# Dynamic Assessment Revealing Individual Differences in EFL Reading Comprehension Ability

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#### **Abstract**

Dynamic assessment with its old history is a quite new concept in foreign language studies. It is based on Vygotsky's sociocultural theory and presents a more accurate picture of learner abilities inside the zone of proximal development. The present qualitative study aimed at presenting the advantages of applying dynamic assessment for identifying the individual EFL learner's reading comprehension ability. 9 EFL participants at three proficiency levels of high, mid, and low were assessed dynamically during five weeks of this study. The interactions for 270 test items were recorded, tape scripted, and analyzed. Examples of these interactions are discussed with regard to opportunity for better presenting individual abilities. The findings revealed four major differing points among individuals who were previously categorized as having the same reading ability by non-dynamic assessment. The findings of this study with its emphasis over efficiency of dynamic assessment in assessing reading ability and needs of individuals can have implications for all educational practitioners including assessors, teachers, syllabus designers, and teacher educators for making accurate decisions and taking effective steps in learner development attuned with learner needs.

**Keywords:** Dynamic assessment, non-dynamic assessment, sociocultural theory, zone of proximal development, individual differences

# 1. Introduction

Dynamic assessment (DA) is based on Vygotsky's sociocultural theory which attempts to account for the processes through which, learning and development take place. It strongly proposes that cognitive development is best understood within its social and cultural contexts. Mitchell and Myles (1998) argue that sociocultural theory is unique in contrast to other predominant conceptualizations of second language learning that have 'concentrated mainly on modeling the development of language within the individual learner, in response to an environment defined fairly narrowly as a source of linguistic information' (p. 163).

This theory agrees that human cognition is socially and culturally mediated through interaction with others and through the use of cultural objects. This mediation by others & cultural objects helps the individual to develop higher forms of consciousness which is unique to human being (Vygotsky, 1978). For the first time Vygotsky (1998, p.201) rejected the general view that independent problem solving was the only valid indication of mental functioning, and argued that this revealed only part of his or her mental ability or actual developmental level. For him, "determining the actual level of development not only does not cover the whole picture of development, but very frequently encompasses only an insignificant part of it" (Vygotsky 1998, p.200). He suggested that responsiveness to assistance is an indispensable feature for understanding cognitive ability because it provides an insight into the person's future development. That is, what the individual is able to do one day with assistance today can be done independently by him/her tomorrow.

To identify the distance between assisted and independent performance the concept of zone of proximal development (ZPD) was introduced. ZPD in fact refers to the range of tasks that a child can complete unaided and independently and those completed with the guidance and assistance of an adult or a more capable peer. It can be said that there are lower and higher limits for the child's ZPD; the lower limit is the child's level of skill when working alone and the higher one when being helped by a skilled person. Vygotsky himself (1978, p: 24) defines zone of proximal development as:

The distance between the actual developmental level as determined by independent problem solving and the level of potential development as determined through problem solving under adult guidance or in collaboration with more capable peers.

He believes that we can't understand the potential intellectual development of a child using a one-way assessment. The ZPD, in fact, captures the child's cognitive skills that are being matured and this is possible by the assistance of a more skilled partner. Roosevelt (2008) concludes that from Vygotskian perspective the main goal of education is keeping learners in their own ZPDs as often as possible by giving them interesting and culturally meaningful learning and problem-solving tasks that are slightly more difficult than their current ability or what they can do alone, so that they will need to work with a more competent peer or a teacher or an adult to complete the task. After this jointly completion of task, the learner will likely be able to do the same task individually and independently next time, so the learner's ZPD for that particular task will have been raised. This process is then done for an even more difficult task appropriate for the learner's new ZPD.

Vygotsky also provided the notion of size in zone of proximal development by identifying learners having "larger" and "smaller" zones of proximal development. The size of zone of proximal development means the extent to which a learner can use collaboration to actualize performance beyond what is specified by independent performance and relative to age norms (Chaklin 2003, P. 8). Vygotsky (1998) maintains that the size of ZPD is not a fixed property of a learner that remains constant across age periods but can be modified. Vygotsky (1935 cited in Chaklin 2003) reports some studies in which learners are identified to have a high or low IQ as well as a large or small zone. Subsequent school success is determined, and it appears that the size of the zone of proximal development was more predictive than IQ. That means, learners with a larger zone of proximal development had better development, regardless of the IQ. It can be concluded that focusing on maturing functions the zone of proximal development could predict or understand future intellectual development better (Valsiner, 2001).

