

## ENHANCING MULTIPLE INTELLIGENCE IN THE CLASSROOM

By

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### Abstract

*The intelligence of an individual is denoted by his/her capacity to learn. It differs from person to person. Multiple intelligence is a theory describing the different ways students learn and acquire information. Howard Gardner's Theory of Multiple Intelligences (1983) which became popular among teachers as well as parents by serving as a tool to explore the gifts and talents of children. It enables teachers to explore deeply on curriculum transaction, assessment and pedagogical practices. It helps them to actively engage in developing new approaches and meet the needs of diverse students in the classroom. When multiple intelligence theory is implemented by teachers, it can help them in creating an inclusive classroom to cater the diverse requirements of all students which in turn makes teaching-learning process more effective.*

**Keywords:** *multiple intelligence, verbal linguistic, logical mathematical, visual spatial, bodily kinesthetic, musical rhythmic, interpersonal, intrapersonal, naturalistic, existential.*

### Introduction

Intelligence is the capacity to perceive or infer information, retain it as knowledge and apply it to adaptive behaviour within a particular environment or context. It is an undeniable truth that all individuals possess a set of intelligence which makes them unique. All individuals are not alike. Each of them has their own strengths as well as their weaknesses. The intelligence of an individual is

denoted by his power or capacity. It differs from one individual to another. Howard Gardner's Theory of Multiple Intelligences is a widely recognised tool that helps parents and teachers to identify and develop the unique talents and abilities in their children. Different areas of intelligence are described by Gardner which includes verbal linguistic intelligence, logical mathematical intelligence, visual spatial intelligence, bodily kinesthetic

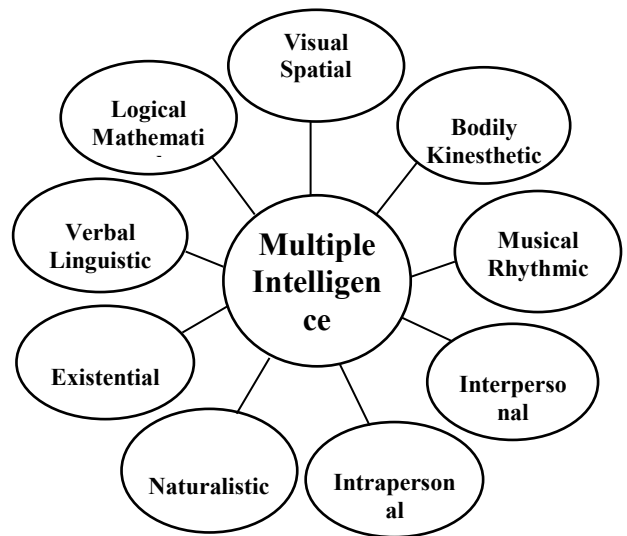
intelligence, musical rhythmic intelligence, interpersonal intelligence, intrapersonal intelligence, naturalistic intelligence and existential intelligence.

**Theory of multiple intelligence**

The study of intelligence involves multi-disciplinary, scientific and systematic act where inferences are drawn from various disciplines such as Psychology, Sociology, Anthropology, Biology, Neurology and also Humanities. It has led to the development of the Multiple Intelligence idea, which is discussed in Gardner's book *"Frames of mind."* Gardner (1983) states that intelligence encompasses more than just Intelligence Quotient (IQ), as a high IQ score does not necessarily translate to practical intelligence without accompanying productivity. Intelligence is stated by Gardner in a much broader way than psychometricians who considered intelligence as a simple entity described psychometrically with an IQ score.

The Theory of Multiple Intelligence is transforming the approach some

teachers teach. Gardner describes intelligence as the ability to create valuable products or solve problems that are relevant across diverse cultural settings. According to him, there is no general intelligence, whereas all individuals have multiple intelligences that can be nurtured and strengthened. The categories of intelligence are mentioned below.



