Dynamic Assessment of EFL Reading:

Revealing Hidden Aspects at Different Proficiency Levels

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Abstract

Dynamic assessment as a complementary approach to traditional static assessment emphasizes the learning process and accounts for the amount and nature of examiner investment. The present qualitative study analyzed interactions for 270 reading test items which were recorded and tape scripted. The reading ability of 9 EFL participants at three proficiency levels of high, mid, and low were assessed dynamically during five weeks of this study. The findings revealed five major data type only available through DA including an exact estimation of examinees' abilities, identifying the source of problem, identifying the stage of the problem, estimating the extent of examinees' development within their ZPDs, and the extent of transcendence for later independent performance. The results also highlighted the differences in these data for readers at different proficiency levels. These findings have implications for assessors, and teachers in taking effective steps to improve learner development with exact information about learners of different proficiency levels.

Keywords: Dynamic assessment, Sociocultural theory, Zone of proximal development, Reading comprehension ability, Proficiency level

1. Introduction

Changes in language teaching methods have always brought about changes in language testing and assessment. The history of language teaching the methods can be classified into three consequent eras of language-centered, learner-centered, and learning-centered methods. As Kumaravadivelu (2006, p. 121) clearly mentions to meet their learning-teaching principle requirements language-centered and learner-centered pedagogists opted for a product-oriented syllabus. But later emerging learning-centered methods such as natural approach and communicational approach moved toward process-oriented approaches to language teaching (p.134). He also adds that

Unlike the product-based syllabus, where the content of learning/teaching is defined in terms of linguistic features, the process-based syllabus defines it exclusively in terms of communicative activities. In other words, a learning-centered pedagogic syllabus constitutes an indication of learning tasks, rather than an index of language features, leaving the actual language to emerge from classroom interaction (p.144).

As expected such changes in language teaching orientation did not leave the assessment orientation untouched and along with teaching methods their corresponding testing or assessment systems also moved from product-oriented to process-oriented ones. But still as a result of focusing on wide-spread and commonly used product-oriented testing, teachers and assessors have no access to the needed information on performance of different learners because the only

data provided for them by product-oriented testing is the final result of that test as a single score and nothing about the details of test task performance is in hand.

To solve this problem dynamic assessment (DA) in language learning derived from sociocultural theory (SCT) of Vygotsky and his idea on cognitive development offers new insights into assessment in the language classroom by revealing hidden aspects of individuals' abilities in answering each test item. While the results of traditional non-dynamic assessment (NDA) can only show the already existent abilities of the student, the analysis of zone of proximal development (ZPD) makes it possible to evaluate the ability of the student to learn from the interaction with a teacher or a more competent peer and predict their possible future development. Unaided performance on static measures tells us what has already been learned or accomplished, whereas the breadth of the zone of proximal development is thought to provide prospective indications of what can be learned.

The present study applied dynamic assessment procedure to identify the unrevealed aspects about reading comprehension ability of EFL learners and make comparisons among different proficiency levels from different perspectives.

2. Review of the Related Literature

2.1 Sociocultural theory

Vygotsky (1962) states that any higher mental function necessarily goes through an external social stage in its development before becoming an internal, truly mental function. Thus, the function is initially social and the process through which it becomes an internal function is known as internalization. The role of social mediation in internalization process has been strongly emphasized in sociocultural theory. Central to the concept of mediation is intersubjectivity which is described by Wertsch (1998) as the establishment of shared understandings between the learner and the tutor (Dixon-Krauss, 1996). The transition from social to personal value is the result of transformation of learnt material (through interaction) into individual and personal version and cannot be considered as copying. The gap between the inter-psychological or social level and the intra-psychological or individual level is bridged by negotiation and creation of meaning as a collaborative act. The same is true for students in schools who transfer what teachers offer them during the process of appropriation rather than copying teachers' capabilities (Vygotsky, 1978). Then 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.

It strongly proposes that cognitive development is best understood within its social and cultural contexts, and is known as 'sociocultural theory of mind'. It attempts to account for the processes through which, learning and development take place. 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. 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.

