

A Little Story about Robert...

When Robert Sternberg enrolled in college, he decided to major in psychology.

The professor in his first psychology course lectured all the time and gave tests that focused on the facts taught in the course. Robert earned a C. Even worse, his professor said to him, "There is a famous Sternberg in psychology, and it looks like there won't be another one."

Discouraged, Robert switched his major to math. Unfortunately, he flunked his math course. Robert figured that a "C" is better than an "F", so he switched back to psychology!

Robert Sternberg went on to earn a PhD in psychology and became President of the American Psychological Association (APA). Today, Dr. Sternberg is a well-respected and highly accomplished cognitive psychologist and scholar. His specialty? Studying intelligence. Inspired by his own school experiences and poor performance on standardized tests, Dr. Sternberg developed a theory about intelligence that challenges the idea that intelligence is one "thing" that can be measured on a test.

According to Dr. Sternberg, the famous (and not-so-famous) people who make valuable contributions to our society are not necessarily people who score well on tests, or who got good grades in school. They are people who are "successfully intelligent". This means they use three types of abilities that Dr. Sternberg says make up intelligence: **analytical abilities, practical abilities, and creative abilities**. He calls this his *Triarchic Theory of Intelligence*.

Dr. Sternberg says that *all* human beings have these abilities, but are probably stronger in two or three of them. He has shown through his research that schools and teachers tend to *overemphasize* teaching and testing students for analytical abilities. He says schools and teachers should focus much more than they do on recognizing practical and creative abilities, because those are *equally important* for students to develop in becoming successfully intelligent people.

Today, Dr. Sternberg is the Dean of the College of Liberal Arts & Sciences at Tufts University. He has worked to change the admissions process at Tufts so that practical and creative abilities are as valued as analytical abilities.

Other Tidbits of Interest

- Dr. Sternberg's research has shown that when students are taught in ways that match their "triarchic intelligence" preferences and strengths, they perform *better* on standardized analytical tests than those students who are not taught "triarchically."
- One study that illustrates the important of teaching and testing "triarchically": British researchers gave a group Brazilian street children a set of math problem very much like those we would see on a math test in the United States. The children couldn't do the problems. BUT, when the same children were given the problems in terms of "buying and selling" on the street, they came up with the right answers.

Analytical

Analyze
Critique
Judge
Compare/contrast
Evaluate
Assess

Creative

Create
Invent
Discover
Imagine if ...
Suppose that ...
Predict

Practical

Apply
Use
Put into practice
Implement
Employ
Render practical

Sternberg's Triarchic Theory of Intelligence



According to cognitive psychologist Robert Sternberg, we all have some of each of these intelligences but are usually stronger in one or two areas.

1. Read “A Little Story About Robert...”
2. Complete the task that corresponds with your intelligence preference.

Analytical Task:

Compare Dr. Sternberg's way of viewing intelligence with how school has traditionally viewed intelligence. What aspects, structures, rules, routines, or ways of “doing school” do and don't “fit” with Sternberg's theory?

Practical Task:

Make a list of things a classroom teacher should STOP and/or START doing, in light of Dr. Sternberg's work.

Creative Task:

Retell a personal story that either reinforces or contradicts Dr. Sternberg's experiences and work.

Be prepared to share with your group how your story is a metaphor for why differentiation is important.

Triarchic Theory of Intelligences - Robert Sternberg

Mark each sentence **T** if you like to do the activity.

1. Analyzing characters when I'm reading or listening to a story _____
2. Designing new things _____
3. Taking things apart and fixing them _____
4. Comparing and contrasting points of view _____
5. Coming up with ideas _____
6. Learning through hands-on activities _____
7. Criticizing my own and other kids' work _____
8. Using my imagination _____
9. Putting into practice things I learned _____
10. Thinking clearly and analytically _____
11. Thinking of alternative solutions _____
12. Working with people in teams or groups _____
13. Solving logical problems _____
14. Noticing things others often ignore _____
15. Resolving conflicts _____
16. Evaluating my own and other's points of view _____
17. Thinking in pictures and images _____
18. Advising friends on their problems _____
19. Explaining difficult ideas or problems to others _____
20. Supposing things were different _____
21. Convincing someone to do something _____
22. Making inferences and deriving conclusions _____
23. Drawing _____
24. Learning by interacting with others _____
25. Sorting and classifying _____
26. Inventing new words, games, approaches _____
27. Applying my knowledge _____
28. Using graphic organizers or images to organize your thoughts _____
29. Composing _____
30. Adapting to new situations _____

Transfer your answers from the survey to the key. The column with the most "True" responses is your dominant intelligence.