According to the Theory of Multiple Intelligence, all these areas of intelligence are necessary to create effective functioning of society. Teachers need to transmit a wide range of knowledge and abilities to students and should value each of these categories of intelligence. In the classroom, all students differ in the

sense that they have different sets of developed intelligence. Teachers have the ability to help students understand a subject by teaching them how to use their higher order cognitive abilities instead of just their lower order skills. Since all students have different learning styles, they can be evaluated by creating and applying an *'intelligence file'* that can help the teachers to evaluate and correctly choose the most suitable and efficient teaching methods in the classroom for the benefit of students.

## **Areas of Multiple Intelligence**

### **Verbal Linguistic Intelligence**

Verbal Linguistic Intelligence is the area of intelligence which is responsible for all kinds of linguistic competencies. If a student has this type of intelligence, he probably likes to play word games, make up poetry and stories, get involved in discussions with other people and also involve in debating, formal speaking, creative writing and telling jokes. Students possessing this type of intelligence are also adept at manipulating language in speaking, writing, and reading. They have a strong vocabulary and employ

auditory skills in addition to speaking well. They also think in terms of words, write clearly, and spell with ease. Authors, journalists, poets, orators, politicians, salespeople, translators, comedians and lawyers are mostly found to exhibit this type of intelligence.

The methods and tools that can be used in teaching-learning to improve students' verbal communication skills are listening to talking books and cassettes, involving in speeches and debates, extemporaneous speaking, large and small group discussions, brainstorming activities, choral and individualised reading, reading aloud in class, use of worksheets and manuals, writing activities, word games, utilising word processors, recording one's speech, etc.

### **Logical Mathematical Intelligence**

The branch of intelligence known as Logical Mathematical Intelligence encompasses all aptitudes, skills, and capacities related to logic and mathematics in their various manifestations. When faced with a difficulty, learners who are logical and mathematical in nature tend to be

proactive. Students possessing this kind of intelligence are able to comprehend numerical correlations and patterns. A student is logically and mathematically smart when he thinks in terms of numbers, patterns and algorithms. These students often work on mathematical problems, patterns, strategy games and also involve in experiments. It is typically observed that mathematicians, physicists, and philosophers possess this kind of intelligence.

Students can improve their logical mathematical intelligence through a variety of methods and resources, such as Socratic questioning, Piagetian cognitive stretching exercises, logical puzzles and games, logical-sequential subject matter presentation, scientific thinking, scientific demonstrations, coding, classifications, categorisations, quantifications, calculations, computer programming languages, and so forth.

### **Visual Spatial Intelligence**

Visual Spatial Intelligence, a distinct branch of intelligence, encompasses the skills, abilities, and aptitudes necessary for understanding, manipulating, and visualising spatial

relationships and configurations. Students that exhibit visual spatial intelligence are also artistically inclined, with a keen sense of colour and detail, spatial awareness, and a passion for drawing and painting. This type of intelligence is often applied in the workplace. When students think in terms of visuals and images, it is claimed that they have visual or spatial intelligence. These students excel through visual learning, enjoy drawing and creating, and demonstrate an excellent eye for colour and detail, as well as proficiency in spatial relationships. Extremely intelligent students may be observed solving puzzles and mazes, or simply thinking and doodling. This kind of intellect is typically found among land surveyors, architects, engineers, mechanics, navigators, sculptors, and chess players.

To foster visual spatial intelligence, teachers can utilise various tools and techniques, including visual aids like charts, diagrams, graphs, and maps; multimedia resources such as photography, movies, and videos; interactive activities like visual puzzles, mazes, 3D construction kits, and creative arts; cognitive exercises

like idea sketching, visual thinking, and mind-mapping; and technology-based tools like computer graphics software and visual organisers, as well as sensory experiences including optical illusions, colour cues and telescopic lenses.

