# Nature of Intelligence

Kristie L. Marriner
AET/500 - Cynthia Loeffler
March 7, 2016



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# Intelligence

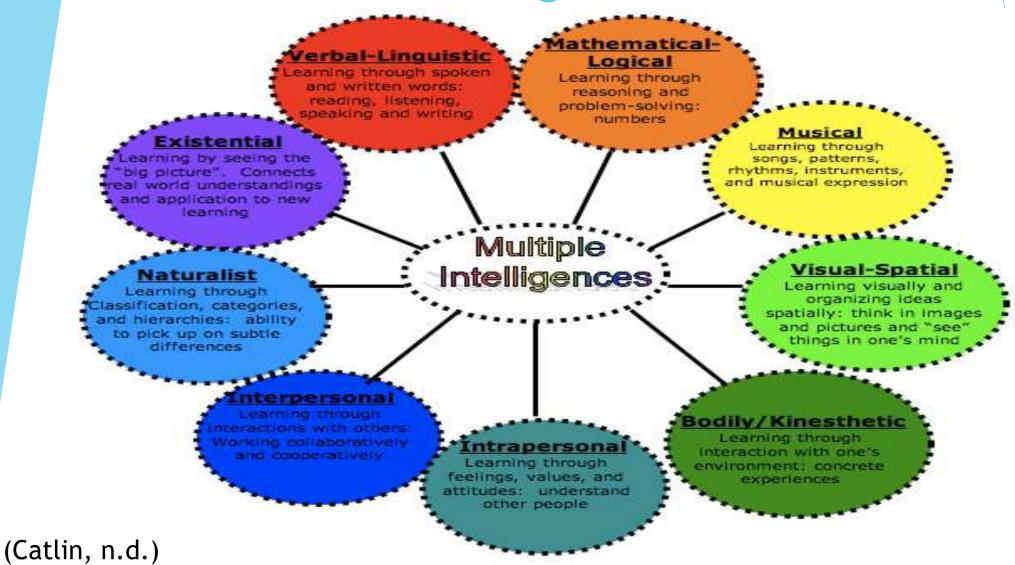
## Definition:

capacity for learning, reasoning, understanding, and similar forms of mental activity; aptitude in grasping truths, relationships, facts, meanings, etc.

www.dictionary.com



# Gardner's Theory of Multiple Intelligence



# Gardner's Theory of Multiple Intelligence

### Verbal-Linguistic:

Varied reading assignments, discussions, written case histories, communication courses

### Mathematical-Logical:

Prefers complex operations, patterns and relationships, cause and effect, creating theory or hypothesis

#### Musical:

Use rhythm or cadence in lessons or through class activities

### Existential:

Learns by connecting meaning; use cases, realistic scenarios, reasoning and connecting to a big picture

### Naturalist:

Learns through nature, patterns, and connections; use activities to classify, group, or categorize

# Application to Adult Learning

### Visual-Spatial:

Learns by watching and observing; Use graphs, videos, presentations, to generate mental images

### Interpersonal:

Learns through group interaction;
Use presentations, collaborative
Learning and group
assingments

### Intrapersonal:

Learns through expression; use goals, journals, and activities that help to establish understanding and purpose.

### Bodily/Kinesthetic:

Learns by touch and movement; Use games, role play, field trips, and creating models

(Cooper, 2013)

# Sternberg's Theory of Practical Intelligence

- individuals applying their abilities to the kinds of problems that confront them in everyday life

### Analytic intelligence

Mental steps or "components" used to solve problems

### Creative intelligence

Use of experience in ways that foster insight

### Practical intelligence

Ability to read and adapt to the contexts of everyday life

(Stateuniversity.com)

# Sternberg's Theory of Practical Intelligence

## **Analytic Intelligence**

Incorporate activities that will analyze, evaluate, judge, compare or contrast

Application to Adult Learning

## **Creative Intelligence**

Write journals, create infographs, presentations, songs, role play, or poems

## **Practical Intelligence**

if..., problem solving, and pull evidence to defend a point

(Stateuniversity.com)

