Multi Dimensional Intelligence

Objectives

After this lesson, you will be able to

- understand the emphasis of Multi Dimensional Intelligence.
- identify the special skills of each of the intelligence.
- state the critiques of the theory.
- define learning style.
- understand the difference between learning style and multi dimensional intelligence.

Keywords

- Kinesthetic Intelligent: A person who has strong and flexible body movements such as dancers and athletes.
- Intrapersonal Intelligent: A person who is thoughtful and has strong planning or designing skills.
- Logical Intelligent: A person who is strong in mathematical calculations and aptitude.
- Linguistic Intelligent: A person who has extremely good linguistic skills and vocabulary.
- Musical Intelligent: A person who understands rhythm and is musically inclined.
- Interpersonal Intelligent: A person who has strong social skills.
- Naturalist Intelligent: A person who likes nature and environment.
- Spatial Intelligent: A person who has strong visualizing power.
- Learning Style: Uniqueness of how each learner receives and processes new information through their senses.

Multi Dimensional Intelligence

Howard Gardener believed that every student as unique style of learning and has different abilities. He has done extensive research and originated a theory named Multi Dimensional Intelligence or Multiple Intelligence.

This theory states that a person does not have one but eight types of intelligence. In case one part of the brain is damaged then may be one intelligence or ability is damaged sparing the others.

Multiple Intelligence is also referred as Learning Styles though Howard Gardner does not agree with this name.

Below are the 8 types of intelligence.

8 Types of Intelligence

- Kinesthetic Intelligence
- Intrapersonal Intelligence
- Logical Intelligence
- Linguistic Intelligence
- Musical Intelligence
• Interpersonal Intelligence
• Naturalist Intelligence
• Spatial Intelligence

This can be easily remembered as KILL MINS.

**Kinesthetic Intelligence**
Specific Abilities: Flexible Body Movements Can do well as: Athlete, Surgeon, Dancer

**Intrapersonal Intelligence**
Specific Abilities: Strong Planning Can do well as: Psychiatrist, Design Planner

**Logical Intelligence**
Specific Abilities: Strong Aptitude and Logic Can do well as: Mathematician, Financier

**Linguistic Intelligence**
Specific Abilities: Strong Vocabulary and Language Can do well as: Writer, Content Developer

**Musical Intelligence**
Specific Abilities: Strong knowledge of Rhythm and Melody Can do well as: Singer, Music Composer

**Interpersonal Intelligence**
Specific Abilities: Strong Social and Communication Skills Can do well as: Public Relations, Journalist

**Naturalist Intelligence**
Specific Abilities: Strong knowledge of plants, climate and animals Can do well as: Environmentalist, Botanist, Veterinary Doctor

**Spatial Intelligence**
Also known as visual.
Specific Abilities: Strong Imagination Can do well as: Painter, Businessman

**Critiques of the Theory**
There are 3 major critiques of this theory.

• Not measurable: None of the 8 intelligence can be measured using any formula or method.
• Logistically difficult: In a class with large number of students, this theory will be difficult to apply as each student may have different intelligence.
• Inte **elligence or Talent: This is an ongoing debate. If a person is specifically good in singing is it intelligence or talent?
Learning Styles

It is the uniqueness of how each learner receives and processes new information through their senses. The four most common kinds are: 1. Visual - learns best when information is seen. 2. Aural - learns best when information is heard. 3. Reading / Writing - learns best when information is written. 4. Kinesthetic - learns best when information is presented through physical means.

Multiple Intelligences and Learning Styles

<table>
<thead>
<tr>
<th>Intelligence</th>
<th>Learning Styles</th>
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<tbody>
<tr>
<td>Kinesthetics</td>
<td>Kinesthetic</td>
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<tr>
<td>Interpersonal</td>
<td>Aural</td>
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<tr>
<td>Linguistic</td>
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<td>Musical</td>
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<tr>
<td>Intra-personal</td>
<td>Reading / Writing</td>
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<tr>
<td>Naturalist</td>
<td>Kinesthetic</td>
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<tr>
<td>Spatial</td>
<td>Visual</td>
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Previous Year Questions

1. Suresh generally likes to study alone in a quiet room whereas Madan likes to study in a group with his friends. This is because of difference in their:
   a. Values
   b. Aptitudes
   c. Learning Styles
   d. Levels of reflectivity

2. Which of the following observations supports Howard Gardner's theory of multiple intelligence?
   a. Damage to one part of the brain affects only a particular ability sparing others
   b. Intelligence is an interaction of analytical, creative and practical intelligence
   c. Different intelligence are hierarchical in nature
   d. Teachers should follow one specific theory of educational innovation at the time of designing instruction

3. Howard Gardner's theory of multiple intelligences emphasizes
   a. general intelligence
   b. common abilities required in school
   c. the unique abilities of each individual
   d. conditioning skills in students

4. Theory of multiple intelligences implies the following except
   a. disciplines should be presented in a numbers of ways
b. learning could be assessed through a variety of means

c. emotional intelligence is not related to IQ

d. intelligence is a distinct set of processing operations used by an individual to solve problems

