

Application of Dynamic Assessment in a College Writing Class*

Kyong-hyon Pyo
Dankook University

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The present study aims to explore the applicability of dynamic assessment (DA), an alternative way of conceptualizing the relationship between assessment and instruction from the Vygotskian perspective, as part of a formal classroom assessment. It further seeks to explore any insights into learners' writing abilities through an application of DA to an L2 learning context at the Korean college setting and the possibility of promoting learners' abilities through DA. Fifteen university students taking a paragraph-writing class were asked to complete a comparative composition. Student performances were interpreted through an interactionist analytical approach. The findings reveal that DA is an effective means of understanding learners' L2 abilities by determining precise Zones of Proximal Development (ZPDs) and uncovering the extent of a problem that learners experience. At the same time, DA has shown differential qualitative changes to mediated support among learners. Based on the current study's rather stable application of DA as a classroom assessment tool, more research should be directed to integrate some of psychometric constructs into DA framework for wider acceptance in the English Language Teaching (ELT) assessment area.

[dynamic assessment/Vygotsky/L2 assessment/
역동적평가/비고츠키/제 2 언어평가]

I. INTRODUCTION

Formative assessment is for evaluating students with the goal of helping them to continue their growth process. Formative assessment has a closer bearing on instruction and its results feed back into classroom teaching. In contrast, summative assessment aims

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to summarize what a student has grasped, and typically occurs at the end of an instructional period. Final exams in a course and achievement tests are examples of summative assessment. As Brown (2004, pp. 6-7) pertinently stated, one of the prevailing problems toward testing/assessing is the summative use of all tests (quizzes, periodic review tests, midterm exams, etc.) by teachers and students. He further asked teachers to offer students an opportunity to convert test into "learning experiences."

In line with Brown's (2004) concern that assessment may not be administered to serve better instruction, Rea-Dickins (2004) identified classroom assessment as a multifaceted phenomenon linked to learning, teaching, and bureaucratic functions, and made a conclusion that teachers often feel compelled to choose "between their role as facilitator and monitor of language development and that of assessor and judge of language performance as achievement" (p. 253). Pinpointing proliferation of terms such as teaching to the test, narrowing of the curriculum, and assessment-driven instruction, Poehner lamented that "assessment is seen as an activity that is distinct from, and perhaps even at odds with, the goal of teaching" (2010, p. 4).

Poehner (2010) furthered the reasons for the view that assessment stands in opposition to instruction as follows: a growing awareness of the political character of many assessment initiatives; teachers' lack of familiarity with the theory and principles underlying assessment practices; and a dichotomy at the level of institutional organization. Among the three factors, "high-stakes tests" typically designed by external agencies and adopted by policy makers and school officials impose upon teachers and learners (Shohamy, 1998, 2001). In the USA, for example, the "No Child Left Behind" legislation has made obligatory standardized tests a driving force in education. Korea is following the suit by introducing state-administered academic achievement tests in elementary, middle, and high schools despite growing fierce opposition from teachers and parents. Conflicts have deepened over state-run tests nationwide (S. W. Kang, 2008).

The area of English language teaching (ELT) is no exception in the emerging character of an assessment initiative. The recent American Council on the Teaching of Foreign Language (ACTFL) volume that outlines the organization's vision for language education in the first part of this century ascribes a central role to testing (Phillips, 2006). The results of high-stakes tests place considerable consequences on discussions of student learning, teacher accountability, and state or national standards. Consequently, test preparation not only becomes an end in itself but it can even supercede other curricular goals and learning objectives (Johnson, Rehn-Jordan & Poehner, 2005).

At this juncture when assessment is isolated from instruction for varied reasons as discussed by many researchers, this study is concerned with the potential relevance of assessment to teaching, according to which these activities are not separate but a single activity that seeks to understand abilities and promote their development (Lidz & Gindis,

2003). In the classroom, assessment need not be conceptualized as a formal, one-time standardized procedure but is integrated with teaching and learning. Reorienting assessment from a measurement activity to one focusing on learner development implies a shift from mere observation of performance to cooperation with learners and intervention. The unification of assessment and instruction is grounded in Vygotsky's (1978) Sociocultural Theory of Mind (SCT), and, more specifically, Vygotsky's learning theory of the Zone of Proximal Development (ZPD), from which its pedagogical approach, dynamic assessment (DA), is derived.

In this paper, interactionist DA procedures were implemented to Korean university students as part of regular assessment practice at school. One-on-one DA sessions for all fifteen students taking a writing class were conducted so that protocols were collected for analysis. This study of teacher (mediator) and student (learner) interaction is developmental/genetic to the extent that it seeks to uncover maturing students' writing abilities in transition from the zone of actual development to the ZPD with a great focus on the changes at the syntactic level. Through this genetic method of assessment, the study seeks to explore pedagogical insights that DA can bring in contrast with static assessment. It further will demonstrate what DA can do as a dialectic activity of assessing and promoting abilities and how DA sessions unfold in concrete practice, along with an eye toward future research.

