

**The Mozart of Psychology: Lev S.  
Vygotsky, 1896-1934**

Yuriy V. Karpov



November 17, 2017 is the 121st birthday of L. S. Vygotsky, a Russian-Jewish psychologist and educator, whose ideas are now becoming more and more popular all over the world. It is not an exaggeration to say that Vygotsky is a unique phenomenon in the history of science. His life was very short (he died at the age of 37), and not very cheerful: Its beginning was darkened by

anti-Semitic laws of the Russian Empire, and its end by tuberculosis attacks and baiting from Stalin's oppressive regime. After Vygotsky's death in 1934, his ideas were banned from public consumption in Russia. In the same year, many of his closest colleagues and followers fled from Moscow to a Russian provincial city to avoid repression that would have been quite possible had they remained in Moscow. It was only at the end of the 1950s and beginning of the 1960s, as a result of so-called de-Stalinization, that Vygotsky's selected works were published in Russia. His single English-language publication appeared in 1929, but only in the 1970s–1980s were English translations of his major works published. Starting with the 1980s, more than 50 years after his death, Vygotsky has been widely recognized as "the Mozart of psychology" (S. Tulimn) whose ideas are surprisingly current.

The major reason for such a broad recognition of Vygotsky's approach relates to the fact that it provides an innovative view of the processes of child learning and development, which has found strong support in recent studies by American and European researchers. According to Vygotsky, children's learning and development are neither predetermined by heredity, as nativists hold, nor are they determined by conditioning, as behaviorists hold, nor are they the result of children's

independent explorations, as constructivists hold. Rather, children's learning and development are products of adult mediation, that is, the engagement of children into age-appropriate activities, in the context of which adults promote the development in children of new motives and teach them new tools of thinking, problem solving, and self-regulation. That is how (and that is why) children, for example, develop intrinsic learning motivation and school readiness, that is, the characteristics that are necessary for successful learning at school.

Using Vygotsky's theoretical ideas as the basis for their studies, his Russian followers have elaborated these ideas and extended them to the level of practical applications and instructional programs. The 50-year experience of the implementation of the Vygotskian ideas in educational practices in Russia and some other countries has confirmed the validity of these ideas and has demonstrated the efficiency of the Vygotskian educational practices for the promotion of children's learning and development.

## Culture and Cognition is Theme of Conference

The upcoming IACEP international conference (**Guadalajara, Mexico, January 28-31, 2018**) is focused on the theme "Culture and Cognition", with many presentations centered on the interaction of these two powerful influences on human development, learning, and performance. The "cultural-historical" psychology of Lev S. Vygotsky permeates the program, almost as if Vygotsky himself (1896-1934) was presenting.

The opening session on Sunday evening, January 28, features an address entitled "An Applied Sociocultural Model to Promote Children's Learning Following an Informal Learning Paradigm", by Rebeca Mejia-Arauz of Mexico's ITESO University, Guadalajara.

The very next morning IACEP president Yuriy V. Karpov of Touro College, New York, USA, will deliver a keynote address entitled "The Vygotskian Approach to Preschool and School Instruction".

The keynote address on Tuesday morning, by Iveta Kovalčíková of the University of Presov, Slovakia, addressing vital issues of educational integration of persons with cultural and ethnic differences, is entitled "*Per aspera ad astra*--Through (cognitive and cultural) obstacles to (educational) stars: Stimulation of executive functioning of underperforming pupils from the Roma ethnic group."

The keynote address on Wednesday, by Angel R. Villarini Jusino of the University of Puerto Rico (Rio Piedras, P.R.), entitled "Fostering human development through critical thinking". A historical-cultural perspective on competency based education, is a report of competency based education from a cross-national perspective in the Latin-American region.

