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### Next Steps in the Journey toward Self-Fulfillment through Critical and Creative Thinking

Charles Rauscher

*University of Massachusetts Boston*

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## GLOSSARY OF TERMS

Analysis: the capability to rationally and objectively consider alternatives

Dispositions (Thinking): are our attitudes, values, feelings, what motivates us to use our knowledge

Evaluation: the ability to determine the worthiness of alternatives

Frames of Reference: relates to our thinking modalities, they could be analytical or social or political

Inference: having the capability of applying past knowledge and experience to current thinking situations.

Interpretation: one's comprehension of our experiences, our understanding of things

Knowledge (Higher Order): the mastery of a discipline, the ability to apply the discipline as well as understanding the foundations beneath the application

Metacognition: thinking about our thinking, mental management

Methodological Belief: the ability to listen to an individual's position and also attempt to believe that position.

Monological Thinking: a myopic view, lacking open-mindedness, the opposite of dialogical thinking

Multilogical Questioning: the ability to appreciate and understand another's point of view; rationally adopt their position

Open-Mindedness: the willingness to listen and evaluate another individual ideas without prejudice.

Point of View: our position based on our assessment of the situation, for example in the purchase of a car it could be an economic point of view.

Sophisticated Believer: appear to be critical thinkers, but are only concerned with and promote their one point of view

Strategic Spirit: being deliberate and reflective in our thinking, process driven approach to decision making and problem solving

Transfer (Knowledge): knowledge or skill learned in one environment can enhance or influence additional learning

APPENDIX C (continued)

Vulgar Believer: operate from an egocentric point of view, stereotypical, this thinking is superficial

Worldview Thinking: encompasses our culture and experiences, these attributes help mold our thinking

## APPENDIX D

### CRITICAL THINKING EXERCISE

#### Decisions in Healthcare

##### Transplant Operation:

- cost is approximately \$250,000 without complications; post-operative care could approach \$150,000

##### Donor Background:

- Donor is 23 yr. Old white/female college student , died in a car accident
- Donor family: mother is catholic; father is an atheist, racist opposed to daughter's upcoming marriage to an African American
- Brother has Aids

##### Liver Transplant Candidates:

###### Patient #1:

Name: Barbara Walters  
Demographics: 37, black female, 2 children, divorced  
Biographic: community activist, enrolled part-time in community college  
Relevant data: has HIV, Hepatitis C; she was refused a transplant from previous insurer because it was deemed experimental

###### Patient #2:

Name: Father Leo Lawless  
Demographics: 53, white male  
Biographic: in the priesthood for 25 yrs.  
Relevant data: recently accused pedophile, number 1 on the transplant list prior to allegations; sclerosis of the liver

###### Patient #3:

Name: Liz Walkman  
Demographics: 46, single parent, one 8 yr. old child  
Biographic: local TV anchor woman  
Relevant data: autoimmune disease, liver failure imminent, possible brain lesion pending final review

## APPENDIX E

### GARDNER'S THEORY OF INTELLIGENCES

1. Linguistic Intelligence: the capacity to use language to express what is on your mind and to understand other people. Any writer, orator, speaker, lawyer, or other person for whom language is an important stock in trade has great linguistic intelligence.
2. Logical/Mathematical Intelligence: the capacity to understand the underlying principles of some kind of causal system, the way a scientist or a logician does; or to manipulate numbers, quantities, and operations, the way a mathematician does.
3. Musical Rhythmic Intelligence: the capacity to think in music; to be able to hear patterns, recognize them, and perhaps manipulate them. People who have strong musical intelligence do not only remember music easily: it is constantly present in all their activities and thoughts.
4. Bodily/Kinesthetic Intelligence: the capacity to use your whole body or parts of your body (your hands, your fingers, your arms) to solve a problem, make something, or put on some kind of production. The most obvious examples are people in athletics or the performing arts, particularly dancing or acting.
5. Spatial Intelligence: the ability to represent the spatial world internally in your mind, the way a sailor or airplane pilot navigates the large spatial world, or the way a chess player or sculptor represents a more circumscribed spatial world. Spatial intelligence can be used in the arts or in the sciences.
6. Naturalist Intelligence: the ability to discriminate among living things (plants, animals) and sensitivity to other features of the natural world (clouds, rock configurations). This ability was clearly of value in our evolutionary past as hunters, gatherers, and farmers; it continues to be central in roles such as a botanist or a chef.
7. Intrapersonal Intelligence: having an understanding of yourself; knowing who you are, what you can do, what you want to do, how you react to things, which things to avoid, and which things to gravitate toward. We are drawn to people who have a good understanding of themselves who tend to know what they can and can't do, and to know where to go if they need help.
8. Interpersonal Intelligence: the ability to understand other people. It is an ability that everyone needs, but is especially important for teachers, clinicians, salespersons, or politicians, that is for individuals who deal with other people.
9. Existential Intelligence: the ability and proclivity to pose (and ponder) questions about life, death, and ultimate realities.

Anon. (2004). Typography of Nine Intelligences. The Institute of Critical Thinking. In <http://sta.uwi.edu/cms/index.php?option=content&task=view&id=50&Itemid=65>.

## APPENDIX F

### DIVERGENCE & CONVERGENCE

Divergence: stimulate thinking by diversifying and exploring

- **Suppose:** Putting yourself in imaginary situations. Suppose you were from Mars, what would this problem look like? Suppose you were six years old or three feet tall, what would the future look like to you? Suppose you could smash all the assumptions around this issue?
- **Wander:** Wandering through new territory with an open mind, make new connections. For instance, you can wander through an antique store.
- **Associate:** Deliberately create new connections between objects, ideas, events, people, or processes. This process allows you to see new relationships and new possibilities.
- **Morph:** Change various aspects of the situation, make the familiar strange and the strange familiar.
- **Inquire:** Questions create openings. A great question can unravel a mystery like a kitten batting a ball of twine. Finding those great questions that open minds and the secrets of the universe is a learned skill based on some simple principles and practice.

Convergence: refine and choose the best possibilities

- **Sort:** Group possibilities into meaningful categories. Categories might be related to time, feasibility, market demand, or availability of resources.
- **Order:** Possibilities can be ranked to create an order of preference.
- **Adapt:** Once likely possibilities have been identified, they can be expanded and adapted to create even better ideas.
- **Refine:** Likely possibilities need to be examined to find the weak spots and possible failure points.
- **Select:** Ideas are only ideas until they are implemented and to be implemented, they need to be "owned." Getting the right people to take ownership in the idea is a critical piece of the process.

Joyce Wycoff. (2004). [Creativity made simple: Divergence and convergence are critical to successful ideation](http://www.innovationtools.com/Articles/ArticleDetails.asp?a=152). In [www.innovationtools.com/Articles/ArticleDetails.asp?a=152](http://www.innovationtools.com/Articles/ArticleDetails.asp?a=152).