So little by little individuals develop consciousness and control over their psychological functions such as attention, perception and memory and increasingly become independent. Independence or autonomy of learner, achieved after interaction and internalization, is of great importance not only in Vygotsky's theory, but also in recent language teaching and learning studies specially after being emphasized as an indispensible character of post-method learner. Stretching the learners' strategies, motivating them for more communication and better collaboration with others are among the five suggestions of Kumaravadivelu (2006, p.177) for improving learner autonomy which are also implied in Vygotsky's theory. For Vygotsky good instruction must always be aimed not so much at the developed abilities but at the developing ones. Vygotsky's theory challenges traditional teaching methods. He requires the teacher and students to play untraditional roles as they collaborate with each other. Instead of a teacher dictating her meaning to students for future recitation, a teacher should interact and collaborate with her students in order to create meaning in ways that students can make their own (Hausfather, 1996). De Valenzuela (2006) rightly points out that cognitive development is seen not as unfolding in a biologically driven sequence, but as emerging as a result of interactions within a cultural and historical context. In this view, learning is seen as leading, or fostering, cognitive development. According to Ellis (2000) sociocultural theory assumes that learning arises not through interaction but in interaction. Learners need help of another person to perform a new task and then after internalizing it they can perform the task independently. Social interaction, therefore, mediates learning. So the great emphasis should be on

learner development which happens when all educational activities aim at it altogether, and it automatically makes assessment and instruction of learners not only in line with each other but also merged into one entity which seeks only learner development. This development-oriented instruction and assessment is considered as the basis of dynamic assessment which can foster individual's development in a unique way impossible trough other instruction or assessment types.

The purpose of this study is to reflect the effectiveness of dynamic assessment in fulfilling the main responsibility of education for learners which is finding new routes to one's future development and guiding the individual to higher stages of ZPD based on needs and potentials and in a way unique for each person. Since based on context, needs, wants, expectations and abilities each learner has a different social and cultural experience which shapes the cognitive development, it is not fair to prepare them for improvement and autonomy in the same way. Dynamic assessment is the only assessment approach capable of differentiating learners' ZPD size and predicting their unique development procedure in the future.

# 2. Method

In order to gather the needed data one of the researchers very briefly introduced the idea of dynamic assessment in her university and language institute classes and asked for volunteers in the study. To her surprise there were much more interested students than expected. On a set date 47 students took part in a TOEFL test and were categorized into three groups of high-, mid-, and low-proficiency groups according to their scores. 3 participants with the same reading scores were then selected from each group. All the 9 participants were Iranian male and female EFL (English as a Foreign Language) learners and their ages ranged between 21 and 32. They were asked to take part privately in a reading test and think-aloud process to reveal the process of taking the advantage of assistance, and presenting their attitude towards dynamicity in assessment. In think aloud method, the researcher provides a task and asks participants to say aloud "everything they think and everything that occurs to them while performing the task" (Garner, 1987 p. 34). Think-alouds require a reader to stop periodically, reflect on how a text is being processed and understood, and retell orally what strategies are employed. In other words, think-alouds involve the overt, verbal expression of the normally covert mental processes test-takers engage in when performing the task.

These procedures were conducted in five weeks. Each participant had a meeting with the researcher during which dynamic assessment was introduced to him/her. The participant was then asked to take a reading comprehension test. To guaranty the validity of the tests, they were selected from IBT TOEFL for high group, and from advanced and intermediate levels of reading test books published by National Organization of Educational Testing which conducts university entrance exams in Iran for the other two proficiency groups. Using an interactionist approach one of the researchers who acted as the mediator of dynamic assessment provided guidance and supported the individual whenever needed. The support was limited to development and didn't include affective support or task-completion assistance. To be as clear as possible and provide the maximum guidance all the procedures of think-aloud and mediation were not limited to using English but their mother tongue Turkish and their official language Persian were use when needed specially in low-proficiency group. They had no time limitation in their procedures and were given the needed time. Each session lasted 30 to 60 minutes. The whole session was recorded for each participant using MP3 voice recorder. They were then transcribed for further analysis. All the tape recorded data from interactionist approach were then completely transcribed and even some of the observed actions of the participants were included. The data were transcribed according to He's transcription conventions (1998 cited in Soria, 2001). Covering 270 reading test items during these sessions in depth understanding of the learners' ZPD, developed and developing abilities was gained and many secrets about the differences in reading ability of participants which would remain hidden in traditional non-dynamic testing procedures were revealed. These important findings which can shed light on various aspects of decision making, teaching and assessing reading comprehension ability are presented in the following section.