The conference's heavy emphasis on cultural aspects continues with paper presentations, symposia, posters, and mini-workshops. Topics in these sessions include, among others:

- elementary science teaching in South Africa
- literacy variables and cultural background in primary school
- eye tracking while reading Urdu script
- cognitive assessment of migrant youth
- US-Mexican collaborative study of mediated thinking skills
- consumer behavior in a religious subculture
- "religiousness" and mediated learning strategies
- world assumptions and exposure to terror
- dynamic assessment and university admission of transcultural children
- dynamic assessment and second language learning

## PROFESSIONAL MINI- WORKSHOPS FEATURED AT JANUARY CONFERENCE

In a message to IACEP members, President Yuriy Karpov asked for a renewed emphasis on applications of cognitive psychology in education, stressing the interests and concerns of practitioners. In response to his appeal, the conference committee called upon a conference tactic that the committee borrowed from CAAML, the California Association for Mediated Learning. This is the practice of including brief professional workshops as an integral part of the conference program. Under the “mini-workshops” plan, presenters were invited to submit proposals for brief workshops on applied topics. Each mini-workshop is allotted either 60 or 90 minutes. Conference registrants are entitled to select and participate in workshops that suit their interests, with no fee beyond conference registration. The workshops are organized in interactive fashion, with opportunities for question/answer periods and bi-directional contributions. Hands-on experience is emphasized.

At the January conference in Guadalajara the mini-workshops will take place on Tuesday, January 30, from 2:00 PM to 5:30 PM, in two simultaneous sessions. Because of the concurrent sessions, it will be necessary for participants to choose the ones they most want to attend.

At the time of this writing, five mini-workshops had been accepted for the program, with a possible sixth. They are:

◆ **Use of Mediated Thinking Skills to Enhance Academic Interventions in US-Mexican Collaboration** (Carol Robinson-Zañartu, Andrew Newcombe, Adriana Damien, Rachel Ruiz, Angelica Gamboa, Elizabeth Medina, & Stephanie Vuelveas)

◆ **Dynamic Assessment Instruments: 4 Verbal Abstracting Tests** (H. Carl Haywood)

◆ **The Seria-Think Instrument, Revised (ST-R): A Novel Dynamic Assessment Measure of Self-Regulation and Planning** (David Tzurriel & Dikla Hanuka-Levy)

◆ **Activating the Relationship between Cognitive Modifiability and Neural Plasticity** (Louis H. Falik)

◆ **Culturally Responsive Mediated Learning in 21<sup>st</sup> Century Schools** (Carol Robinson-Zañartu & Joaquin Sloan Aganza)

If additional mini-workshops are organized they will be listed in the conference program. Conference participants are asked to select their mini-workshop choices at on-site registration; however, the choices are not locked in, so conferees can change their minds or make their selections at the time of the mini-workshops.

### *Registration for Conference Is Open Online*

Bargain registration fees for the XVI International Conference of IACEP are still available—**until November 15**—at the [web site](#). There are two levels of fees, calculated according to the World Bank’s categories of the economic levels of different nations (see lists on the registration forms at the web site). IACEP members enjoy a double bargain: low fee for members, even lower for registration prior to November 15. Non-members can take advantage of a similar bargain: Combine conference registration with a year’s membership in IACEP for an exceptionally good rate. Even lower fees for both conference registration and IACEP membership are offered to students who present a copy of their student identification.

Do not miss this rare opportunity to participate in a meeting of practitioners of cognitive approaches in education together with researchers and theory experts, while joining the

world's only professional organization that combines these different perspectives on cognitive education and psychology. Add to these professional advantages the opportunity to experience Mexican culture in one of its most historic places—how can one resist?



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## **DYNAMIC ASSESSMENT: THINKING ASSESSMENT FOR THE THINKING TEACHER<sup>1</sup>**

Carol S. Lidz

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The teachers who read *The Thinking Teacher* are a special breed. They are already committed to and/or are interested in improving their ability to develop the thinking skills of their students. Many, if not most, of these teachers have been trained in a specific curriculum that provides a means for enhancement of children's ability to think and problem-solve. Therefore, many readers are aware that cognitive education curricula have been strongly influenced by theorists who emphasize the modifiability of cognitive functioning, and who focus their efforts on trying to understand what can be provided by primary socializing agents, or mediators of culture, to enhance children's learning.