5. A teacher makes use of a variety of tasks w cater to the different Learning Styles of her learners. She is influenced by

a. Vygotsky's sociocultural theory

b. PiMa's cognitive development theory

c. Kohlberg’s moral development theory

d. Gardner's multiple intelligence theory

6. Ability to recognize and classify all varieties of animals, minerals and plants, according to multiple intelligences theory, is called

a. Naturalist intelligence

b. Linguistic intelligence

c. Spatial intelligence

d. Logico - mathematical intelligence

7. Which one of the following illustrates a person with linguistic intelligence?

a. The ability to notice and make distinctions among others

b. The ability to handle long chains of reasoning

c. Sensitivity to the meaning and order of words and the varied uses of language

d. Sensitivity to pitch, melody and V tone

8. The class teacher observed Raghav in her class playing melodious self-composed music on his keyboard. The class teacher thought that Raghav seemed to be high in ............ intelligence.

a. spatial

b. bodily-kinesthetic

c. musical

d. linguistic

9. According to Gardner's theory of multiple intelligence, the factor that would contribute most for being a 'self-aware' individual would be

a. Musical

b. Spiritual

c. Linguistic

d. Intrapersonal

10. Which one of the following is an example of Learning Styles?

a. Visual

b. Accrual

c. Factual

d. Tactual
11. In context of 'theory of multiple intelligences', which one of the following intelligences is required for an airforce pilot?<<
   
a. Interpersonal  
b. Linguistic  
c. Kinesthetic  
d. Intrapersonal

12. Which one of the following could be an end stage of a child possessing bodily-kinesthetic intelligence?
   
a. Orator  
b. Politicalleader  
c. Surgeon  
d. Poet

13. "Logical mathematical intelligence" is associated with
   
a. two-factor theory  
b. group factor theory  
c. hierarchical theory  
d. multiple intelligence theory

14. Following are the critical views about the 'Theory of Multiple Intelligences', except
   
a. it is not research-based  
b. different intelligences demand different methods for different students  
c. gifted students usually excel in a single domain  
d. it lacks of empirical support

15. `Theory of Multiple Intelligences' cannot be legitimized as it
   
a. is not possible to measure different intelligences as there are no specific tests  
b. does not place equal importance on all seven intelligences  
c. is based only on sound empirical studies done by Abraham Maslow throughout his life  
d. is not compatible with general intelligence `g', which is most important

16. Which one of the following is a critique of theory of multiple intelligences?
   
a. Multiple intelligence are only the 'talents' present in intelligence as a whole.  
b. Multiple intelligence provides students to discover their propensities.  
c. It overemphasises practical intelligence.  
d. It cannot be supported by empirical evidence at all.

**Check For Understanding**

1. Choose the best option for the questions below.

   1. The class teacher observed Reema quietly drawing very neat profile pictures of her friend. She thought to her self that Reema has high intelligence.
a. Logical
b. Musical
c. Spatial
d. Intrapersonal

1. Sravan loves animal and plants. He can cure anyone by preparing a paste from ayurvedic plants. He is also doing a research on plants in Sundarbam forest. Sravan will most likely become a successful

   a. Doctor
   b. Environmentalist
   c. Veterinary
   d. Compounder

2. ......... has found Multi Dimensional Intelligence.

   a. Lev Vyogotsky
   b. Noam Chomsky
   c. Howard Gardner
   d. Jean Piaget

3. Write True or False.
   1. In a class of 40 students it is easy to apply Multi Dimensional Intelligence.
   2. Linguistic intelligent person is good with language.
   3. Kinesthetic intelligence is about being kind and emotional.
   4. Interpersonal people are mostly thoughtful.
   5. KILL MIMS is the best way to remember the 8 types of Intelligence.
   6. Learning Style is not same as Multiple Intelligence.
   7. Multiple Intelligence theory is measurable.
   8. In multiple intelligence and learning style mapping, Interpersonal intelligence is similar to Aural.

4. Fill in the blanks.
   1. ......... is the other name for spatial intelligence.
   2. Mathematicians are .......... intelligent.
   3. ......... intelligent persons may like gardening.
   4. ......... intelligent persons are very social and friendly.
   5. Musicians are .......... intelligent.
   6. .......... mnemonic is the best way to remember the Learning Styles.
   7. .......... learners learns best when information is heard.
   8. .......... is how each learner receives and processes new information using his/her senses.
   9. Multiple Intelligence mainly has ........ number of critiques.
Answers

Previous Year Questions

1. c. Learning Styles
2. a. Damage to one part of the brain affects only a particular ability sparing others
3. c. the unique abilities of each individual
4. c. emotional intelligence is not related to IQ
5. d. Gardner's multiple intelligence theory
6. a. Naturalist intelligence
7. c. Sensitivity to the meaning and order of words and the varied uses of language
8. c. musical
9. c. Linguistic
10. a. Visual
11. c. Kinesthetic
12. c. Surgeon
13. d. multiple intelligence theory
14. c. gifted students usually excel in a single domain
15. a. is not possible to measure different intelligences as there are no specific tests
16. a. Multiple intelligence are only the ‘talents’ present in intelligence as a whole.

Check For Understanding

1. Choose the best option for the questions below.
   1. c. Spatial
   2. b. Environmentalist
   3. c. Howard Gardner

#. Write True or False
1. False
2. True
3. False
4. False
5. True
6. False
7. True

#. Fill in the blanks.
1. Visual
2. Logical
3. Naturalist
4. Interpersonal
5. Musically
6. VARK
7. Aural
8. Learning Style
9. Three