# Goleman's Theory of Emotional Intelligence



**Perceiving Emotions** 

Using emotions to facilitate thinking

Understanding **Emotions** 

> Managing **Emotions**

www.educational-business-articles.com

Adapted from Mayer & Salovey (1997)

# Goleman's Theory of Emotional Intelligence

- the ability to manage ourselves and our relationships effectively

Self Social

Recognition

Regulation

### Self Awareness

#### Self-Confidence

Emotional Self Awareness

Accurate Self Assessment

## Self Management

#### Self-Control

Trustworthiness

Conscientiousness

Adaptability

Drive and motivation

Initiative

### Social Awareness

### **Empathy**

Organisational Awareness

Understanding the environment

### Social Skills

### <u>Influence</u>

Inspirational Leadership

Developing others

Influence

**Building bonds** 

Team Work and Collaboration

# Cultural Influences to Intelligence and Practical Applications

## Asian Concepts of Intelligence

- Based on concepts of Confucian, Taoist, Buddhist, and Hindu traditions
- Confucian
  - ► Intelligence is built on character
  - Maintain social relationships
  - Intelligence linked to religion and morals
  - Intelligence is compared to formally educated vs. uneducated
  - Believe in self-cultivation and formal education
- Taoist
  - Intelligence is based on a person knowing Tao and practicing it

- Hindu and Buddhist
  - Intelligence is determined by mental effort, knowledge, discrimination, noticing, recognizing, and decision making
  - Pure knowledge through senses and five motor organs
  - Intelligence is passing the state of enlightenment
- Chinese and Taiwanese
  - People developed a form of multiple intelligence similar to Gardner

# Cultural Influences to Intelligence and Practical Applications

# African Concepts of Intelligence Western Concepts of Intelligence

- Western Nigeria
  - Intelligence is based on sensible behavior
- Ogbu People
  - Intelligence is based on practical skills
- Luo People
  - Intelligence is academic, specific skills, practical thinking, social attributes, and comprehending instruction
- East Africa
  - Focus is placed on practical intelligence and less on academic

- Historically based but evolved through western culture
- American view
  - Based on intelligent, academically intelligent, and every day intelligent
  - Social behavior and practical skills are important
  - Multiple intelligences may exist
  - Intelligence incorporates perception, reasoning, knowledge, speed when completing a task, decision making, problem solving, and inference

# Cultural Differences and Practical Applications

## **Differences**

- Academic vs. practical and their level of importance
- Eastern and African cultures are not familiar with western culture
- Intelligence is woven with religion and philosophy with eastern and African cultures
- Sense of value and character differ

## Adult Learning Application

- Intelligence can vary based on experiences, values, and beliefs
- Instruction should include various methods to embrace cultural diversity
- Encompass various theories of intelligence to meet the needs of the adult learner
- Get to know the student population to understand values and possible learning styles

# References

Catlin, J. (n.d.). Howard Gardner's Multiple Intelligences. Retrieved from <a href="http://learningforevermore.weebly.com/howard-gardners-multiple-intelligences.html">http://learningforevermore.weebly.com/howard-gardners-multiple-intelligences.html</a>

Cocodia, E. A. (2014). Cultural Perceptions of Human Intelligence. *Journal of Intelligence*, 2(4),180-196. doi:10.3390/jintelligence2040180

Cooper, S. (2013). Theories of Learning in Educational Psychology. Retrieved from <a href="http://www.lifecircles.com/Learningtheories/Gardner.html">http://www.lifecircles.com/Learningtheories/Gardner.html</a>

StateUniversity.com. (n.d.). Intelligence - Triarchic Theory of Intelligence. Retrieved from <a href="http://education.stateuniversity.com/pages/2104/Intelligence-TRIARCHIC-THEORY-INTELLIGENCE.html">http://education.stateuniversity.com/pages/2104/Intelligence-TRIARCHIC-THEORY-INTELLIGENCE.html</a>