Sociocultural theory has profound implications for researches about mind, mental development and also educational practices. As Nassaji and Cumming (2000) justly conclude defining the dialogic nature of teaching/learning processes within the zone of proximal development and designing research that exemplifies its nature is central in sociocultural theory.

2.2 Zone of proximal development

As Chaiklin (2003) indicates the first step to understand how Vygotsky formulated the zone of proximal development, is to know Vygotsky's interest in developing a theoretical basis for appropriate pedagogical interventions, including principles for possible instructional grouping of learners and identification of specific interventions for individual learners. 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 elaborates by stating:

The [ZPD] defines those functions that have not yet matured but are in the process of maturation, functions that will mature tomorrow but are currently in an embryonic state. These functions could be termed 'bucks' or 'flowers' of development rather than the 'fruits' of development. The actual developmental level characterizes mental development retrospectively, while the [ZPD] characterizes mental development prospectively.... the [ZPD] permits us to delineate the child's immediate future and his dynamic developmental state, allowing not only for what already has been achieved developmentally but also for what is in the course of maturing (1978, pp: 86-87)

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. For Vygotsky the ZPD was a means of describing not only the learner's current or actual level of development, but also the next level attainable through the use of mediating semiotic and environmental tools and capable adult or peer facilitation.

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.

According to Vygotsky's sociocultural theory, social interaction informs the development of mental processes, cultural tools mediate psychological functioning, and development advances through the ZPD (Lantolf & Thorne, 2006). Vygotsky emphasizes that educational system should provide children with experiences in their ZPD to encourage and advance their individual learning (Brek and Winsler, 1995, p: 24). Holding a more educational perspective Ellis (2003, p:180) believes that ZPD sheds light on every important point about learning which remains without any logical explanation if we disregard the notion of zone of proximal development. He (2003, p: 179) recommends that learning materials and tasks should be constructed in a way that pose an appropriate challenge on learners to guide them toward dynamic construction of their ZPDs. If the tasks assigned to the learner fall outside his/her ZPD, the learner would not be able to do the task even with help. Thus the focus of teaching should be on tasks inside the ZPD which the learner cannot do by him or herself but has the potential to perform with the assistance of others. As the learner completes the task through interaction, his or her ZPD, shrinks.

In terms of language learning, Williams and Burden (1997) parallelize ZPD with interlanguage. It conceives that each learner's understanding of the language system is gradually reshaped as it develops and more closely approximates towards the target language system. So the ZPD can be seen as the next level of understanding in the learner's interlanguage. The notion of ZPD interpreted this way aims at directing attention to the idea that instruction and assessment should be based on maturing rather than matured abilities which was the basis of several instructional programs such as dynamic assessment.

2.3 Dynamic assessment

As previously mentioned the traces of Vygotsky's ideas can be seen in the process approaches, which appeared as a reaction against the dominant product approaches in the 1960s and 1970s. Based on Lantolf and Thorne's (2006, p.28) quotation, Vygotsky pointed out that "the only appropriate way of understanding and explaining ... forms of human mental functioning is by studying the process, and not the outcome of development". This is the critical point distinguishing dynamic assessment from other forms of assessment. It posits a qualitatively different way of thinking about assessment. The 'dynamic' nature of this approach is based on Vygotsky's observation that a body can show what it is only in movement (Lidz and Gindis, 2003). For Vygotsky, abilities are not innate but are emergent and dynamic. Through participating in various activities, and through being mediated by those around them, individuals come to master their cognitive functions in unique ways. In DA, the examiner-examinee relationship is thus transformed, with the examiner intervening during the assessment. The conventional "attitude of neutrality" characteristic of NDA "is thus replaced by an atmosphere of teaching and helping" (Sternberg and Grigorenko, 2002, p.29). To emphasize the fluid nature of dynamic assessment Lidz (1987, p.4) defines it as "an interaction between an examiner-as-intervener and a learner-as-active participant, which seeks to estimate the degree of modifiability of the learner and the means by which positive changes in cognitive functioning can be induced and maintained". Murphy (2011, p.1) sees DA as "an approach to understanding and conceiving an individual in the assessment process".

