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David Lazear is the founder of New Dimensions of Learning, an organisation that trains educators and business people to apply cutting-edge research on multiple intelligences and other brain-friendly approaches to instruction and business. He has many years’ international experience in applying MI theory in practical ways to classrooms, schools and business.

David Lazear

Solving the Assessment Conundrum

David Lazear

Foreword by Grant Wiggins
Multiple Intelligence Approaches to Assessment
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These three scenarios perfectly illustrate what I call “the assessment conundrum”; namely, our students almost always know, understand, and have learned much, much more than they can demonstrate on any tests we must administer. And yet, we educators are required by school boards, legislatures, and taxpayers, who pay for public education, to preoccupy ourselves with getting better and better test scores each year, even when we know that these test scores do not tell the whole story of what our students have learned, what they understand, and what they know about various subject areas. In A True Test: Toward More Authentic and Equitable Assessment, Grant Wiggins (1989) eloquently describes the conundrum we are facing: “When an educational problem persists despite the well-intentioned efforts of many people to solve it, it's a safe bet that the problem hasn't been properly framed. Assessment in education has clearly become such a problem since every state reports above-average scores on norm-referenced achievement tests
get higher and higher test scores. To a great extent, my evaluation as an educator, by my administrators, peers, and community, to say nothing of my salary level, rests mainly on this.

I got into the teaching profession because I wanted to serve the needs of the next generation of Americans by providing them with the skills and knowledge they would need to function effectively and successfully in the world. Who am I in fact serving? College admissions officers, school board policy-makers (whose major concerns are often more political than in the best interests of students), district schedule-makers, school board/district budget committees, and secretaries who want a simple formula for entering grades into computers. Why do all of these concerns take precedence over the needs of students?

Where do our state legislators come up with their “mandates” for school reform? Do they even have a clue what goes on in schools today and who the student population is? Do they know that the world has changed from when they went to school, and that therefore schooling, which is supposed to prepare students to live effectively in this new world, must be different, as well? How many of them are even marginally aware of the most up-to-date educational research on effective teaching, learning, and human development? I feel like we (students and teachers alike) are often nothing more than pawns in their political chess games.

In an article that appeared in *Educational Leadership*, Carl Glickman (1991) summarizes this teacher’s frustrations and the moral dilemma as follows:

For too long, professionals have gone about the business of teaching and operating schools in ways they privately admit are not in the best interests of students. The reasons for doing so are plentiful—we all live with district policies, state regulations, traditional school structures, mandated curriculum alignment, community pressures, and limited resources . . .

We must confront our knowledge and use it to guide our efforts; then we must operate our schools in different ways, using our knowledge . . . We [must] ask that the school be the center for professional decisions where teachers and administrators control the priorities and means of helping students to learn.

This book is about confronting our knowledge and applying it to restructuring the assessment process in our schools. In so doing, I believe that assessment can become a profound means for enhancing and deepening the learning of our students and for giving back to teachers the raison d’être that led most of them to enter the vocation of being a professional educator.
# Bodily-Kinesthetic Capacities Development Evaluation

(1 = low interest; 2 = consistent growth; 3 = high interest)

<table>
<thead>
<tr>
<th>Basic Level</th>
<th>Complex Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>automatic physical reflexes</td>
<td>gestures, body language</td>
</tr>
<tr>
<td>simple motor skills</td>
<td>coordinated motor skills</td>
</tr>
<tr>
<td>physical independence</td>
<td>role-play, charades</td>
</tr>
<tr>
<td>environment-control actions</td>
<td>body exercise routines</td>
</tr>
<tr>
<td>goal-oriented actions</td>
<td>hands-on creation tasks</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Coherence Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>invention activities</td>
</tr>
<tr>
<td>expressive body movements</td>
</tr>
<tr>
<td>enactment of complex scenes</td>
</tr>
<tr>
<td>complex physical movements</td>
</tr>
<tr>
<td>goal-oriented movements</td>
</tr>
</tbody>
</table>

## NOTES
Intelligence Foci

Procedure

Show students a film, play, or TV show that includes fine representations of the intelligences—beautiful scenery, great soundtrack, lots of action, good script, and so on. Afterward, lead students in a discussion, carefully listening to what they focused their attention on, what captured their imagination, and what they liked or disliked.
Intelligence Foci

<table>
<thead>
<tr>
<th>Student Name: ______________________</th>
<th>Age: ____</th>
<th>Date of Observation: ________</th>
</tr>
</thead>
</table>

**Verbal-Linguistic Discussion Questions**
- What lines of dialogue do you remember?
- What were some of the key words, phrases, or figures of speech used?
- What written words do you remember from any of the scenes?

**Logical-Mathematical Discussion Questions**
- Where were you aware of the use or presence of patterns?
- What do you think would happen in a sequel to what you have seen?
- How would you compare and contrast the major characters?

**Visual-Spatial Discussion Questions**
- What scenes do you remember?
- What physical objects do you remember? What colors?
- What visual patterns? What symbols were used?

**Bodily-Kinesthetic Discussion Questions**
- What action scenes can you recall?
- What gestures and physical movements did the main characters use?
- Where were you aware of movement of any kind?

**Musical-Rhythmic Discussion Questions**
- What sounds and noises do you remember?
- Where were you aware of music being used?
- Can you hum any of the themes?
- What sounds or music would you add to the production if you could?

**Interpersonal Discussion Questions**
- What are your observations about how the various characters related?
- If you could have one of the characters as a friend, who would you choose? Why?
- What role would you assign each main character on a team or in a cooperative group?

**Intrapersonal Discussion Questions**
- Where were you aware of your own emotions and feelings?
- With whom did you identify? Whom did you dislike and why?
- In a sentence, state what you think the message or moral is.
- What title would you give the film?

