus the quality of mediation. These findings are in line with Kuzolin and Grab's (2002), Ajideh and Nourdad's (2012) and Naeini and Duvall (2012) results. Following Kuzolin and Grab (2002) categorization of the learner's LPS scores, the current study recognize two groups of learners: High learning potential: students with LPS range from 1.16- 1.24 and Low learning potential: students with LPS less than. This categorization can be applied to classify learner's LPS in current study, which range from 0.64 to 1.24. The categorization also indicates the variation of the learners' needs of instruction and coaching. In other words, the learners differ in their LPS because they differ in their ZPDs as well as the amount and quality of mediation required to activate their



ZPDs. One of the current study limitations was restrictions was the number of the subjects, it would be more appropriate if there were more subjects. To this end, we wish that years ahead will encompass more DA especially in L2 learning. It is hoped that the present argument will open a dialogue around application DA in typical classrooms. To further explore the discussed issue, future studies could be carried out by utilization of interactionist approach in lieu of interventionist or combination of both.

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