Due to its process-oriented nature, dynamic assessment can offer new insights into assessment in the language classroom

by revealing invaluable secrets about the ability of individual students and their abilities while answering each test item. While the results of non-dynamic assessment can only show the already existent abilities of the student, the analysis of zone of proximal development makes it possible to evaluate the ability of the student to learn from the interaction with a teacher or a more competent peer and provides information crucial for effective remediation, which is the ultimate goal of this assessment and is not provided by traditional non-dynamic tests. The assumption behind dynamic assessment is that some individuals can achieve much more cognitively if provided the opportunity to work with a 'significant other' to improve their cognitive efficiency. The aim of dynamic assessment is to optimize cognitive functioning, rather than simply to sample it, and it is here that a paradigm shift in intellectual assessment occurs (Grigorenko & Sternberg, 1998, p. 77; Lidz, 1997, p. 291).

Lidz (1991) writes, "To merely describe the child's performance does not allow us to draw conclusions or to derive recommendations" (p. 24). An important advantage of DA is making recommendations based on developmental potential which is not revealed by traditional non-dynamic tests (Davin, 2011). Lidz (1997, p. 282) explains that "Dynamic assessment begins where traditional psychometric assessment ends. Instead of terminating the procedure with the establishment of a ceiling, the dynamic assessor views the ceiling as an area of functioning that warrants exploration." He (1995) observed that traditional standardized assessment trails the learner's cognitive development to the point of "failure" in his/her independent functioning, whereas DA leads the child to the point of achieving success in mediated performance because it aims at identifying obstacles to more effective leaning and performance, to find ways to overcome those obstacles on subsequent learning and performance effectiveness (Haywood & Lidz, 2007, p.3). Emphasizing the change in performance rate and remedial strategies necessary for progress (Wiedl, 2003), DA is in a sharp contrast with more product-oriented approaches of mainstream psychometric and edumetric assessment (Resing, 1993; Slenders & Resing, 1997). Limitations of traditional psychometric assessment methods made examiners move toward dynamic assessment as an alternative and/or supplemental approach. Dynamic assessment has, in fact, emerged from theoretical conceptions about human cognitive plasticity and the practical needs to find novel diagnostic measures for language learners which were not possible by traditional non-dynamic assessment. Non-dynamic assessment is to make decisions on static, one-time scores alone (Wiedl, Guthke & Wingenfeld, 1995). It is limited because it does not directly aim at making learners independent knowledge constructors and problem solvers (Johnsson, Mattheos, Svingby, & Attstrom, 2007). So in non-dynamic assessment approach the change in the learner's level of ability would have likely gone undetected. It is only through cooperating with the individual that his/her ongoing maturing understanding can be understood. Dynamic assessment, as a result, presents a more fine-grained understanding of learners' abilities than non-dynamic assessment. DA is generally based on the belief that assessment of an individual's present knowledge is not nearly as revealing as an assessment of that individual's potential so in dynamic assessment determining potential performance is more emphasized than assessing typical performance.

DA aims at assessing the learner's at times hidden potential or reserve capacity in a dynamic, process - oriented, and flexible way in which assistance or mediation is provided by instruction and feedback for cognitive skill acquisition (Elliott, 2003; Sternberg & Grigorenko, 2002). The rationale behind this method of assessment is that if a learner can improve on initial performance when mediated, s/he has the potential to achieve more (Ukrainetz, Harpell, Walsh & Coyle, 2000). All proponents of dynamic assessment recognize that people usually function at levels far below their capacity so assessment of their present performance is invaluable in predicting their future performance. To assess the possibilities in optimal conditions and defeat pessimistic predictions derived from non-dynamic assessment of typical performance a dynamic assessment involving intervention and seeking of potential is required (Haywood & Lidz, 2007, p.9). Lunt (1993) believes that DA investigates a learner's strategies for learning and ways in which these strategies may be extended or enhanced. Since it offers individuals an opportunity to learn, dynamic assessment has the potential to show important information about individual strategies and processes of learning. In other words, dynamic assessment sees development process as a predictor of the test-taker's future performance and offers potentially useful suggestions about teaching, because it measures the processes of knowledge acquisition at the time of test. It sees language learning as knowledge construction and the outcome of interaction between student and teachers (Birjandi, Daftarifard, & Lange, 2011). For Tzuriel (2001) dynamic assessment is an assessment of thinking, perception, learning, and problem solving by an active teaching process aimed at modifying cognitive functioning. It focuses not just on knowledge but learning ability is of more importance and as a result it can overcome deficiencies in using traditional tests with disadvantaged students providing information about what to teach them to improve development (Bolig & Day, 1993).