II. LITERATURE REVIEW

1. Beginning of Dynamic Assessment

Vygotsky(1978) realized that observing learners engaged in independent problem solving revealed those functions that had already been internalized but indicated nothing about abilities that were still in the process of developing. This means that the scope of individuals' abilities can only be revealed when various forms of support are offered as they struggle with difficult tasks. Moreover, the provision of such assistance simultaneously aids development, and so assessment itself becomes an instructional intervention. Assessment and instruction are, therefore, dialectically integrated into the same development-oriented activity. The pedagogical approach has come to be known as dynamic assessment (DA) (Poehner, 2010).

A central tenet of DA is that it considers a person's potential abilities. Conventional testing methods did not reveal the full range of individuals' abilities (van der Veer & Valsiner, 1991). Their research pointed to the fact that individuals whose independent performance is quite similar may vary considerably when offered assistance in the form of

hints, leading questions and demonstrations, an observation that led to Vygotsky's formulation of the Zone of Proximal Development (ZPD). Originally, Vygotsky discussed the ZPD as an alternative to conventional intelligence testing, but later he came to see it as a new way of organizing all educational activities, including both teaching and assessment, in order to optimally impact learners' development (Lantolf & Thorne, 2006; van der Veer & Valsiner, 1991).

Vygotsky's writings on the ZPD present complexities and reflect three slightly different interpretations of the ZPD. One was based on his observation that schooling frequently enhanced the IQ score of children entering school with low scores, while it appeared to have virtually no impact on those with high IQ ratings (van der Veer & Valsiner, 1991). Vygotsky reasoned that this differential effect of schooling was a consequence of the fact that children with high IQs had already minimized the distance between their actual and potential development prior to entering school, but that their low IQ classmates still had room for development to occur. Vygotsky used this score to convince testers to redirect their efforts to prognosis of their potential development.

Another way in which Vygotsky conceptualized the ZPD was much more qualitative in its focus on understanding and promoting those aspects of a child's mental development that were in the process of maturing. He still stressed the centrality of assisted and unassisted performance, but instead of linking this to a difference score he argued that educators needed to rethink how to connect teaching with development in a systematic and meaningful way (Valsiner & van der Veer, 1993, p. 43). In both conceptualizations, Vygotsky was concerned with the pivotal notion that "development was an emergent process masked by intermediate outcomes" (Valsiner & van der Veer, 1993, p. 43).

In proposing the ZPD Vygotsky argued that "an individual's actual level of development as determined by independent performance '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 insisted that responsiveness to mediation is indispensable for understanding cognitive ability because it provides insight into the person's future development. That is, what the individual is able to do one day with mediation, s/he is able to do tomorrow alone. Importantly, potential development varies independently of actual development, meaning that the latter cannot be used to predict the former. Moreover, the former is not a prior prediction but is derived from concrete mediated activity. The following extended quote summarizes Vygotsky's position on the ZPD:

From the point of view of their independent activity they are equivalent, but from the point of view of their immediate potential development they are sharply different. That which the child turns out to be able to do with the help of an adult points us toward the zone of the child's proximal development. This means that

with the help of this method, we can take stock not only of today's completed process of development, not only the cycles that are already concluded and done, not only the processes of maturation that are completed; we can also take stock of processes that are now in the state of coming into being, that are only ripening, or only developing (Vygotsky, 1956, pp. 447-448; cited in Wertsch, 1985, p. 68).

Lidz and Gindis (2003) summarized notions from Vygotsky's sociocultural theory for a clear understanding of the core of its theoretical base. First, cognitive, language, and social functioning in educational settings are not innate abilities or disabilities but are sociocultural formations resulting from the interactions of a child with culture. What is to be measured, therefore, is a child's evolving individual ability to master "psychological tools" that are in process of development. Second, assessment is not an isolated activity that is merely linked to intervention. Assessment, instruction, and remediation can be based on the same universal explanatory conceptualization of a child's development and within this model are therefore inseparable. Third, Vygotsky suggested that the "size" of the ZPD was determined by the child's ability to benefit from collaboration with an expert in order to advance the child's performance beyond what was already achieved by non-assisted performance, and the size was a better predictor of future cognitive functioning than a measure of independent performance through such measures as traditional tests of intelligence. Fourth, the ZPD should be measured in the context of what Vygotsky called either "shared/joint activity" or "collaboration"; its performance is viewed as an indicator of the status of the learner's maturing psychological functions. Lastly, Vygotsky turned to the psychological concept of imitation as a way of identifying maturing psychological functions that were still inadequate for independent performance. In Vygotsky's words, "It is well established that the child can imitate only what lies within the zone of his intellectual potential" (Vygotsky, 1978, p. 209).

2. Dynamic Assessment Approaches

The varied understandings of Vygotsky's writings have led DA proponents to pursue a number of approaches to constructing the ZPD with learners. Some DA methods adhere closely to traditional assessment procedures of standardization and the quantification and generalizability of results, while others are more flexible allowing for cooperative interaction between assessor and learner. Lantolf and Poehner (2004) refer to these DA orientations as interventionist and interactionist, respectively. These authors explain that interventionist and interactionist DA can be distinguished according to the outcomes they wish to obtain, with the former generally following a more formal approach in order to determine learners' potential for future development and the latter abandoning

psychometric concerns in order to help learners realize their potential.