**Naturalist Discussion Questions**
- What natural settings do you remember? What objects? What animals?
- If you could go to any natural place, where would you go? Why?
- Which of your senses “got turned on” by the scenes from nature?
Intelligence Foci Scoring

Instructions
1. During the discussion, try to detect the different intelligences students used when watching the movie, play, or TV show. Listen for clues such as those listed below, which reveal different ways in which students are processing the production. Rank the students based on the frequency and intensity of their comments using the following criteria:

<table>
<thead>
<tr>
<th>Score</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>unable to recall information related to the questions; is bored by these kinds of questions</td>
</tr>
<tr>
<td>1</td>
<td>recalls mostly items already mentioned by others; shows little interest in these questions</td>
</tr>
<tr>
<td>2</td>
<td>remembers new things that piggyback on or are related to others’ responses; shows some interest in answering these questions but loses interest quickly</td>
</tr>
<tr>
<td>3</td>
<td>recalls new items from contexts and situations not mentioned previously; demonstrates an appreciation for subtleties of things in the area; interprets the meaning of specific items; items from the discussion of one intelligence trigger responses from another intelligence</td>
</tr>
<tr>
<td>4</td>
<td>keeps coming back to items from this area; shows genuine appreciation for and excitement about questions related to this area; based on information from this area, is able to hypothesize, empathize, analyze, and perform higher-order cognitive tasks related to the larger story; sees connections between items and questions in this area and everyday living</td>
</tr>
</tbody>
</table>

Clues for Listening between the Lines of the Discussion
(What to be looking for)

VERBAL-LINGUISTIC
• remembers specific phrases and patterns of speech
• interprets characters primarily through their speech
• easily recalls written and verbal information from the production
• appreciates linguistically based humor

LOGICAL-MATHEMATICAL
• grasps thought and behavior patterns of various characters
• tries to figure out what is going to happen next based on clues
• analyzes cause-and-effect relationships
• notices and points out various motifs in the story
EXAMINATION STRUCTURE

- Standards are developmentally appropriate
- Test standards and questions are known in advance
- Performance is judged by a panel of experts

Criteria of Authentic Assessment

- Expectations, Standards, and Testing Formats Are Public Knowledge

Exam Structure

- Teaching to the test for improved performance
- Realistic constraints are placed on test-taker

Academic Design

- Part of the Regular Teaching and Learning Process
- Emphasis on Progression toward Mastery
- Portfolio-like product expectations

Grading and Scoring

- Assessee feedback, explaining, and questioning
- Assessor probing for genuine understanding
- Recurring opportunities to take the same test

AUTHENTIC ASSESSMENT
Personal Reflective Journals and Logs

As far as we know, human beings are the only creatures who have the ability to be self-reflective. That is, we possess self-consciousness: the unique capacity to step back from ourselves and watch ourselves involved in any activity. And, what is more, we can alter our behavior even in the midst of it.

This self-reflective or self-awareness dynamic is at the heart of the learning process. It is key to helping students grasp the personal implications of what they are studying. Most of what we learn at deep levels has meaning for us personally. We can learn an immense amount about students' understanding of various concepts if we read between the lines or listen between the words of their personal reflections on the meanings and interpretations they give to what they have learned.

One of the best ways to provide yourself with the opportunity to read between the lines is to encourage students to keep reflective journals or logs to help them be aware of their thoughts, feelings, learnings, questions, and ideas. In Patterns for Thinking, Patterns for Transfer, Jim Bellanca and Robin Fogarty (1989) describe the possibilities inherent in thinking logs:

Writing in the thinking log may take many forms. It may be a narrative, a quote, an essay, jotting, a drawing, a cartoon, a diagram, webs or clusters, a soliloquy, a riddle, a joke, doodles, an opinion, a rebuttal, a dialogue, a letter, a flowchart, or just an assortment of phrases and ideas. The entries may be reflective, evaluative, questioning, personal, abstract, introspective, cynical, incomplete, revealing, humorous, communicative, thoughtful, poetic, rambling, formative, philosophical, or none of the above. There are no right or wrong answers to do the log. It's just a log of one's thinking—whatever that thinking may be. It's a personal record of the connections being made within the framework of the student's cognitive capacities and their experiences. (226–27)

Following are five models for creating student journals and logs that I suggested in Seven Ways of Teaching (Lazear 1991). I have also included an experimental personal reflection log adapted from one in Seven Ways of Knowing (Lazear 1991) that suggests a multimodal journaling and logging process. Each model asks students to reflect on the import of a lesson in a particular way. Journals can involve a variety of modes of reflecting, including writing, drawing, painting, sculpting, role-playing, and dancing. As an assessment tool, journals and logs can help us discern the personal impact of lessons on students, and through students' reflections we can often grasp the relative depth and accuracy of their understanding of what we have been teaching.
Models for Student Journals

1. “THINKING LOGS”* (to process lesson content)

_The main thing I'll remember is . . ._
_A new insight or discovery is . . ._
_I really understood . . ._
_I'm really confused about . . ._
_Something I can use beyond school is . . ._
_Connections I'm making with other things I know are . . ._

2. BEFORE-AND-AFTER SCENARIOS* (to process the impact of a lesson)

Analyze the impact of a unit or lesson on yourself using this chart.

<table>
<thead>
<tr>
<th></th>
<th>BEFORE THE UNIT OR LESSON</th>
<th>AFTER THE UNIT OR LESSON</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Feelings about it</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Thoughts about it</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Associations with it</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Images or pictures in mind</strong></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Now write “How I'm different as a result of this unit or lesson.”

* These models are adapted from Lazear, David. Seven Ways of Teaching: The Artistry of Teaching with Multiple Intelligences. Palatine, Ill.: Skylight, 1991.
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