So the main difference between dynamic and non-dynamic approaches is the modifiability of learner performance during the assessment, which exists in DA as a goal but not in NDA. The reason of using modifiability in dynamic assessment is its grounding in zone of proximal development. In fact dynamic assessment insists that a complete assessment should determine the extent of the person's performance modifiability. In formal non-dynamic assessment; however, any change in the person's performance during the assessment is considered as a threat to test reliability. The reason for such

consideration is that non-dynamic assessment is rooted in psychometric principles which view any change in test-takers' performance due to interaction a source of pollution and a threat to test reliability.

As a result while the scope of non dynamic assessment is just limited to the past learning experience of individuals, dynamic assessment presents a broader scope of past to present experiences and future capabilities, and is therefore able to provide prescriptive information about language learning and any other kind of learning in general. Individuals' current capabilities, takes account of abilities that are still developing. To be more accurate the results of dynamic assessment also go far beyond simply noting whether individuals can correctly answer test questions or whether a given hint helps them solve an item; the interaction between mediators and learners brings to light the problems or deficiencies underlying poor performance. Vygotsky himself also insisted that assessment of ability must not merely provide a label but must explain the source of the problem and must suggest how it can be overcome. In other words, assessment should be about "prognosis" rather than simply "diagnosis". That is to say assessment should go beyond simply recognizing that learners are struggling and consider how individuals approach specific kinds of problems and where in the process of solving these problems difficulties arise.

Unfortunately the number of qualitative studies on dynamic assessment which can have a thorough record of the interactions is very limited and there is no previous qualitative study revealing secrets about the advantages of data provided by dynamic assessment with regard to its exactness and also the role of dynamic assessment in identifying problem source and stage of the problem, its effect on cognitive development of the test-takers and the their ability to transcendent the developed ability to similar tasks in independent performance of learners with different proficiency levels. The present study aimed at filling this gap in the previous literature and highlighting the advantages of the data provided through DA to those gained by NDA and making a comparison between EFL learners with different proficiency levels with regard to the findings.

3. Method

In order to gather the needed data one of the researchers introduced the idea of dynamic assessment in her university and language institute classes very briefly 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 were then randomly 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 guarantee 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 also used 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 reading ability of participants which would remain hidden in traditional non-dynamic testing procedures were revealed. The data made comparison among three proficiency groups possible. These important findings which can shed light on various aspects of teaching and assessing reading comprehension ability are presented in the following section.

4. Findings and Discussion

The 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 answered for different reasons including participants not being able to answer the item, participants not being able to answer the item correctly, and participants answering the item correctly but not being able to provide the correct reason for their choice.

Applying DA assessment a more accurate picture of the EFL learners' reading ability for three different proficiency levels was obtained. While non-dynamic assessment procedures tend to overestimate or underestimate the abilities in some cases, having a comprehensive look at the process of answering each item, dynamic assessment provided the chance for assessors to identify the cases of underestimation and overestimation and provided exact information on individuals' abilities. In NDA each correct answer is considered as acceptable and is worth a point whereas each incorrect answer is unaccepted and the examinee's inability or lack of knowledge on the related point is inferred. This is a very common and unfortunately unfair procedure for estimating abilities. In DA; however, any correct or incorrect looking answer is not used for estimation without analyzing the reason for that choice.