For instance, Stenberg and Grigorenko (2002) classify interventionist approaches as either a sandwich or cake format. In the sandwich format, learners are administered a test in a traditional, non-dynamic manner, after which they receive an intervention designed to help them with problems they experienced before repeating the initial test or a parallel version. The intervention stage varies among DA approaches, with some adhering more closely to pre-determined mediation scripts than others (Haywood & Lidz, 2007). The cake format embeds mediation for each test item or task that they find difficult. In this case, mediation is usually very tightly scripted and often arranged as a menu of hints and prompts that must be followed in a predetermined sequence, usually from most implicit to most explicit. Mediation continues until the learner either overcomes the problem or until the final hint is reached, which usually includes the solution to the problem and an explanation of how the solution was reached. In both its sandwich and cake formats, interventionist DA displays many of the characteristics of formal testing despite its focus on learner development.

In interactionist DA, however, mediation is not scripted beforehand as mediators are given significant latitude in how they respond to learners. In fact, mediator-learner dialoging would likely appear to be about teaching rather than testing to an eye of a casual observer. As Reuven Feuerstein has repeatedly argued with regard to his own interactionist DA model, teaching and testing are inseparable since the purpose of the procedure is to bring about change in learners' abilities. The challenge faced by mediators is to provide support that is neither too implicit and therefore ineffective, nor too explicit such that it threatens learner agency and self-regulation (Feuerstein, Falik, Rand & Reuerstein, 2003).

3. Applications of Dynamic Assessment in ELT

As there is a robust research literature on DA in psychology and general education (Lidz & Elliott, 2000), the approach is slowly yet steadily known in second language studies. To date, a growing interest in Vygotskian theory among applied linguists has led to some exploration of how DA principles might be used in L2 contexts and several studies have examined L2 performance from the DA perspective as well (e.g., Ableeva, 2008; Anton, 2003; Birjandi, 2009; Erben, Ban & Summers, 2008; Leung, 2007; Lidz & Gindis, 2003; Poehner, 2007; Poehner, 2008a, 2008b; Poehner & Lantolf, 2005; K. H. Pyo, 2010).

Schneider and Ganschow (2000) related dynamic assessment to the instruction of students experiencing foreign or second language learning problems. Specifically, they called for teacher/student interaction as a way to teach and assess students' awareness of metalinguistic skills. Guthke and his colleagues conducted a language-based version of the Lerntest. In this procedure items were presented in a sequence of increasing complexity;

learners were provided with immediate implicit or explicit feedback as needed until they were able to respond appropriately to an item (i.e., the cake model), the assumption being that they cannot move to more complex items until they have mastered the principles underlying simpler problems (Guthke, 1982).

Kozulin and Garb (2002) reported on a small scale study of text comprehension by at-risk EFL adult students in Israel. They assessed the students' ability to learn and use reading comprehension strategies following the test-teach-retest format. Students were given a static test. Then the test was reviewed by teacher and students together focusing on the strategies called forth by each item. A post-test served to assess whether students had benefitted from the mediation. The results indicated that many students' scores improved in the post-test, but not all. Kozulin and Garb devised a formula to operationalize student learning potential with differentiates between high and low learning potential students. They noted that some students with high and low learning potential obtained the same scores in the pre-test, showing that dynamic assessment added important information that remained hidden in static testing. It seemed then that DA procedures are applicable and effective not only in assessment of cognitive performance, but in other areas as well, such as the EFL context. The results of the study have a high instructional value in the identification of students in more need of individual instruction and the development of action plans according to individual students' needs.

Lidz and Gindis (2003) described a specific DA procedure for use with young children with two case studies of the application of the procedure after a discussion of the idea of the ZPD and an overview of DA. These two cases demonstrated the contribution of DA information to the understanding of children experiencing learning problems; the information enabled mediators to observe the different contributions of cognitive versus social-emotional factors to learner performance, as well as to elaborate the qualitative aspects of their functioning on a variety of tasks. Lidz and Gindis also stressed the co-existence of traditional psychometric approaches and DA procedures for a full repertory of students' development.

Agreeing on the role of DA as an alternative to static types of assessment, i.e., standardized test, suggested by Lidz and Gindis (2003), Birjandi (2009) pointed out that DA is not intended as a replacement of other test types, but as a complement to them. Since the goal of DA as a social, interactive, and qualitative enterprise is to measure, intervene, and modify behaviors as well as document the process of learning, DA can accommodate the roles of the conventional assessment tools required from institutional and societal demands.

As presented by Kozulin (1998), there are two alternative sets of assumptions that underlie traditional standardized testing and dynamic assessment. The traditional testing paradigm includes the notions that (1) the manifest level of functioning reveals the child's

inner abilities more or less accurately; (2) unaided performance is the best format for assessment; (3) the primary goals of testing are to predict future functioning and to classify the child according to level of abilities. In contrast, DA includes the principles or assumptions that (1) cognitive processes are modifiable, and an important task of assessment is to ascertain their degree of modifiability, rather than to remain limited to estimation of the child's manifest level of functioning; (2) interactive assessment that includes a learning phases provides better insight into the child's learning capacities than unaided performance; (3) the primary goal of assessment is to suggest psychoeducational interventions aimed at the enhancement and realization of the child's latent abilities to learn.

