Evaluating the Zone of Proximal Development: A Vygotskian Perspective

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Abstract

Inadequacies observed in static assessment have motivated the emergence of new approach of assessment and testing in education, labeled dynamic assessment (DA). It is believed that DA provides more accurate information about individuals' learning abilities. The objectives of this paper are to review the drawbacks of static assessment, to present the theoretical foundations of DA, to introduce different methods of applying DA, and finally to discuss advantages and disadvantages of DA.

Key terms: Dynamic assessment, Static assessment, Zone of Proximal Development (ZPD)

1. Introduction

One indispensible part of each curriculum is assessment. Two major types of assessment in education include formative and summative. The purpose of summative assessment is to provide information about the students' achievement at certain point of time, especially at the end of the course of instruction. However, formative assessment aims to evaluate learners continuously. This type of assessment tries to improve learning. On the other hand, formative assessment provides interaction between teaching and learning (Farhady, et.al. 1998). This type of assessment provides feedback for learners. However, the effectiveness of formative assessment in enhancing learning is a great concern. This type of assessment cannot obliterate the distinction between teaching and assessment. A new method of assessment is needed to integrate teaching and testing and merge these two elements. This new method is dynamic assessment.

2. Static Assessments and Their Drawbacks

Static tests are commonly used by educationalists and language teachers to see how much learners have developed on the subject that they have been taught. However, Butler (2000)
counts suggest that static tests suffer from some drawbacks. First, all static assessments presuppose all learners have similar and comparable background knowledge and experience. However, considering all learners with the same level of knowledge is a fallacy. Static assessments can evaluate those skills that have been learned completely and are not able to estimate emerging skills and metacognitive abilities that have not consolidated completely. Moreover, Butler (2000) believes these assessments have a narrow range of acceptable answers, for example, a response is either correct or incorrect. Third, testees are provided no help during static assessments. On the other hand, testees are left unaided and the examiner plays a neutral role. Therefore, there is no intervention and no learning in static assessments.

Fourth, administered to culturally or linguistically different learners, static assessments cannot estimate the potential effect of those cultural or linguistic factors. However, performing under interactive conditions such as scaffolding may improve.

3. What is Dynamic Assessment?

In the field of language, it is recently that the experts started researching dynamic assessment (DA). All the concepts and methods used in DA are borrowed from psychology and education. Unlike static assessments that aim to assess static achievement, DA is an overarching term including a group of assessment methods that aim to assess learning potential (Kozulin 1988). Although DA has its roots in the concept of Zone of Proximal Development (ZPD), wit will be discussed in next part, proposed by Vygotsky, he himself didn’t apply DA in his theories. Poehner & Lantolf (2005) suggest that one of Vygotsky's colleagues, Luria, contrasted statistical with dynamic approaches to assessment. DA tries to assess hidden potential and reserve capacities in a process-oriented, diagnostic and flexible manner. In this way it differs from product-oriented and inflexible manner used in psychometric assessment (Craig, 1991). Dynamic assessment is an interactive approach to conducting assessment. Providing help and guidance by instruction and feedback is the most important feature of DA. Moreover, in conventional assessments there is no collaboration and interaction between tester and testee, but DA takes advantage of collaboration and relation between tester and testee (Lidz, 1992). Traditional assessment was to measure the results of cognitive development but DA promotes this development.

4. Theoretical Backgrounds of Dynamic Assessment

The term Dynamic Assessment is rooted in two main theories: Vygotsk's sociocultural theory and Feuerstein's structural cognitive modifiability.

4.1. Vygotsky’s Sociocultural Theory

Dynamic assessment is grounded in Vygotsky's sociocultural theory. According to this theory, cognitive processes have social origins. Vygotsky believes that individual's cognitive development is interrelated to social, cultural and historical understanding. It is believed that higher mental functions have their origins in social interactions with more experienced adults and peers (Vygotsky 1978). He suggested the concept of the Zone of Proximal Development (ZPD) by which he proposed that there is a difference between what learners can do autonomously and what they can accomplish by the assistance of more knowledgeable persons like peers or parents. This concept is the relation between two types of problem-solving behaviors used by children. First, there are behaviors which children use to solve a problem in
social interactions. This level is called "potential level of development". Second, there are those behaviors by which children can solve the problem by themselves. This level is called "actual level of development".

Holzman (2009, mentioned in Poehner & van Compernolle (2011) elaborates on three different interpretation of ZPD. These interpretations include: "(1) A property of individual learners; (2) an approach to offering social support to learners, usually in dyadic interactions; and (3) a collective and transformative activity" (Poehner & van Compernolle 2011, 45). Holzman believes that only the first two readings of ZPD have been researched in education and the first one has been ignored to some extent.

4.2. Feurstein's Structural Cognitive Modifiability

The structural cognitive modifiability proposes that individuals have the capacity to modify their cognitive functions and adapt their functioning demands (Feuerstein et al.2002). Based on this theory, the examiner or mediator has the responsibility for the modifiability. The core part of this theory is 'Mediated Learning Experience' (Tzuriel, D. 1992). Mediated learning experience (MLE) suggests that environmental stimuli do not affect directly on the individuals; they are mediated by "other persons, usually an adult mediator" (Poehner & Lantolf 2005, 241). MLE interactions help individual to facilitate the development of different functions such as cognitive and metacognitive ones. Mediators can provide MLE strategies to facilitate children's learning processes, to determine problematic cognitive functions and finally to provide advices for development of cognitive structures.

Feuerstein et al. (1980) consider some underlying assumptions of the MLE theory as followings. First, human beings have the ability to modify cognitive functioning and adapt it to the changes of the environment. Second, cognitive modifiability happens without considering some barriers such as age or condition. Third, cognitive modifiability is explained by MLE processes better than unmediated learning experience.

5. Different Approaches to DA

Different models of DA have been suggested by scholars. Lantolf and Poehner (2004) consider two general approaches of DA: interactionist and interventionist. Seng et al (2003) name four model of DA. The first approach is an open-ended approach that uses general problem solving tasks. This approach focuses on strategies used in problem solving. The objective of this approach is to train the learners to become independent problem solvers. The second approach is also a generic problem solving task with standardized intervention. It means the same intervention is provided for all learners. It focuses on the classification of learners. The third approach is a prompting procedure in which all learners are provided the same body of explicit hints and prompts. The last approach is called curriculum-based approach. This approach focuses on "the actual content from the learner's educational program, with interventions based on best practices of teaching" (Seng et al 2003).

6. Advantages of DA

If we want to account some advantages of DA, we can say that DA has changed the format of assessment in different ways (Butler 2000). During this process, the child's cognitive functioning is facilitated. It also provides supportive interaction for the learners. Moreover, DA allows examiners to focus on the way learner process information. Examiner can focus on learner's perception, attention, and metacognitive strategies used by him. Furthermore, the examiner uses DA to judge the ability of the learners to take advantage from cues, hints and scaffolding. This knowledge is used to determine what the best intervention would be for the learners.

7. Conclusion

The purpose of the present paper was to take a look into DA. To this reason, the underlying assumptions of DA were discussed. A comparison was made between dynamic assessment and static or standardized assessment. Different approaches to DA were discussed and finally the advantages of using DA were mentioned. This review demonstrated that since DA focuses on potential rather than the ultimate attainment, it seems a useful process to be used in language classes. However, it is recommended that if language teachers want to assess the potential of their students in language classes, they can trust DA. However, it should be mentioned that DA is a newly grown concept in language classes, and needs more studies to prove its strengths in language classes.

References