Three main sources of ability overestimation were identified in this study including guessing the correct choice without having the real knowledge and ability, answering the item correctly but not being sure about the correctness of choice which indicated that the individual had some knowledge but didn't have the required mastery over that point, and answering the item correctly but providing a wrong reason for the choice which was another indication of lack of needed knowledge or ability. In addition two major sources of ability underestimation were recognized in this study. The first one was having a wrong answer not due to lack of knowledge or ability but because of carelessness and when further analyzed the individual's complete mastery over the specific point was revealed. The second one was having a wrong answer not due to partial and incomplete knowledge/ability. In fact the individual had learned some points but hadn't gained complete mastery over the issue that should be differentiated from individuals who know nothing about that point.

As the results in Table 1 presents overestimation of ability for high proficiency group was the lowest among three groups but underestimation was the highest for this group. Also while the number of cases for guessing, providing wrong reason and incomplete knowledge are close in three groups, answering correctly with doubt was much less in participants of high proficiency group. Answering wrongly due to carelessness, on the other hand, was the highest in this group. These findings seem to be logical because as the proficiency level and accordingly reading ability increases less doubt in answers is expected and one of the major sources of incorrect responses turns out to be carelessness and not lack of knowledge or ability. In low proficient groups, however, participants concentrate more on the task to compensate limitations in knowledge and ability so carelessness automatically decreases but doubt in responses due to incomplete ability still remains higher for this group.

<Table 1 about here>

DA also had the ability to identify the exact source of problem in answering a test item. This datum is of great importance because the aim of education is not only teaching and testing but also providing opportunities for individual to develop considering their needs. Analyzing the unaccepted answers 6 major sources of problems were identified. As Table 2 presents 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. Comparison of percentages for these problem sources at three different proficiency levels indicates that instruction should be adjusted to the frequency of each problem source at different proficiency levels because while for example problems related to vocabulary decreases as the proficiency level increases, the learners with higher proficiency level have more problem with carelessness, hastiness, and so on. So it is not logical to devote equal time and energy on all problem sources at different proficiency levels. Instead instructors and assessors can use these findings as a source of needs analysis for reading ability of different proficiency levels and focus on the needs to reach the expected results. These findings also highlighted the absolute needs of low-proficient readers to increase their vocabulary domain to have a better comprehension of the text.

<Table 2 about here>

The third type of information provided by process-oriented dynamic assessment and making comparisons among proficiency levels possible is the exact stage of problem for each group. That is to say dynamic assessment not only identifies what is the problem source of each item for each proficiency group, it can also specify 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 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 term in each proficiency group.

<Table 3 about here>

As presented in Table 3 the orientation stage is more problematic for low proficiency group than the other groups, but at execution stage high proficiency group has more problems than the other two groups. Mid proficiency group on the other hand needs more mediation at control stage than high and low groups. The reason for such findings can be that orientation as the first step of task performance plays an important role in devising a plan for performance which guides the performer through the exact steps needed to be taken. Low proficient readers need instructions at this very beginning stage to develop planning skills for task completion. As the proficiency increases participants are more able to devise the required plans and conduct them but may have doubts in their correct responses because they have not mastered the reading ability thoroughly yet. That is why mid proficiency readers mainly have problems at control stage. Highly proficient readers however do not have control problems because as findings in the previous section revealed they do not doubt about their answers so do not need to control them. Also their high proficiency and reading ability solves their orientation problems and the majority of the problems therefore appear to be at execution stage most of which can be attributed to high carelessness of readers in this group. Identifying the frequency of problem stages for each proficiency group can help educationists in improving the cognitive and reading ability development of learners according to their proficiency level and specific needs.

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. 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 4 presents these findings.

<Table 4 about here>

Not all the mediation 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 the role of a dictionary or a reminder in these cases and any type of learning was not the case. All these cases were excluded from frequencies and percentages of development 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 ZPDs. Participants of higher proficiency group had the highest development in this study (75.86%) while mid proficiency level had the lowest development (60%).