# 3. Findings and Discussion

Total number of items analyzed in this study was 270. Participants were asked to provide a reason for their choices in both correct and incorrect answers and mediation was provided for incorrect items. 154 items were answered correctly and the participants were able to provide complete and correct reasons for their choices which indicated their knowledge/ability on that point. The other 116 items included examples of unacceptable answers for different reasons including individuals not being able to answer the item, individuals not being able to answer the item correctly, and individuals answering the item correctly but not being able to provide the correct reason for their choice. Using NDA test-takers have only the number of correct and incorrect answers but can't find out the exact source of inability in answering correctly which is of great importance because the aim of education is not only teaching and testing but providing opportunities for each individual to develop considering his/her needs. DA solves this problem. Analyzing the unaccepted answers 6 major sources or problems were identified.

As Table 1 presents there were three proficiency groups in this study and each group included three participants with similar reading comprehension scores before the mediation. But data from dynamic assessment revealed 6 problem sources in reading ability of these 9 participants. These problem sources included 1. not knowing the meaning of a word, 2. having problem with grammatical structure of the sentence, 3. not applying the appropriate strategy for the given reading comprehension item, 4. lacking enough or accurate background knowledge required in items, 5. not getting the idea of the given sentence correctly or completely, and 6. errors due to carelessness, hastiness, not being able to answer multiple choice questions and so on. In fact the reasons for failing in answering the items were different for participants in each proficiency group. The frequency of each problem is presented for each participant. In order to reduce the number of tables data on all proficiency groups are presented together in a single table but under different columns. Participants' surname initials are used to identify them. A comparison between participants of each proficiency group makes it clear that considering the ability and problem sources of all three participants of each group is not fair. These data can be very useful in remedial courses for improving individuals' abilities by identifying and solving the problems.

Table 1. Frequency of different problem sources for each participant

	Proficiency level									
	High				Mid			Low		
Source of the problem	Participants		Participants			Participants				
	N.	J.	S.	P.	E.	Sh.	H.	R.	Y.	
Vocabulary	1	6	4	2	4	3	7	11	13	
Structure	0	1	0	0	0	1	1	0	0	
Strategy	4	4	3	2	1	2	4	1	0	
Background knowledge	0	0	0	1	0	0	0	1	1	
Comprehension problems	5	3	4	1	1	1	4	4	2	
Additional problems	4	4	2	1	1	2	0	1	0	

The total number of problem cases was 118 which was more than the wrong answers, because there were 116 unaccepted answers but 9 of them were not wrong and in fact had no problems but the examinees were not sure of their answers which needed further investigation and therefore were not classified as correct answers, also 11 other cases had two problem sources. That is 116-9+11=118. As Table 1 clearly presents participants of each group differed from their group mates in reasons of failure. For example while participant Y. of low proficiency group had problems mainly with word meanings, he was quite good at applying appropriate strategies to answer the reading comprehension questions. Participant H. of

the same group; however, had less vocabulary problems but required more mediation on reading comprehension strategies. The data reveals that equal non-dynamic reading comprehension scores does not mean that participants of each group are equally able in reading comprehension. So their abilities, strengths, and weak points are different and an individualized analysis is required to present an effective remedial program to improve the performance of each person. This is what Vygotsky expected from assessment. He believed that assessment should not merely present a label but explain the source of the problem and make it possible to find ways to overcome them. As he insisted the findings of the present study revealed such information and went beyond just recognizing that the learners were struggling in some items.