Poehner's study (2008a) also acknowledged the considerable attention in the ZPD and DA research that has been devoted to elaborating the kinds of mediation that may successfully promote development but argued that this must be balanced by simultaneously focusing on learners' contributions. He identified the construct of learner reciprocity, first proposed by Lidz (1991), as a way of interpreting learner behaviors during DA. Poehner concluded that just as the quality of mediation learners require reveals much about their abilities, analysis of their reciprocating behaviors completes the picture of their development.

Ableeva (2008), like Poehner' study (2008a), compared the insights into learners' abilities gained through dynamic and non-dynamic procedures. Pointing to the current interest in listening comprehension assessment in the language testing literature, Ableeva carried out a small-scale pilot study in order to ascertain whether a dynamic procedure uncovered features of their abilities not apparent from their independent performance. Her findings confirmed Vygotsky's prediction that individuals whose independent performances are quite similar may have very different ZPDs. Ableeva went on to argue in favor of the use of DA as both a diagnosis tool to uncover the causes of poor comprehension as well as an approach to supporting learners' development of their listening abilities.

Poehner's another study (2008b) discussed a possibility of storing a view that in the classroom assessment should be conceptualized as a procedure linked with teaching and learning, but is often integrated with teaching and learning. The discussion is predicated on Messick's (1989) unified validity model that test validation is a scientific enterprise employing methods akin to hypothesis generation and evaluation in order to establish the legitimacy of interpretations and uses of test scores. Poehner maintained that DA approach seeks not to describe performance consistencies but to engage in dialogue with learners in order to arrive at a diagnosis of the sources of performance problems and a prognosis for their remediation. Drawing on examples of DA with L2 learners, he further argued that the validity of DA activities is ultimately derived from its success in promoting learner development.

Finally, K. H. Pyo (2010) firstly introduced DA notions into the Korean English context, although its introduction was limited to the college level. Regretfully pointing out most of the colleges' imitation of the assessment models commonly adopted from middle and high schools, the researcher explored into the applicability of DA with a focus on speaking skills in pursuit of assessment as part of instructional tools. DA was found to be a potential assessment easily integrated into a formal testing process in the classroom; however, a few issues as regards to administration and time consumed for DA implementation were mentioned as ones to be solved in order to meet demands from traditional testing perspectives.

Despite its psychometric-based criticism, DA challenged conventional views of assessment and instruction by stating that these should not be dualistically opposed to one another and, further, that they are not even distinct activities. Assessment and instruction can only be complete when they are fully integrated, with mediated interactions simultaneously revealing and promoting learners' abilities. Further, assessment should help students achieve their original goals of learning while preparing for assessment activity. It is a new philosophy of teaching and assessment in which learner development takes center stage. The theoretical motivation is always mediated, either externally, as when we interact with others, or internally and our social interactions in the world are the source of our cognitive development. The great power of education, then, is that it presents opportunities to intervene in and guide the development of mental functions by offering learners approach to integrating teaching and assessment as well as a theoretical framework for reflections on the validity of the activity.

In what follows, DA of writing abilities will be implemented to focus on what DA may reveal compared to conventional assessment. This study will help to build greater understanding of the extent and nature of the difficulties that participants have with the linguistic aspects of learning as well as their self-regulation and psychological processes while producing verbal utterances during DA. Then, how DA protocols are interpreted for assessment purposes will be elaborated in the following section.

III. METHODOLOGY

1. Participants

The protocols of the present study were collected from a class titled "English Writing I" in 2010, spring semester. The course is elective for English major students, with a goal of developing English writing skills at the paragraph level. This is a course for students who have taken a basic writing course offered as part of General English Program during the

freshman year. Students can revise their paragraphs through the whole process of planning, outlining and developing ones. English was used as the main communication means in the classroom. During the semester, fifteen students took the class; thirteen were sophomores, and two were juniors. There were 7 male and 8 female students. An informal survey of the level of English proficiency shows that their TOEIC scores range from 540 to 720; the participating students seem rather heterogeneous in their overall English proficiency. None of the students had an extensive experience of English learning overseas except for two students who had a stay shorter than six months in English-speaking countries. All fifteen students agreed to participate in the study after listening to the general purpose of the newly introduced assessment, DA, the overall implementation procedure, and use of DA interpretations for compiling scores for the midterm exam.