Analytical

1. _____
4. _____
7. _____
10. _____
13. _____
16. _____
19. _____
22. _____
25. _____
28. _____

Creative

2. _____
5. _____
8. _____
11. _____
14. _____
17. _____
20. _____
23. _____
26. _____
29. _____

Practical

3. _____
6. _____
9. _____
12. _____
15. _____
18. _____
21. _____
24. _____
27. _____
30. _____

Total Number of True:

Analytical _____

Creative _____

Practical _____

The Theory of Multiple Intelligences

Self Assessment

Where does your true intelligence (processing ability) lie? This quiz can help you determine where you stand. Read each statement. If it expresses some characteristic of yours and sounds true for the most part, jot down "T." If the statement is sometimes true, sometimes false, leave it blank.

1. _____ I'd rather draw a map than give someone verbal directions.
2. _____ I can play (or used to play) a musical instrument.
3. _____ I can associate music with my moods.
4. _____ I can add or multiply quickly in my head.
5. _____ I like to work with calculators and computers.
6. _____ I pick up new dance steps quickly.
7. _____ It is easy for me to say what I think in an argument or debate.
8. _____ I enjoy a good lecture, speech, or sermon.
9. _____ I always know north from south no matter where I am.
10. _____ Life seems empty without music.
11. _____ I always understand the direction that comes with new gadgets or appliances.
12. _____ I like to learn puzzles and play games.
13. _____ Learning to ride a bike (or skate) was easy.
14. _____ I am irritated when I hear an argument that is illogical.
15. _____ My sense of balance and coordination is good.
16. _____ I often see patterns and relationships to numbers faster and easier than others.
17. _____ I enjoy building models or sculpting.
18. _____ I am good at finding the fine points of word meaning.
19. _____ I can look at an object one way and see it turned sideways or backwards just as easily.
20. _____ I often connect a piece of music with some event in my life.
21. _____ I like to work with numbers and figures.
22. _____ Just looking at shapes of buildings and structures is pleasurable to me.
23. _____ I like to hum, whistle, and sing in the shower or when I am alone.
24. _____ I am good at athletics.
25. _____ I would like to study the structure and logic of languages.
26. _____ I am usually aware of the expressions on my face.
27. _____ I am sensitive to the expression on other people's faces.
28. _____ I stay in touch with my moods. I have no trouble identifying them.
29. _____ I am sensitive to the moods of others.
30. _____ I have a good sense of what others think of me.

Scoring Sheet

Place a checkmark by each item, which you marked as "True." Add your totals. A total of four in any of the categories A through E indicates strong ability. In categories F through G a score of one or more means you have abilities in these areas as well.

A Linguistics	B Logical/Math	C Musical	D Spatial	E Body/Kinesthetic	F Intrapersonal	G Interpersonal
7 _____	4 _____	2 _____	1 _____	6 _____	26 _____	27 _____
8 _____	5 _____	3 _____	9 _____	13 _____	28 _____	29 _____
14 _____	12 _____	10 _____	11 _____	15 _____		30 _____
18 _____	16 _____	20 _____	19 _____	17 _____		
25 _____	21 _____	23 _____	22 _____	24 _____		

The Modality Preferences Instrument

Follow the directions below to get a score that will indicate your own modality (sense) preference(s). This instrument, keep in mind that sensory preferences are usually evident only during prolonged and complex learning tasks.

Identifying Sensory Preferences

Directions: For each item, circle "A" if you agree that the statement describes you most of the time.

