

IMPLEMENTING MULTIPLE INTELLIGENCES THEORY IN THE CLASSROOM

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ABSTRACT

Multiple Intelligences theory has stimulated teachers to find more ways to help all of student in the class. It is very important that the teacher take individual differences among the student very seriously. Everyone is born possessing the eight intelligences. Nevertheless, all students will come into the classroom with different sets of developed intelligences. This means that each child will have his own unique set of intellectual strengths and weaknesses. These sets determine how easy (or difficult) it is for a student to learn information when it is presented in a particular manner. This is commonly referred to as a learning style. Many learning styles can be found within one classroom. Therefore, it is impossible, as well as impractical, for a teacher to accommodate every lesson to all of the learning styles found within the classroom. Nevertheless the teacher can show students how to use their more developed intelligences to assist in the understanding of a subject which normally employs their weaker intelligences.

Keyword: Multiple intelligences, implementation, classroom

Introduction

Traditional views of intelligence base human intellect on the results of paper and pencil tests and statistical analysis. If a test is reasonably challenging, some students score better and some worse. Those who perform better than most are said to have a higher amount of something called “intellect,” as expressed in a number or “quotient” – hence the term Intelligence Quotient, or “IQ.” Traditional views assume that intellect is an intrinsic quality, like height or hair color, something we can measure and that we will carry with us for the rest of our lives. Classroom teachers with a traditional view of intelligence believe some students perform tasks better than others due to different intellectual capacities that are fixed and unchangeable.

The substance of intelligence will probably always be debated. On a practical level, IQ is defined by the tests employed to measure it. Researchers suggest that intelligence has many components, resulting in one IQ that measures a singular intellect. In the early 1980's, Dr. Howard Gardner, professor of Education at Harvard University, challenged the view that intelligence is a singular property. In an effort to understand the nature of intelligence, he proposed a theory that based intelligence not on the results of specific tests, but on the individual's ability to solve problems. In his book *Frames of Mind*, Gardner defines intelligence as “a psychobiological potential to solve problems or to fashion products that are valued in at least one cultural context.”

Gardner's theory classifies human intellectual competencies in a totally new way, with more specific criteria than the traditional choice between “verbal” or “mathematical.” He proposes that intelligence cannot be described as a fixed quantity, but rather can be trained and increased. Gardner further argues that each specific intelligence is independent from the others and can improve independently with use. Gardner's system of classification has already had a

significant impact on how we think about the learning process, teaching, testing, and even the nature of thought itself.

Implementing Multiple Intelligences in the Classroom

Howard Gardner claims that all human beings have multiple intelligences. These multiple intelligences can be nurtured and strengthened, or ignored and weakened. He believes each individual has eight intelligences. Theory of multiple intelligences is considered an innovation in learning because it helps students develop all nine intelligences that, on the other hand, represent ways people understand the world around them, solve problems and learn. They are: verbal-linguistic, logical-mathematical, visual-spatial, bodily-kinaesthetic, musical/rhythmic, interpersonal, intrapersonal, and naturalist.

Although the theory was not originally designed for use in a classroom application, it has been widely embraced by educators and enjoyed numerous adaptations in a variety of educational settings. Teachers have always known that students had different strengths and weaknesses in the classroom. Gardner's research was able to articulate that and provide direction as to how to improve a student's ability in any given intelligence. Teachers were encouraged to begin to think of lesson planning in terms of meeting the needs of a variety of the intelligences.

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To implement Gardner's theory in an educational setting, we can organize classroom into eight learning centers, each dedicated to one of the eight intelligences. The students spend approximately two-thirds of each school day moving through the centers – 15 to 20 minutes at each center. Curriculum is thematic, and the centers provide eight different ways for the students to learn the subject matter.

All students learn each day's lesson in eight ways. They build models, dance, make collaborative decisions, create songs, solve deductive reasoning problems, read, write, and illustrate all in one school day. Some more specific examples of activities at each center follow:

1. In the **Personal Work Center** (Intrapersonal Intelligence), students explore the present area of study through research, reflection, or individual projects.