### **Bodily Kinesthetic Intelligence**

Bodily Kinesthetic Intelligence refers to the capacity to utilise one's physical abilities, including manual dexterity and whole body coordination, to solve problems, create, and express oneself. It is the ability to perform skillful and purposeful movements. Individuals that possess this kind of intelligence are often highly conscious of their bodies. They can often perform a task much better than others. They most likely enjoy playing all types of physical games and giving instructions. These individuals may have difficulty remaining still for long periods and get bored quickly. When students are well-coordinated, use gestures and body language, disassemble and reassemble objects, learn through practical experiences, enjoy acting and role-playing, and love dancing and sports are considered body smart. Athletics,

physical education instructors, physicians, gymnasts, actresses, and firefighters are among the potential professions. People in the performing arts, especially dance and acting, athletes, and doctors are the ones who typically display this kind of intelligence.

In order to enhance bodily kinesthetic intelligence among students, teachers can utilise a range of teaching strategies and resources, including hands-on activities (crafts, manipulatives, cooking, gardening), physical movement and exercise (creative movement, physical education, field trips), tactile experiences (sensory materials, body maps), interactive games (cooperative and competitive), relaxation and awareness techniques (relaxation exercises, physical awareness), immersive technologies (virtual reality), non-verbal communication (body language), and experiential learning (mime, hands-on thinking). These diverse approaches foster students' ability to learn through movement, touch and physical engagement.

## **Musical Rhythmic Intelligence**

The kind of intelligence that encompasses the aptitudes, skills, and abilities related to the musical arts is known as musical rhythmic intelligence. The key indicators of musical intelligence include distinguishing pitch, recognising rhythm and texture, identifying timbre and musical themes, as well as creating music through composition or performance. This intelligence makes its holders sensitive to sound. Students who like writing and reading music, enjoy making music, have a strong sense of rhythm and melody, and enjoy singing, humming, chanting, and rapping are considered music smart. It is seen in a sizable percentage of professionals, including conductors, vocalists, composers and musicians.

The musical rhythmic intelligence of students can be enhanced through various teaching strategies and approaches including music performance (singing, humming, whistling, playing musical instruments), music listening (recorded music, background music, discographies), music appreciation (analysing classic songs, connecting

music to concepts), creative music-making (composing new melodies, improvisation), rhythmic activities (rhythms, songs, chants), and collaborative music (group singing). These diverse approaches enhance students' musical awareness, creativity and rhythmic understanding.

## **Interpersonal Intelligence**

Interpersonal intelligence is the capacity that enables individuals to understand and work harmoniously with others, fostering meaningful social interactions in everyday life. Some examples are teachers, sales persons, politicians and religious leaders. These people most likely have a large social circle, are very empathetic toward others, and have a keen awareness of other people's perspectives. They most likely enjoy working in teams of all sizes and are excellent teammates. These individuals are perceptive to the thoughts and emotions of others. Additionally, they probably know how to get people to participate in a conversation. They are also adepts at mediating disputes, resolving conflicts, and reaching a middle ground when parties are diametrically opposed to each other. In

the educational setup this intelligence thrives on active learning within the social context of the classroom.

To enhance students' interpersonal intelligence, teachers can incorporate various teaching-learning strategies and approaches such as collaborative learning (cooperative groups, peer teaching, cross-age tutoring, group brainstorming), social interaction (conflict mediation, peer sharing, social gatherings), community engagement (apprenticeships, community involvement), simulation-based learning (role-playing, people sculpting), technology integration (interactive software), and extracurricular activities (academic clubs). These diverse approaches foster students' ability to communicate, collaborate and build relationships effectively.

### **Intrapersonal Intelligence**

The capacity to understand oneself, one's cognitive strengths, styles, and mental processes is known as intrapersonal intelligence. It speaks about one's capabilities, desires, responses to situations, and things to avoid. They frequently recognise their

limitations. They are also aware of where to go for assistance. Thus, it offers insight into a person's overall behaviour. It involves being conscious of their emotions, values, beliefs, spirituality and inner selves. Saints, yogis, and philosophers are examples of it. Students with high intrapersonal intelligence frequently possess strong opinions, self-assurance, and determination on various topics. If a student's intelligence is one of their strong characteristics, they could prefer working alone and occasionally avoid social situations. Their insights are highly intuitive, and they possess creative wisdom.