Just as we are interested in finding ways to help children learn and, specifically, to help them learn how to learn and to think for themselves, we are also interested in finding ways to determine what kind of help children need as learners. Assessment can help us do this. Unless we can say that all children need the same thing at the same time and equate teaching with learning (that

is, unless we believe that children learned it because we offered it), assessment is necessary. Assessment helps us determine and describe the status and needs of learners, and it also allows us to monitor children's progress and evaluate the success of the teaching.

The need to do assessment is not news to teachers; however, I suggest that teachers may need to question their current models of assessment. I would also like to propose that they consider the usefulness of a "dynamic assessment" approach, and I describe here how this can be done within the classroom.

The two models of assessment with which teachers may be most familiar are norm-referenced and curriculum-based (or criterion referenced.) Both of these are useful within the classroom to the extent that they have "face validity" with the specific teaching objectives. Teachers usually give norm-referenced tests because they are told to do so by administration.

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<sup>1</sup> Reprinted, with permission and minor editing, from *The Thinking Teacher*, 1993, VIII (3), 3-8.

These are the tests that may halt the instructional process for a week at a time. These are the scores that get written into the record and possibly sent home, but that are rarely if ever used for instructional planning. This is test information that tells us how a student compares with peers, and scores are reported in terms of standard scores, percentiles, age- or grade-equivalents. This approach to assessment may be useful as a red flag to signal when a student is in trouble and warrants further \_ diagnostic attention. The limited relevance to the actual task of instruction seems recognized by the fact that these scores are rarely made available to teachers at a time of year when they could possibly relate to curriculum planning.

Curriculum-based tests, on the other hand, do relate directly to instructional objectives. In fact, they may dictate these objectives. For example, I recall asking a preschool teacher what her curriculum was, only to be told that it was the LAP (The Learning Accomplishment Profile, which, in fact, is a test and not a curriculum). A curriculum-based test is used to reflect the content that is to be mastered. However, one of the major problems with curriculum-based tests is that their content tends to be based on tradition (most frequently harkening back to Gesell's developmental norms, in the case of young children); that is, there is rarely concern shown for finding evidence that the items represent genuine precursors of developmental milestones or of later curriculum objectives. Nevertheless, a curriculum-based approach has the potential to be instructionally relevant, and can inform teachers of what the student does/does not know, as well as provide

guidelines to the next step. What this approach does not do is inform the teacher of the "how" or "why" of instruction.

What about children who are not learning successfully? Is it enough to be able to catalog what these children do or do not know? Does this provide a full and complex picture of them as learners, or offer guidance to the teaching process other than to target a content objective? Obviously, my response to these questions would be "no."

#### *Enter dynamic assessment*

Dynamic assessment is an approach to gathering information about learner functioning that is not as explicitly or thoroughly elicited by other approaches. Procedures that are administered within a "dynamic" model typically follow a pretest-intervene-posttest format. Both the pre- and posttest could be normed and/or curriculum-referenced. The content of these testing phases varies considerably. A number of researchers are devising procedures that tap a broad array of cognitive functions and content domains. [For those who are interested in pursuing this area, the primary references include Feuerstein (1979), Haywood & Lidz, 2007, Haywood & Tzuriel (1992), Lidz (1987, 1991), and Lidz & Elliott, (2000).]

Since this article addresses teacher-administered assessment, let us suppose that the pre- and post-testing then becomes not only "what" the student does or does not know, but "why and "how" the student does or does not learn. It then becomes possible to look at the match between the task and the learner. A very important aspect of engaging in a dynamic approach to

assessment, then, is that the assessor carefully observes and analyzes the performance of the student as the student problem-solves; the assessor constantly asks, when the student struggles and experiences difficulty, "What is it that is making this difficult? What is the task demanding at this point? What is it that the child is doing or not doing?"

With this approach, it becomes imperative for the assessor to have an internalized outline of cognitive processing. I have found the Das & Naglieri (e.g., 1991) discussions

and interpretations of Luria's conceptualization of mental processing very helpful. Recognizing that mental processing is dynamic, interactive, and nonlinear, these authors outline the primary hallmarks of cognitive processes that can be used to guide the dynamic approach to assessment. I summarize these processes here in the form of a checklist (Table 1) that I find helpful.