- | | |
|---|---|
| 1. I prefer reading a story rather than listening to someone tell it. | A |
| 2. I would rather watch television than listen to the radio. | A |
| 3. I remember names better than faces. | A |
| 4. I like classrooms with lots of posters and pictures around the room. | A |
| 5. The appearance of my handwriting is important to me. | A |
| 6. I think more often in pictures. | A |
| 7. I am distracted by visual disorder or movement. | A |
| 8. I have difficulty remembering directions that were told to me. | A |
| 9. I would rather watch athletic events than participate in them. | A |
| 10. I tend to organize my thoughts by writing them down. | A |
| 11. My facial expression is a good indicator of my emotions. | A |
| 12. I tend to remember names better than faces. | A |
| 13. I would enjoy taking part in dramatic events like plays. | A |
| 14. I tend to sub vocalize and think in sounds. | A |
| 15. I am easily distracted by sounds. | A |
| 16. I easily forget what I read unless I talk about it. | A |
| 17. I would rather listen to the radio than watch TV. | A |
| 18. My handwriting is not very good. | A |
| 19. When faced with a problem, I tend to talk it through. | A |
| 20. I express my emotions verbally. | A |
| 21. I would rather be in a group discussion than read about a topic. | A |
| 22. I prefer talking on the phone rather than writing a letter to someone. | A |
| 23. I would rather participate in athletic events than watch them. | A |
| 24. I prefer going to museums where I can touch the exhibits. | A |
| 25. My handwriting deteriorates when the space becomes smaller. | A |
| 26. My mental pictures are usually accompanied by movement. | A |
| 27. I like being outdoors and doing things like biking, camping, swimming, hiking etc. | A |
| 28. I remember best what was done rather than what was seen or talked about. | A |
| 29. When faced with a problem, I often select the solution involving the greatest activity. | A |
| 30. I like to make models or other hand crafted items. | A |
| 31. I would rather do experiments rather than read about them. | A |
| 32. My body language is a good indicator of my emotions. | A |
| 33. I have difficulty remembering verbal directions if I have not done the activity before. | A |

Interpreting the Instrument's Score

Total the number of "A" responses in items 1-11 _____

This is your visual score

Total the number of "A" responses in items 12-22 _____

This is your auditory score

Total the number of "A" responses in items 23-33 _____

This is your tactile/kinesthetic score

- If you scored a lot higher in any one area: This indicates that this modality is very likely your preference during a protracted and complex learning situation.
- If you scored a lot lower in any one area: This indicates that this modality is not likely to be your preference(s) in a learning situation.
- If you got similar scores in all three areas: This indicates that you can learn things in almost any way they are presented.

Interaction Inventory

Directions:

- Rank order the responses in rows below on a scale from 1 to 4 with 1 being "least like me" to 4 being "most like me."
- After you have ranked each row, add down each column.
- The column(s) with the highest score(s) shows your primary Personal Objective(s) in your personality.

In your normal day-to-day life, you tend to be:							
Nurturing Sensitive Caring		Logical Systematic Organized		Spontaneous Creative Playful		Quiet Insightful Reflective	
In your normal day-to-day life, you tend to value:							
Harmony Relationships are important		Work Time schedules are important		Stimulation Having fun is important		Reflection Having some time alone is important	
In most settings, you are usually:							
Authentic Compassionate Harmonious		Traditional Responsible Parental		Active Opportunistic Spontaneous		Inventive Competent Seeking	
In most situations you could be described as:							
Empathetic Communicative Devoted		Practical Competitive Loyal		Impetuous Impactful Daring		Conceptual Knowledgeable Composed	
You approach most tasks in a(n) _____ manner:							
Affectionate Inspirational Vivacious		Conventional Orderly Concerned		Courageous Adventurous Impulsive		Rational Philosophical Complex	
When things start to "not go your way" and you are tired and worn down, what might your responses be?							
Say "I'm sorry" Make mistakes Feel badly		Over-control Become critical Take charge		"It's not my fault" Manipulate Act out		Withdraw Don't talk Become indecisive	
When you've "had a bad day" and you become frustrated, how might you respond?							
Over-please Cry Feel depressed		Be perfectionistic Verbally attack Overwork		Become physical Be irresponsible Demand attention		Disengage Delay Daydream	
Add score:							
Harmony		Production		Connection		Status Quo	