The intrapersonal intelligence can be enhanced by the teachers using various strategies and approaches such as self-directed learning (independent study, self-paced instruction, self-learning programmes), reflective practices (feeling-toned moments, one-minute reflection periods, journal keeping), personalisation (individualised projects, games and homework options), autonomy (private study spaces, choice time), and self-awareness (personal connections, self-esteem activities, goal-setting sessions). These

approaches empower students to develop self-awareness, self-regulation and introspection skills.

### **Naturalistic Intelligence**

Gardner's intelligence was expanded in 1997 to include naturalistic intelligence. It describes the capacity to identify and categorise all types of flora and fauna, as well as minerals, rocks, grass, and animals. The naturalistic intelligence may also be a factor in the recognition of cultural artifacts. Students possessing this intelligence level may be able to distinguish between natural objects such as fish, animals, insects, birds, rocks, minerals, and plants, and non-natural objects like cars. Additionally, they learn best when the material is connected to the natural world. It entails being fully aware of everything that takes place in and around our natural surroundings. The weather, the sound of the wind, the changing leaves in the fall, the warm sun, or bugs in the room most likely captivate or have an impact on students. Those who work in agriculture, conservation, biology, and the environment are more likely to possess this kind of intelligence.

The following techniques and resources can be used in teaching and learning to improve students' naturalistic intelligence such as nature observation, conservation methods, environment feedback, habitat creation, sensory stimulation exercises, taking care of plants and animals, gathering and categorising natural objects and organisms, etc.

### **Existential Intelligence**

A person with existential intelligence is one who asks probing inquiries about ultimate realities, life and death. They are interested in existential or cosmic matters. They look for encounters with religious myths and a predisposition to life and death. They have the capacity to relate to the infinite or the cosmos. The ultimate realities pique their curiosity. Individuals possessing existential intelligence tend to be highly self-aware and introspective. They are fully aware of their own inclinations, convictions, and personal views. Activities at school that give kids a range of experiences are enjoyable to them. Rather than committing facts and information to memory, they would rather express



themselves and their thoughts. They are adepts at assessing their own work and regularly exhibit motivation. This type of intelligence is possessed by philosophers such as Aristotle, Einstein, Plato, Socrates, and all Indian yogis and saints including Vivekananda, Yogananda, Ramathirtha, and Rishi Aurobindo. In the learning environment, this kind of intelligence flourishes if the students are provided opportunities to ask 'why' and 'what' kind of questions.

The strategies and materials like charity work, puzzle games, critical thinking questions, questions and answers game, read books in different languages, read about other cultures, draw or paint a scene from a story, write an opinion essay on a certain topic, guess, imaginative play, group discussion, etc. can be employed in teaching-learning to enhance existential intelligence of students.

### **Approaches to Develop Multiple Intelligence**

The following approaches can be used to develop multiple intelligence in the classroom.

1. **Lesson design:** The teaching and learning process follows lesson design, which includes asking students about their ideas on the best ways to teach and learn specific topics, or having team teachers use all or some of the intelligence in their lessons.
2. **Interdisciplinary approach:** Using an interdisciplinary approach is possible for some areas.
3. **Student projects:** Projects allow students to learn and develop their skills.
4. **Assessments:** Through assessments, students can demonstrate their learning. This can occasionally take the form of giving each student the freedom to design the method by which they will be evaluated as long as they fulfil the teacher's quality standards.
5. **Internships:** Students can learn a skill through internships and eventually become proficient at it if they work hard and practise discipline.

### **Implications of Multiple Intelligence**

The teacher while teaching in classroom can focus on multiple intelligence by making students realise their potentialities by enabling them to experience different outlets of learning. Using Gardner's idea, it might be required to devote more time to preparation and planning. Students with multiple intelligences learn better because they can use combinations of all nine intelligence during learning, rather than just one or two of them.