Vygotsky also suggested that assessment should consider how individuals approach specific kinds of problems and where in the process of solving problems difficulties arise. So the second type of information hidden in non-dynamic assessment but clearly manifested in process-oriented dynamic assessment is the exact stage of problem for each person. That is to say dynamic assessment not only identifies what is the problem source of each item for each participant, but also specifies the stage of the problem. Gal'perin's model of human performance (1967) including 3 stages was used in this study. He argued that individuals first orient to the task which involves devising a plan for task completion. They then execute their performance which means using available resources to perform the task. In the third stage they reflect on their performance and check it to make sure that they were successful in task completion. As the three stages follow each other in order human development occurs in these stages in order as well. In other words if an individual has a problem at orientation stage he moves to other stages of task completion as a result of development and has a successful performance at orientation level. Using dynamic assessment it is possible to identify the stage of the problem for each problematic performance and mediate the individual at that stage. It is usually expected that effective mediation within individual's ZPD can lead to development in each stage and move the person to the next stage because the process of that specific stage has become internalized and is carried out intramentally thereafter. Analysis of the mediation and learner feedback indicated the exact stage of problem for each problematic item in each participant's performance. Table 2 presents the frequency of problem in each performance stage for each individual.

Table 2. Frequency of different problem stages for each participant

	Proficiency level								
	High			Mid			Low		
Stage of the problem	Participants			Participants			Participants		
	N.	J.	S.	P.	E.	Sh.	H.	R.	Y.
Orientation	6	5	3	3	2	3	5	6	9
Execution	8	9	9	5	3	5	10	16	7
Control	0	0	3	1	2	1	0	2	2

Again the total number of problem stages identified in this study were more than the number of unaccepted responses because 9 items had problems at two separate stages so the total number of stages studies were 125 because 116+ 9= 125. As Table 2 shows participants have varying number of problems at different stages of task completion. For example while participant N. of high proficiency group requires almost equal amount of support and guidance for orientation and execution stages, she has no problem at control stage. Participant S. of the same group however requires equal amount of help at orientation and control stages.

In order to contrast problem stages of different individuals three extracts by three participants are presented for one test item. A part of one of the given texts in higher proficiency group and its related question are presented here:

Theorists adopting the psychodynamic approach hold that inner conflicts are crucial for understanding human behavior, including aggression. Sigmund Freud, for example, believe that aggressive impulses are inevitable reactions to the frustration of daily life. Children normally desire to vent aggressive impulses on other people, including their parents, because even the most attentive parents cannot gratify all of their demands immediately. Yet children, also fearing their parents' punishment and the loss of parental love, come to repress most aggressive impulses. The Freudian perspective, in a sense, sees us as "steam engines". By holding in rather than venting "steam", we set the stage for future explosions. Pent-up aggressive impulses demand outlets, they may be expressed toward parents in indirect ways such as destroying furniture, or they may be expressed toward strangers later in life.

Question 6. According to paragraph 5, Freud believed that children experience conflict between a desire to vent aggression on their parents and .....

- a. a frustration that their parents do not give them everything they want
- b. a fear that their parents will punish them and stop loving them
- c. a desire to take care of their parents
- d. a desire to vent aggression on other family members

This question is a "detail" type question and it is possible to find the information needed to answer the test item inside the text. Participant J. had problem at orientation stage because as the following extract shows she couldn't fully and correctly provide a plan for performing the task. The mediator (M) tried to indirectly take her attention to the key words of the question but this mediation was not useful enough so the mediator had to use a more direct mediation by explicit explanation of the keywords and guiding her to look for keywords in detail type questions. As soon as a plan for solving the problem was presented the participant was able to answer the question.

#### EXTRACT 1

- J.: A part of choice "a" is almost impossible.
- J.: Choice "b" was not in the text.
- J.: The third choice is not the answer.
- J.: Choice ...
- J.: It is choice "a" because the text says "Children normally desire to vent aggressive impulses on other people, including their parents, because even the most attentive parents cannot gratify all of their demands immediately".
- M: Is this sentence related to "conflict"?
- J.; ....
- M: Please read the paragraph.
- J.: You mean choice "b" can be the answer?
- M: I didn't mean a specific choice. I just want you to find the correct answer in the text.
- J.: Choices "c" and "d" are not correct at all.
- J.: So only choice "a" and "b" are left.
- J.: Well I don't know ...
- M: Since the question mentions "conflict" you should look for a word showing a kind of conflict in children or a contradiction.
- J.: What for example?!
- M: You know a special words, expression or grammatical structure conveying contradiction or conflict.
- J.: Oh, yes. Here we have "still" and "yet" in the paragraph.
- J.: So the answer is choice "b".