2. Procedure

It was agreed among students that the experimental DA would be used for the midterm exam portion, which takes 20% out of 100% for the final grade. Students' small anxiety over their grades from the use of a new test format was offset by the administration of the traditional format of the final exam with a bigger portion (40%). Midterm exam task, a comparative writing, was given to students as DA instrument during the 6th week; in the following week, students brought their writing for DA session. There were two topics to choose for students to write: a comparison of a classmate with him/herself or a comparison of now-him/herself and past-him/herself. During the previous weeks before the midterm exam, students had instruction on the task with an extended amount of practice in class and were quite familiar with comparative writing. Given the research focus on microgenetic aspects of mental functioning during DA, the researcher decided to conduct DA procedures for 15 minutes for each participant, and all of which were audio-recorded. With 15 participants, 225 minutes (15 minutes by 15 students) in total were required for the whole DA sessions to be completed; then two weeks (7th and 8th weeks) were allocated for the implementation of DA. After all the DA sessions finished, students' writing performance was graded following the agreed-upon criteria such as flow, paragraph format, content and mechanics. Those rating criteria were ones used when the instructor/researcher provided feedback to students' overall writing for instructional purposes; hence, students were completing their comparison composition with the criteria in mind.

The directions the students received for DA were as follows:

- Students will read their writing aloud at a slow pace. They may underline or take notes whenever they are uncertain with expressions, word choices or sentence structures.
- Their responses can be made either in English or Korean.

During the sessions in which mediation was provided, the following additional directions were also given.

- The researcher will interrupt at various points to ask students to re-read parts of writing loud, ask questions, offer suggestions, and provide help when necessary; sometimes the researcher will interrupt to provide a correction, to question something that was written, or to make general comments.
- These interruptions will be done in English or Korean; Korean will be used when needed to avoid any possible misunderstandings. If student does not understand something said or would like further clarification or assistance, s/he should let the researcher know in Korean.
- Students are encouraged to ask the researcher to help if they need it; they can do this in either English or Korean.

3. Data Analysis

In the present study, an interactionist analytic approach (Feuerstein, Rand, Hoffman & Miller, 1980) is used to interpret learner performance and the interactions between learners and mediator. Evaluations were made of the learners' performances for fifteen minutes for each student, and at the same time they were audio-recorded, using a recording function of a cell-phone. The whole recording was converted into several mp3 files, sorted by students. Then, all the audio-recorded assessment sessions were transcribed and analyzed. Through careful reading of the transcripts certain recurring patterns of interaction between the mediator and the learners emerged. In particular, various types of mediation were noted: use of rising intonation for eliciting responses, recasts, clarification questions, gradual corrections from implicit to explicit feedback, and so on.

The data analysis in the following section included excerpts from the transcriptions of the assessments. The lines of text are numbered in the excerpts in order to facilitate reference to specific parts of interactions. Whenever Korean was used in these sessions, an English translation is provided in italics. Ultimately, the analysis of the transcriptions of the assessment sessions would shed much light on the interplay between mediator and learner, with a primary emphasis on understanding the emergent mediation and performance in certain linguistic aspects.

4. Research Questions

- 1) What insights does dynamic assessment provide on students' development in writing, with a specific focus on linguistic aspects?

- 2) Is dynamic assessment applicable as part of classroom assessment?

IV. FINDINGS AND DISCUSSION

We have learned that one of the major contributions of DA procedures over conventional procedures is that the inclusion of mediated interaction during the assessment provides more information regarding an individual's knowledge and abilities. Following Vygotskian theory of mediation and instruction, the present study aims at demonstrating some of the insights into learners' abilities that are not obtained from assessing from independent performance but that only come to light during DA. In order to highlight those insights gained through the collaborative dialoguing between mediator and learner, a statistical analysis was not conducted; the moments of linguistic development during DA are shared through a series of excerpts and their interpretations.

1. Determining Precise ZPDs

The following excerpts support Vygotsky's argument that the inclusion of both independent performance and performance in cooperation with a mediator shows a wider range of learners' abilities from the zone of actual development and the ZPD. MS brought in her writing on a comparison of herself with her partner under the title of "Yuchan and I." Usually in class MS was very active in group activities and responsive to teacher's questions. She was on time submitting her writing assignment, eager to have feedback from teacher. As her paragraph shows (see Appendix student writing samples), MS was unaware of a grammatical error in line 4 ("...he has a black short hair..."), which is often found among Korean learners of English. "Hair" is not a count noun. Mediator asked MS to re-read the sentence with the error loud

01. M: Why don't you read the fifth sentence again?

02: MS: the whole sentence?

03. MS: For example, he has a black short hair, but I have a brown long hair.

04. M: Good. Are there any places to correct in the sentence?

05. MS: For example, he has a black short hair....?

The mediator (M), starting with the most implicit hint for correction, intervened in her description by reading the sentence again to indicate that there was something wrong in the sentence in line 1. However, MS re-read the first half of the sentence at a slower space without knowing the problematic area. Then, M intervened once again in line 6:

06. M: "Hair" [*doesn't need an article.*]
07. MS: Ah... yes? yes.. just black short hair...
08. M: That's right. Can you read the sentence again?
09. MS: Yes. For example, he has black short hair but I have a brown long hair.

M explained that "hair" is a non-count noun that does not go together with an article. MS, in line 7, understood quickly and corrected herself for the part. Upon the feedback of the mediator, MS seemed to recognize her mistake and made a correction; however, she repeated the same linguistic error in reading her writing in line 9, which signifies that she failed to internalize the item although it is in transition from the ZPD to the level of actual development evidenced by independent performance.