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 guidance, support and mediation. But what is of even greater importance is estimating the ability of individuals in applying the learnt point in other similar tasks to prove that they have moved form 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 of three proficiency groups are provided in Table 5 and indicate that transcendence increases as the proficiency level improves. That is participants with high proficiency had better transcendence ability and those with low proficiency level had the least transcendence ability. It means while low proficiency participants took the advantage of mediation for development more than mid proficiency group.

<Table 5 about here>

But all in all, considering both development and transcendent ability of readers the ones in high proficiency group had both the highest development in reading ability and the highest transcendent ability to apply the developed ability into new tasks. The readers with mid proficiency ability had better proportion of transcendence to development (85.71/60) than readers with low proficiency (75/71.43). So the mid group was more able to take the advantage of mediations during DA for new tasks in independent performance than the low group.

All these findings for reading ability of different proficiency levels reveals hidden aspects not clear in non-dynamic assessment and it fulfills Vygotsky's goal who emphasizes that assessment should not merely provide a label but must be able to explain the source of problem and ways to overcome them. In other words DA with its prognostic and not merely diagnostic nature goes far beyond recognizing that learners are struggling and provides detailed information about the problem source, problem stage, development and transcendence ability of learners with specific proficiency to help instructors to take better and more efficient steps in remedial courses to improve learner development which is the ultimate purpose of education. With this view DA merges assessment with instructions and puts the hands of examiners in hands of teachers to have a closer cooperation for fulfilling their now unified aims and solve the problem of negative washback effect. This kind of educational perspective based on learners' needs analysis and considering the specific groups of learners is in line with principles of postmethod education which tries to deconstruct the limitations of preset objectives, syllabi, methods, and testing without considering the ZPDs and providing the needed mediation.

5. Conclusion

The present qualitative study applied dynamic assessment to find new and hidden aspects of reading ability for EFL learners of different proficiency levels. The findings gained from analysis of mediators' interactions with participants presented differences in the extent of overestimation and underestimation of reading ability for high, mid, and low proficient readers. Differences were also found for the source and stage of development in these proficiency groups. The most important part of the data was related to the development and transcendence of the reading ability which was the main goal of DA. It was concluded that high proficient learners had the highest ability in taking advantage of interactions and applying them into new and similar tasks in independent performance and the transcendence ability decreases for the lower proficiency level readers. Instructors and assessors can apply these findings to provide the appropriate interactions and mediations based on needs and weak points of each proficiency group and have the best investment for EFL readers' development.

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Test result pollution source	Pro	Proficiency level		
rest result ponution source	High	Mid	Low	
A: Overestimating the ability	9.26%	13.79%	12%	
1. Guessing the correct answer	1.855%	1.15%	1.33%	
2. Answering correctly with doubt	2.78%	9.19%	8%	
3. Answering correctly but with wrong reason	4.63%	3.45%	2.67%	
B: Underestimating the ability	7.41%	4.60%	4%	
1. Answering wrongly due to carelessness	6.48%	3.45%	2.67%	
2. Answering wrongly due to incomplete knowledge	0.93%	1.15%	1.34%	

Table 1. Percentage of ability over- and under-estimation for different proficiency groups

Table 2. Percentage of different problem sources for each participant

Source of the problem	Proficiency level		
Source of the problem	High	Mid	Low
Vocabulary	24.44%	39.13%	62%
Structure	2.22%	4.35%	2%
Strategy	24.44%	21.74%	10%
Background knowledge	0%	4.35%	4%
Comprehension problems	26.67%	13.04%	20%
Additional problems	22.22%	17.39%	2%

Table 3. Percentage of different problem stages for each participant

Stage of the problem	Proficiency level		
Suge of the problem	High	Mid	Low
Orientation	32.56%	32%	35.09%
Execution	60.46%	52%	57.89%
Control	6.98%	16%	7.02%

Table 4. Percentage of development for each participant

Development	Proficiency level		
Development	High	Mid	Low
Yes	75.86%	60%	71.43%
No	24.14%	40%	28.57%

Table 5. Percentage of transcendence for each participant

Transcendence	Proficiency level		
Transcendence	High	Mid	Low
Yes	94.44%	85.71%	75%
No	5.55%	14.29%	25%