The Multiple Intelligence approach allows students to meet the demands of the classes while acknowledging individual diversity. As a result, students are able to complete their work and participate fully in class activities. Additionally, the intellect, cognitive processes, hobbies, and capabilities of the individual are stimulated, highlighting areas for future development. Teachers themselves might take pleasure in creating lessons that fit the skills and interests of their students. It also makes it easier for teachers to meet the various demands of their students. Teachers can enhance their students' learning by utilising everyday

occurrences and real-world scenarios. The method enhances students' abilities to sing, draw, think, and express in addition to helping them to improve their speaking, listening, writing, and reading skills. To put it in another way, it aids in developing each student's potential. Thus, the nine intelligence can enhance and synthesise the learner as a whole.

### **Conclusion**

Teachers have a great role to play in enhancing the multiple intelligences of students in the classroom. Multiple intelligences enhance the creativity, problem-solving and social skills. Students can be provided with different avenues to express themselves creatively, involve them in projects, and make them face the challenges and real-world problems using their unique intelligence. The knowledge of theory of multiple intelligence enables teachers in exploring deeply on curriculum transaction, assessment and pedagogical practices. It helps them to actively engage in developing new approaches. It also helps them to cater to the needs of different types of

students in the classroom. Teachers have the ability to support all forms of intelligence in their students and provide them with a personalised learning experience that will ultimately help the student to make use of their special skills and improve the learning process. Teachers should use different teaching strategies, diverse materials and variety of resources in the classroom that address multiple intelligence to accomplish the needs of

all students effectively. They should also take action to employ a variety of evaluation techniques, provide a supportive learning environment, and provide students chance to explore their skills, abilities, talents and interests. By implementing multiple intelligence theory, teachers can create an inclusive classroom meeting the diverse needs of all learners which in turn makes teaching-learning process more effective.

### References

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- Andrea L. Heming. (2008). *Multiple intelligences in the classroom*. Fall: Western Kentucky University.
- Armstrong, T. (2000). *Multiple Intelligences in the Classroom* (2 ed.). Alexandria, Virginia, USA: Association for Supervision and Curriculum Development.
- Brualdi Timmins, A., C., (1996). *Multiple intelligences: Gardner's theory*. Practical Assessment, Research and Evaluation, 5(1), 10.
- Charles Peeler Jefferson, W. (2007). *The implementation of multiple intelligences in the classroom to enhance student learning*. Menomonei: University of Wisconsin-Stout.
- Gardner, H. (1991). *The unschooled mind: How children think and how schools should teach*. New York: Basic Books.
- Gardner, H. (1983). *Frames of mind: The theory of multiple intelligences*. New York: Basic Books.
- Gardner, H. (1993). *Multiple intelligences: The theory in practice*. New York: Basic Books.

- Gardner, H. (1999). *Intelligence reframed*. New York: Basic Books.
- Gardner, H. (2000). *The disciplined mind: Beyond facts and standardised tests, the K-12 education that every child deserves*. New York: Penguin Putnam.
- Gardner, H. (2010). *Multiple intelligences*. Retrieved from <http://www.Howardgardner.com/MI/mi.html>
- Howard Gardner's Theory of Multiple Intelligences, Northern Illinois University, Faculty Development and Instructional Design Centre, Retrieved from [https://www.academia.edu/28068080/Howard\\_Gardners\\_Theory\\_of\\_Multiple\\_Intelligences](https://www.academia.edu/28068080/Howard_Gardners_Theory_of_Multiple_Intelligences)
- Lazear, David. (1992). *Teaching for Multiple Intelligences*. Fastback 342 Bloomington, IN: PhiDelta Kappan Educational Foundation. (ED 356 227) *Scientists*, 1(2), 1-12.
- Linda C. Campbell, Bruce Campbell & Dee Dickinson. (2003). *Teaching and learning through multiple intelligences*. Boston: Allyn and Bacon.
- Mangal, S. K. (2007). *Advanced educational psychology*. New Delhi: Prentice-Hall of India.
- Mahmoud Mohammad Sayed Abdullah. (2008). *Multiple ways to be smart: Gardner's theory of multiple intelligences and its educational implications in English teaching and oral communication*, Egypt: Assiut University.
- Reena V. Nair. (2010). Multiple intelligence a broad vision of education, *Edutracks*. 9(6).

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