Next is the dialogue between YC and the mediator for "narrative writing" the same task that MS did for DA. Like MS, YC made a comparison between himself and his partner in the writing. An interesting similarity between MS and YC was found in the use of grammar: making non-count nouns plural. In line 10, YC was stopped at sentences 5-6: "Third, I am 3 year older than she is. I am 24 year old, and she is 21 year old." M indicated an ungrammaticality in the sentence, recasting the part with the linguistic error in line 11.

10. YC: Third, I am 3 year older than she is. I am 24 year old, and she is 21 year old...
11. M: Third, I am 3 year older...That doesn't sound right..

Without great difficulty, YC recognized his error and responded to M with clearly defined grammatical terms in line 12. Shortly afterward, YC completed reading the rest of the sentence without additional special attention to the error. No further errors were found in the use of plural nouns; even at the end of his paragraph, he self-corrected another error "difference" into "differences." No little pauses or hesitations were observed while completing his description. According to the teacher's informal class observation, he was a soft-spoken person, and rarely made questions to teacher. Teacher's evaluation of YC as an insecure learner changed: he was just a careful learner. In other words, his quiet attitude could have masked his true writing abilities.

12. YC: (thinking a moment and putting on a smile) [*Are you saying that year needs - s because it's plural?*]
13. M: Right. Could you continue, then?
14. YC: Let me try again. Third, I am 3 years older than she is. I am 24 years old, and she is 21 years old... As seen in the examples, there are differences in the physical appearance between Myeong-seon and I.

At the first glance of the two students' initial performance on the comparative writing the two learners may have been assessed to be in a similar development of the linguistic item, since frequently found linguistic errors were found from both of the learners. However, mediation helped the mediator determine precise ZPDs of those learners. Without this interaction it would have been difficult to discover that YC has a good control over the use of the noun, as opposed to MS who needs more practice for internalization. Static assessment would have underestimated YC's level of development. Post-DA sessions with the participants also confirmed that MS's grammatical aspects of writing require more improvement for greater accuracy of language. This was the concern that Vygotsky (1998) initially brought up, stating that observation of individuals' independent performance does not adequately reflect the full range of their abilities, further critiquing conventional approaches to assessment on the grounds that requiring individuals to perform without dialogic interaction with a mediator limits the scope of the assessment to only those functions that have already fully developed and ignores functions that are still in the process of forming.

2. Revealing the Extent of a Problem

Referring to her partner as a cute girl, MK, in her writing, said that she met Heejin this year. However, MK's sentence is not grammatically correct since a present perfect tense cannot accompany a reference to a specific time. Throughout MK's paragraph, present perfect is often observed, mixed with other tenses (See Appendix). For M's more specific question to the date of her first encounter with Heejin as a follow-up, MK confirmed in line 17 that she met her partner in 2010, more specifically two months ago. MK used again a present perfect tense for the time reference to simple past tense (two months ago).

15. MK: Heejin is a cute girl whom I have met in my writing class in 2010.

16. M: When did you meet Heejin in your writing class?

17. MK: I have met her this year two months ago.

Next, M pointed to the specific time reference in rising intonation, hinting at the incomparability of the tense with a certain time reference expression. Choosing a different word "knew," MK continued with the same tense in line 19, which indicates that she did not recognize the problem hinted by M. Then, M went more specific, pointing to the error to work on. Slightly puzzled with M's feedback in line 21, MK retreated to the sentence she made previously regarded error-free, adding a new time reference "at the beginning of this class." She gave it another shot, seemingly without full recognition of grammatical constructions on the simple past. In order to look into the student's more accurate level of

development, M suggested to her to try a sentence with a given time expression "2 months ago."

18. M: Two months ago?

19. MK: Yes, I knew her two months ago.

20. M: There's something wrong with the use of tense in what you said.

21. MK: I have...met Heejin at the beginning of this class.

22. M: Can you say it with the time expression "two months ago"?

23. MK: Ah, yeah.. I have...recently met Heejin...two months ago. Heejin is a cute girl whom I have met in my writing class in 2010. [*They are all present perfect. Present perfect tense has a bigger coverage of present and past tenses, or in-between. I guess it's convenient to use present perfect in broader contexts.*]

Through interaction with MK, M came to know the reason that she used the present perfect so often: a wrongly established concept of the tense. A DA dialogue brought to light the student's understanding of present perfect tense in comparison with simple past. She did not differentiate the use of the two specific tenses, overly relying on a present perfect. She understood the present perfect as an umbrella tense over the simple past. As a result, MK failed to use the simple past for a specific time reference such as "in 2010," or "two months ago."

From the initial output sentence evidencing a wrong use of the simple past, a further mediation gave a clear insight into the extent/severity of a problem on the use of tenses. After the DA session, an enrichment program was provided to help her with tense, specially placing an emphasis on usage differences between the simple past and present perfect. Static assessment might flash a red light on the problematic area; however, it should stop short of further information on the genesis of the problem and, accordingly, the learner's developmental stage.