Participant N. had problem with the same test item but at the execution stage. Also the mediation she required to reach the answer was in the form of an indirect question and less explicit. She knew that answering this item required finding the information in the text and she identified the correct paragraph but she had problem finding the related sentence. After the mediation's question about "frustration" she

immediately found the correct lines and reached the correct answer because she identified the wrong keywords of choice a.

### EXTRACT 2

N.: "a"

N.: Because in line 5 of this paragraph it says "because even the most attentive parents cannot gratify all of their demands immediately".

M: And does it lead to a kind of frustration?

N.: No. The second choice is correct.

N.: Because of line 6.

N.: "Yet children, also fearing their parents' punishment and the loss of parental love, come to repress most aggressive impulses."

Participant S. had problem at the control stage of the same item. She had answered the question correctly but her ability in identifying the intended information in the text was not fully developed to do it independently without any doubt in her answer. So although she answered the question correctly and provided a correct reason for her choice she needed the mediator to confirm her response.

#### EXTRACT 2

S.: "Yet children, also fearing their parents' punishment and the loss of parental love, come to repress most aggressive impulses."

S.: Is it the second one?

M: Yes. It is correct.

As comparison of these extracts show that an individualized view toward learner ability makes it possible to consider how each participant approaches specific kinds of tasks and where in the process of the task completion the person faces problems and difficulties. Non dynamic assessment cannot show the exact source and stage of difficulty for each person and therefore has less educational value in comparison to dynamic assessment.

Haywood & Lidz (2007) argue that teaching within the test provides a useful way of assessing potential as opposed to performance. And this is not possible unless applying DA. Dynamic assessment with its monistic view toward teaching and testing aims at assessing the individuals for providing the opportunity for development within ZPD because for Vygotsky abilities are not innate but emergent . In NDA; however, any modification in examinee performance is considered as a source of test score error and is avoided therefore the examinees have no chance for development. The most important part of findings in this study is related to development part. Table 3 presents these findings.

Table 3. Frequency of development for each participant

	Proficiency level									
Development	High			Mid			Low			
	Participants			Participants			Participants			
	N.	J.	S.	P.	E.	Sh.	H.	R.	Y.	
Yes	6	8	8	4	3	2	6	5	4	
No	5	2	0	1	1	4	3	3	0	
Not the case	3	4	7	4	3	3	4	11	12	

Not all the mediations of the study resulted in development. In fact there were problematic items in which development were not the case at all. These items included the ones with vocabulary problems, or items answered wrongly due to carelessness because the mediator played a role of dictionary or a reminder in these cases and any type of learning was not the case. But in other cases learners could take the advantage of mediation and develop their reading comprehension ability somehow, or be unable to use the

mediation because the point to be internalized is not within their ZPD. As Table 3 shows individuals in each proficiency group had different numbers of development and non-development cases. For example while participant P. of the mid-proficiency group developed in 4 cases and was unable to develop only in one case, participant Sh. of the same group had only 2 cases of development and 4 cases of non development. This highlights the fact that these two participants with seemingly same reading scores at the beginning of the study had in fact differing ZPD sizes which was impossible to recognize by non-dynamic assessment. That is the extent to which each participant used collaboration for independent performance beyond independent performance was different. So while one of them had the hidden potential to improve his abilities the other one was not able to keep paste of his group mate because of his smaller ZPD size. Examinees were viewed as active participants in the mediation process and revealed what was in the movement by their ability to respond to interventions and make positive changes in their ability. According to modern cognitive theories as a result of interaction with capable individuals abilities of learners are changeable and sensitive to instruction. So dynamic assessment in this study provided information on participants' learning potential based on their needs and potential responses to mediation which is not available by the traditional psychometric assessments.