**Table 1. Cognitive Processes Examined during a Dynamic Assessment**

Attention/arousal	<ul style="list-style-type: none"> <li>○How does the student manage his or her attention?</li> <li>○Are there issues regarding orientation/ sustaining/span/ selection?</li> <li>○Does the student appear hyper/hypo aroused?</li> </ul>
Perception	<ul style="list-style-type: none"> <li>○How does the student deal with the perceptual demands of the task?</li> <li>○Does the student derive, ' meaning/ note distinctive features/ show modality effects?</li> </ul>
Memory	<ul style="list-style-type: none"> <li>○How does the student deal with memory demands of the task?</li> <li>○Are there issues regarding short-term versus long-term memory?</li> </ul>
Conceptual Abilities	<ul style="list-style-type: none"> <li>○How does the student deal with the coding demands of the task?</li> <li>○Are there issues regarding simultaneous versus successive or sequential coding?</li> </ul>
Planning	<ul style="list-style-type: none"> <li>○How does the student deal with the "metacognitive" or "executive" demands of the task?</li> <li>○Are there issues regarding self-regulation/problem-definition/ strategy determination/ strategy application/ self-evaluation/ flexibility?</li> </ul>

These, then, are what the teacher, or any assessor, would be noting about the student during the course of the assessment process. Similarly, these same processes would apply to analysis of the task. The task is not just a listing of steps to be mastered, but also of processing demands on the learner. It is relevant to ask, "what does the task require

in terms of attention/arousal, memory, perception, conception, coding, and planning."

The first steps of a dynamic assessment include these analyses of the learner's cognitive processes and task processing demands. Thus, even though the pre- and

posttest administration appears traditional in terms of using normed or curriculum-referenced tests, the information from these procedures is not treated in the traditional way.

The most definitive characteristic of a dynamic approach to assessment is the intervening phase, between the pre- and posttests. Once the assessor derives an idea of why and where the student is experiencing difficulty, the next step is to intervene and try to induce change. The focus of the assessment at this point is on how the student responds to the interventions, and on what seems to work or not work to induce change. While there is no ready-made list of interventions (since they would vary with the task, the age of the child, the known instructional repertoire,

among other factors), there are some guidelines. These guidelines are based on Feuerstein's theory of Structural Cognitive Modifiability and mediated Learning (SCM/ML) which, again, is elaborated in the references mentioned earlier. The SCM/ML theory is an attempt to describe interactions between adults and children that appear to facilitate learning. I have highlighted the most relevant of these in a list that can be applied to assessment by teachers within the classroom. These are formulated in terms of questions the teacher would ask herself during the course of the interaction and are offered as guidelines to the intervention phase of the dynamic assessment (Table 2).

**Table 2. Criteria for Classroom Dynamic Assessment**

1. Did I make clear to the student what I wanted her to do?
2. Did I help the student learn to regulate his own attention?
3. Did I make the lesson meaningful and interesting?
4. Did I help the student understand the connection between this experience and others she has had?
5. Did I help the student understand the implications of the experience?
6. Did I present the task in a way that made it possible for the student to succeed?
7. Did I discuss relevant strategies and the need to plan and think strategically?
8. Did I keep the task within the student's "challenge range" (challenge without frustration)?
9. Did I offer informed praise and encouragement?

Some of these questions require forethought before proceeding with the assessment. For example, item 7, which concerns strategies, requires some thinking through of what strategies might be helpful for the specific content being offered, just as item 6 requires some planning of task-relevant instructional strategies.

The posttest is administered after the intervention. This provides one source of evidence of the student's response to the intervention. The teacher also has many clues to the student's responsivity throughout the intervention phase. In a way, the posttest serves as evidence of the

student's ability to transfer what was learned during the teaching interaction.

### Conclusion

The dynamic approach to assessment provides teachers with understanding of how students learn (the learners' cognitive processes), what might account for learning problems (the interaction between learner processes and task processing demands), and promising interventions (teacher mediations). The teacher-as-assessor can also experience the degree of responsiveness of students.

No one said such a complex process would be easy; however, teachers who teach from a "thinking" point of view are already on the road to a thinking assessment. There is an increasing number of resources available to support and nurture further progress.

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