3. Showing Differential Qualitative Changes in Development

In the following excerpt, two students' different developmental changes are elaborated in response to mediation during DA. The writing task was to compare the writer in the past against in the present. YJ's writing seems strewn with mixed tenses (the past and present) at random throughout the paragraph (See Appendix). At the same time of composition, YJ seemed to struggle in attending to proper verb tenses. Her attention to other aspects/mechanics of language made it more difficult for her to produce reliable verb forms in the past. Her comparative writing demonstrates that her ability to control tenses is not well-developed yet.

24. YJ: When I was (a) child, I'm a little demon...

Right after YJ's first sentence, M intervened in Korean in line 25 as a reminder that she was describing something that took place in the past, guiding YJ to use the past. YJ took M's mediation, but her try was a half success; she failed to control the verb tenses in her continued reading. She regressed to the use of the present tense again and M's recast of the part with an error from line 27 corrected YJ's to get back to the past again. In the latter part of her paragraph, however, YJ was faltering in the use of a past tense in the following sentence in line 28, which might lead to another error in verbal tense. While trying a possible verb form, he was having a hard time evaluating her performance. YJ checked with M in Korean whether it was acceptable. Her question in line 28 invited the mediator to provide an evaluation. YJ's seeking of the mediator approval, when she was faced with a complex task, revealed her abilities through dialogic cooperation. YJ's requests for specific kinds of support demonstrate learner reciprocity for a successful DA sessions (Lidz, 1991; Poehner, 2008a).

25. M: When you were a child, you mean you were something like a little demon? [*In the past? You need a past tense.*]

26. YJ: [*Oh, let me... I will try this again.*] When I was (a) child, I was a little demon. I had to do everything that I want..

27. M: You had to do everything that you want?

28. YJ: I had to do everything that I wanted....My parents so worried...[*Is that right?*] about me... They wanted me to calm down.

29. M: Again it should be past tense. [*cause your parents were worried when you were young, right?*]

30. YJ: I see.

Next dialogue shows that SY's interaction, while reading over her writing (See Appendix), unfolded differently from YJ during DA. SY required minimal mediation, essentially a reminder, and she was able to independently use the forms with some degree of control. SY's ability to control tense was fairly well developed but she still required slight prompting in line 32.

31. SY: ... I didn't have any concerns or worries. The only thing I have to do was playing with friends..

32. M: Playing with friends.. was it the only thing you have to do when you were a child?

33. SY: (Correcting the verb tense in her writing) The only thing I had to do was

playing with friends. I had no exams or stress. ... and I was happier when I was a child. I can go everywhere and play with my friends..Oh, wait... I could go everywhere and play with my friends. [*I could do that in the past..*]

Interestingly, SY was able to self-mediate in Korean while correcting for the error she made. This proves the mediator's initial mediation led to SY's internalization of tense, which Vygotsky (Wertsch, 1985) contended as a qualitative revolutionary change during DA sessions for the course of milliseconds. YJ, on the other hand, required prompting throughout the dialogue but some degree of understanding began to emerge towards the end of the assessment. To be sure, this change in the ability being assessed is problematic in static procedures, where it would be difficult to make statements about a given ability if it were a moving target.

V. CONCLUSION

The goal of the present study is to demonstrate some of the insights that can be gained when, as Vygotsky (1998) recommended, the object of the assessment shifts from measuring the individuals' abilities to interpreting and promoting those abilities. Throughout the paper, the study illustrated the double-sided coin metaphor that Lantolf and Poehner (2004) have used to describe dynamic assessment: assessing and promoting development. DA was offered to fifteen university students and they received mediation that was sensitive to their maturing writing abilities mostly found at the syntactic level and support during the editing process.

The findings of the study are quite intriguing. DA interactions not only rendered visible the full range of learners' writing abilities but they simultaneously took on a leading role in their development. Students whose independent performance was quite similar varied when offered assistance in the form of hints, leading questions and demonstrations during DA. Excerpts of dialogues between mediator and learners demonstrated that DA was able to determine precise ZPDs and reveal the extent of a problem, which is not obtained from assessing independent performance. MS and YC would have been assessed to be in a similar development of language based on the two students' initial output on the writing task. However, further assistance offered during DA placed them in different ZPDs, and gave the mediator some ideas of how to bring about following development.

As the second finding illustrated through the protocol of MK, DA revealed how severe her wrong conception of the present perfect is as opposed to the use of the simple present. Further dialogic interaction with mediator shedded so much light on the range of the problematic area in terms of tense that it provided a pedagogical approach to attacking

MK's long-held wrong internalization of the present perfect when the following enrichment program was designed.

As the third finding illustrated through the protocols of learners, YJ and SY, there were differential qualitative changes in response to mediation. SY, who showed an initial error, was able to self-mediate and correct her own error later during DA. That evidences SY's internalization of the tense; however, YJ did not undergo a qualitative change in developing the linguistic item, demanding more mediated support. Mediation led not only to improved performance, although differential, but also to learner's enhanced understanding of the processes underlying that performance. For Vygotsky this is a necessary for increased self-regulation. DA interprets maturing abilities and is concerned with explaining the underlying causes of an individual's performance. Then, the kind of explanation emerges from the interaction between mediator and learner, and the interaction brings about qualitative changes in language development.