Estimating the extent of learner development by mediation is not the ultimate aim of DA. It is quit expected that examinees improve their performance in a given task as a result of guide, support and mediation. But what is of even more importance is evaluating the ability of individual to maintain the positive changes made that is their ability to apply the learnt point in other similar task to prove that they have moved from intermental stage to intramental stage and have internalized the point. This ability is known as transcendence which is the ability of individual to perform a similar task independently with no need for mediation. The data on transcendence is provided by Table 4.

Table 4. Frequency of transcendence for each participant

Tuble 4. Frequency of transcendence	Proficiency level										
	High				Mid			Low			
Transcendence	Pa	Participants			Participants			Participants			
	N.	J.	S.	P.	E.	Sh.	H.	R.	Y.		
Yes	4	7	6	3	2	1	3	2	1		
No	1	0	0	1	0	0	0	2	0		
Not the case	1	1	2	0	1	1	3	0	3		

Transcendence was not the case in all the problematic items because it could only make sense for the items with positive development. Therefore the items with no development or the ones for which development was not possible or meaningful were not considered in the analysis. As Table 4 presents participants of each group were not the same in their ability to transfer the learnt point in new tasks. This point is totally ignored in non-dynamic assessment because any kind of learning or development during assessment procedure is not possible for participants and is considered as a source of error score. The ultimate goal of dynamic assessment, however, is reaching as many transcendence cases as possible within the individual's ZPD and make them autonomous. Learner autonomy is a new concept introduced in post-method view toward education and its aim is making learners active, independent problem-solvers and knowledge constructors but as shown in lines of old literature Vygotsky had considered its importance in development years ago the evolution of post-method concept. In his sociocultural theory he recommended collaboration and interaction with learners to create meaning in their unique ways inside the ZPD.

The findings of the present study intended to reveal the fact that participants can have different problem sources and stages, also different development and transcendence abilities due to their individual strengths and weak points even if the scores of non-dynamic assessment categorizes them as equally able

in reading comprehension skill because the result of non-dynamic assessment presents a single score for each individual and the only possible analysis can be finding out which question items each participant failed to answer which is not so accurate and useful. Dynamic assessment, on the other hand, can represent the exact ability of each person by avoiding under- and over-estimation and can also reveal the weak points for remedial actions. The reason is that dynamic assessment being development-oriented toward instruction and assessment seeks opportunities to improve abilities. So by identifying the needs of each individual it provides the appropriate situation for guiding him/her toward improvement in performance. Assessment as an important factor in educational setting is an indispensable component of decision making and must honor the wholeness of development picture and focus first and foremost on the individual learner. Therefore, if the main purpose of education is learner development dynamic assessment should be practiced in decision making and practice stages to provide the best power of observation and analysis to make a comprehensive picture of unique learner needs because other assessment procedures ignore differences among individuals and consequently cannot provide the required opportunity for learners' development based on their needs and capabilities.

# 4. Conclusion

The qualitative analysis of the results highlighted the advantages of applying dynamic assessment over non-dynamic assessment in deeper and richer description of actual and potential abilities by identifying sources of problem in performance of each individual and the exact stage of the problem because individuals who are unable to answer an item correctly may not necessarily have the same or even similar problems. It also presented the role of dynamic assessment in identifying the ability of each individual to develop their abilities as a result of mediation and also their ability for independent performance in future. So dynamic assessment proved to have a more detailed view over assessing abilities and was efficient in identifying the exact scope of ability for each person, it also provided opportunities for learner development due to its monistic view toward instruction and assessment and besides presented a thorough pathway of development not only from past to present but even into future inside the ZPD of each participant. It was also concluded that relying on proficiency level of test-takers and their same or similar non-dynamic assessment scores assessors shouldn't predict a similar performance or ability in task completion. None of these data could be gained relying solely on scores from traditional non-dynamic assessment procedures because it generally masks the differences among individuals. These finding can have useful implication in all educational contexts including foreign language teaching and learning especially for assessors, teachers, syllabus designers, and teacher educators because the end goal and main propose of all these practitioners is making accurate decisions and taking effective steps for learner development by devising individualized instructional plans attuned to learners' needs.