In the present study, students' performance data were used to generate scores for the midterm exam; at the same time, understanding and promoting learners' development through DA was achieved. Thus, descriptions of learners' use of grammar found in students' writing and their interaction with the mediator led to interpreting individuals' abilities. The development of a rubric for assessing DA performance upon realistic demands in the classroom proved a viable approach for teachers wishing to assign grades, although most of the interpretations of the DA performances were limited to "mechanics" as the current data showed. Three other rating criteria such as "flow, paragraph format, content" were used to compile scores for the midterm exam, complementing DA interpretations of mechanics. Such an approach would enable teachers to share results with students, administrators, and other stakeholders.

However, there are a few research limitations to comment before making a conclusion, if tentative, about the educational worthiness of DA. One of the most distinctive limitations is that the discussion of the ZPD is desirable when a bigger picture is provided from the whole person perspective, in consideration of humans as cognitive, affective, and social beings. However, the lenses through which the study was conducted are constrained to a very small part of cognitive aspects through DA sessions, hence failing to understand the sources of the development and possibly undermining the trustworthiness of the research. Furthermore, participants' perceptions of DA procedures as part of their midterm exam were not sought in a scientific manner although, according to anecdotal data, they reported their participation in DA as a positive experience. Tapping into students' perceptions of DA such as how they felt while they were undergoing DA sessions should be integrated as part of a fuller assessment environment in the follow-up research.

Future research into the use of DA in classroom settings should address further logistical issues in greater depth, and accommodate teachers' needs to either replace formal

assessment procedures or complement the existing ones for the purpose of profiling students in the classroom. Although DA has been severely criticized by traditionalists as failing to address the psychometric concerns, its solid theoretical foundation rooted in Vygotskian perspective in learning and prioritizing the construct of development have made it impervious to traditional challenges. In line with Birjandi (2009), DA researchers and practitioners need to outline their methods by integrating some of psychometric constructs into their framework to make dynamic assessment a tool not just for classifying or categorizing individuals but a pedagogical breakthrough to help individuals move beyond their current capacities and foster development.

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APPENDIX

Student Writing Samples

Yuchan and I (MS)

Yuchan and I are quite different from each other. First of all, Yuchan is a man, and I am a woman. This is the biggest difference. Secondly, when you look at us, you can see our appearance is also different. For example, he has a black short hair but I have a brown long hair. And he is taller than I am. Lastly, we are very different in interest. He likes coffee so he drinks three cups in a day but I don't like coffee. And his favorite movie genre is action movie but I like horror. So Yuchan and I are quite different people. But we will understand each other continuously.

Myeong-seon and I (YC)

Myeong-seon and I are totally different from top to bottom. Here is the interesting comparison. First of all, Myeong-seon is a cute woman, but I am a tough man. Secondly, she is 15 cm shorter than I am; she is 162 cm, and I am 177 cm. Third, I am 3 year older than she is. I am 24 year old, and she is 21 year old. And my hair is darker than hers. She dyed her hair brown. Further, she has a better eyesight than I have, but we both are wearing glasses. As seen in the examples, there are difference in the physical appearance between Myeong-seon and I.

Heejin and I (MK)

Heejin is a cute girl whom I have met in my writing class in 2010. Through some talks, I found she and I have been different in many places. Her family has 4 members, which is one more than mine. She has an older brother, so she is muck luckier than I am, because sometimes I feel a little lonely by myself. As a typical Korean, she likes hot food better than I do. Although I have been in Korea for more than two years, I still can't adapt to the hot food. She is red and I am blue. Though we belong to the different color systems, we have built friendship when we mix.

Myself as a Child, Myself Now (YJ)

When I was child, I'm a little demon. I had to do everything that I want. Usually, I fought with male friends, so most time of my childhood, I had my wounds. My parents are so worried about me. They wanted me to calm down. One day, I have fought with a male friend at school. I scratch the boy's face with my fingernail and he had a big scratch on his face. After the intense fight, my teacher told me to call my mother to school. Nowadays I am a quiet person. As time goes by, I learned that I could not do everything I want and how to live with other people. Sometimes, I really miss my hussy childhood. But, I know I cannot go back. So I will try to be a better person than now.

Myself as a Child, Myself Now (SY)

When I was a child, I was freer than now. I didn't have any concerns or worries. The only thing I have to worry was playing with friends. I had no exams or stress. But, now I have lots of worries about future, relationship, money and so on. Besides, I have a lot of work to do such as study, diet, volunteer work and experiments... But, I was happier when I was a child. I can go everywhere and play with my friends. I didn't have to worry about money or boyfriends then. So, I think my childhood was freer than the present.

Examples in: English

Applicable Languages: English

Applicable Levels: Tertiary

Kyong-hyon Pyo

단국대학교 인문과학대학 영어과

330-714 충남 천안시 동남구 안서동 산29

Tel: (041) 550-3136/ H.P.: 010-2408-1321

Email: khpyo@dankook.ac.kr

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