# References

- Birjandi, P., Daftarifard, P. & Lange, R. (2011). The effects of dynamic assessment on Research item and person hierarchies in second language testing. *International Journal of Language Studies*, 5, 125-140.
- Bolig, E. E. & Day, J. D. (1993). Dynamic assessment and giftedness: The promise of assessing training responsiveness. *Roeper Review*, 16 (2), 110-113.
- Chaiklin, S. (2003). The Zone of Proximal Development in Vygotsky's Analysis of Learning and Instruction. In Kozulin, A., Gindis, B., Ageyev, V. & Miller, S. (Eds.). *Vygotsky's Educational Theory and Practice in Cultural Context*. Cambridge: Cambridge University Press.
- Davin, K.J. (2011). Group dynamic assessment in early foreign language learning program: Tracking movement through the zone of proximal development. (Doctoral dissertation). University of Pittsburg.

- De Valenzuela, J. (2006). Sociocultural views of learning. The SAGE Handbook of Special Education. SAGE Publications.
- Elliott, J. (2003). Dynamic assessment in educational settings: Realizing potential. *Educational Review*, 55, 15-32.
- Ellis, R. (2000). Task-based research and language pedagogy. *Language Teaching Research*, 4(3), 193-220
- Gal'prin, P.Ya. (1967). On the notion of internalization. Soviet Psychology, 5, 28-33.
- Garner, R. (1987). *Metacognition and reading comprehension*. Norwood, New Jersey: Ablex Publishing Corporation.
- Hausfather, S. J. (1996). Vygotsky and Schooling: Creating a social contest for learning. Action in Teacher Education.
- Haywood, H.C. & Lidz, C.S. (2007). *Dynamic assessment in practice: Clinical and educational applications*. Cambridge: Cambridge University Press.
- Jonsson, A., Mattheos, N., Svingby, G., & Attström, R. (2007). Dynamic assessment and the interactive examination. *Educational Technology and Society*, 10 (4), 17-27.
- Kumaravadivelu, B. (2006). *Understanding language teaching: From method to postmethod*. New Jersey: Lawrence Erlbaum.
- Lantolf, J. P. and Thorne, S. L. (2006). Sociocultural Theory and the Genesis of Second Language Development. Oxford: Oxford University Press.
- Lidz, C. S. (Ed.). (1987). Dynamic assessment: An interactional approach to evaluating learning potential. NY: Guilford Press.
- Lidz, C.S. & Gindis, B. (2003). Dynamic assessment of the evolving cognitive functions in children. In *Vygotsky's Educational Theory in Cultural Context*. A. Kozulin, B. Gindis, V.S.Ageyev, & S.M. Miller (Eds.). Cambridge: Cambridge University Press.
- Lunt, I. (1993). The practice of assessment. In H. Daniels (Ed.), *Charting the agenda: Educational activity after Vygotsky*, (PP. 145-170). London and NY: Routledge.
- Mitchell, R. & Myles, F. (1998). Second language learning theories. London: Arnold.
- Murphy, R. (2011). Dynamic assessment, nteligence and measurement. John Wiley & Sons.
- Poehner, M.E. (2008). Dynamic Assessment: A Vygotskian approach to understanding and promoting second language development. Berlin: Springer Publishing.
- Roosevelt, F.D. (2008). Zone of Proximal Development. Encyclopedia of Educational Psychology. SAGE publication.
- Soria, J. (2001). A study of Ilakono learners' lexical inferencing procedures through think-aloud. *Second Language Studies*, 19(2), 77-110.
- Sternberg, R.J. & Grigorenko, E.L. (2002). *Dynamic testing, the nature and measurement of learning potential*. Cambridge: Cambridge University Press.
- Tzuriel, D. (2001). Educational aspects of dynamic assessment. In *dynamic assessment of young children*, 113-139. NY: Kluwer Academic/Plenum Press.
- Ukrainetz, T.W., Harpell, S., Walsh, C., & Colye, C. (2000). A preliminary investigation of dynamic assessment with native American kindergartners. *Language, Speech and Hearing Services in Schools* 31 (2), 142 54.

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- Valsiner, J. (2001). Process structure of semiotic mediation in human development. *Human Development*, 44, 84-97.
- Vygotsky, L. S. (1978). *Mind in society: The development of higher psychological processes*. Cambridge: Harvard University Press.
- Vygotsky, L. S. (1998). The Problem of Age. In *The Collected Works of L. S. Vygotsky*. Vol. 5. Child Psychology. R. W. Rieber (Ed.). New York: Plenum.