2. In the **Working Together Center** (Interpersonal Intelligence), they develop cooperative learning skills as they solve problems, answer questions, create learning games, brainstorm ideas and discuss that day's topic collaboratively.
3. In the **Music Center** (Musical Intelligence), students compose and sing songs about the subject matter, make their own instruments, and learn in rhythmical ways.
4. In the **Art Center** (Spatial Intelligence), they explore a subject area using diverse art media, manipulables, puzzles, charts, and pictures.
5. In the **Building Center** (Kinesthetic Intelligence), they build models, dramatize events, and dance, all in ways that relate to the content of that day's subject matter.
6. In the **Reading Center** (Verbal/Linguistic Intelligence), students read, write, and learn in many traditional modes. They analyze and organize information in written form.
7. In the **Math & Science Center** (Logical/ Mathematical Intelligence), they work with math games, manipulatives, mathematical concepts, science experiments, deductive reasoning, and problem solving.
8. In the **Natural Center** (Naturalist Intellegences), ability to recognize and categorize plants, animals and other objects in nature.

When asked how educators should implement the theory of multiple intelligences, Gardner says, that it is very important that a teacher take individual differences among student very seriously. The bottom line is a deep interest in children and how their minds are different from one another, and in helping them use their minds well.

An awareness of multiple-intelligence theory has stimulated teachers to find more ways of helping all students in their classes. Some schools do this by adapting curriculum. Linda Campbell describes five approaches to curriculum change:

1. **Lesson design.** Some schools focus on lesson design. This might involve team teaching ("teachers focusing on their own intelligence strengths"), using all or several of the intelligences in their lessons, or asking student opinions about the best way to teach and learn certain topics.
2. **Interdisciplinary units.** Secondary schools often include interdisciplinary units.
3. **Student projects.** Students can learn to "initiate and manage complex projects" when they are creating student projects.
4. **Assessments.** Assessments are devised which allow students to show what they have learned. Sometimes this takes the form of allowing each student to devise the way he or she will be assessed, while meeting the teacher's criteria for quality.
5. **Apprenticeships.** Apprenticeships can allow students to "gain mastery of a valued skill gradually, with effort and discipline over time." Gardner feels that apprenticeships "should take up about one-third of a student's schooling experience."

With an understanding of Gardner's theory of multiple intelligences, teachers, school administrators, and parents can better understand the learners in their midst. They can allow

students to safely explore and learn in many ways, and they can help students direct their own learning. Adults can help students understand and appreciate their strengths, and identify real-world activities that will stimulate more learning.

Accepting multiple intelligences theory has several implications for teachers in terms of classroom instruction. The theory states that all eight intelligences are needed to productively function in society. Teachers, therefore, should think of all intelligences as equally important. This is in great contrast to traditional education systems which typically place a strong emphasis on the development and use of verbal and mathematical intelligences. Thus, the Theory of Multiple Intelligences implies that educators should recognize and teach to a broader range of talents and skills.

Another implication is that teachers should structure the presentation of material in a style which engages most or all of the intelligences. For example, when teaching about the revolutionary war, a teacher can show students battle maps, play revolutionary war songs, organize a role play of the signing of the Declaration of Independence, and have the students read a novel about life during that period. This kind of presentation not only excites students about learning, but it also allows a teacher to reinforce the same material in a variety of ways. By activating a wide assortment of intelligences, teaching in this manner can facilitate a deeper understanding of the subject material. With understanding of multiple intelligences, teacher can allow student to safely explore and learn in many ways and they can help student direct their own learning. Teacher can help students understand and appreciate their strength and identify the real activities.

The example of lesson plan using multiple intelligences perspective.

This example lesson plan for elementary school grade 1.

Five Senses (Body Parts)

Subject Area: Science

Concept: Students can name and describe various body parts

Materials: Body library books, poster paper, homework paper, dittos, felt body parts, playdoh, overhead (or opaque) projector, songs and fingerplays about bodies, paper

1. Linguistic Activities:

- a. Many books are available about our bodies in our school library. Students can look at books and discuss with others the different body parts and can make drawings which they can label.
- b. Name and describe at least ten body parts.
- c. Label a class poster.
- d. Homework Idea: Draw a picture of a body and get help labeling body parts. Present to class.

2. Logical-Mathematical Activities:

- a. Students can count and write the number of body parts on a picture of a body.

- b. They could also make up counting, addition or subtraction story problems with felt cutouts of the different body parts on the felt board.
- c. Invent a new body part - what would it look like and be used for?
- d. Graph what we think is our most important body part (and explain why we think they are the most important).

3. Kinesthetic Activities:

- a. Students can touch, name and describe various body parts.
- b. Students can make different body parts out of playdoh and have others guess what they made.
- c. Play Simon Says naming various body parts.

4. Visual-Spatial Activities:

- a. Draw and label a body with various body parts.
- b. Students can create a life-size picture of a body (using an overhead or opaque projector), labeling the body parts.
- c. Students can make bodies out of playdoh and name body parts.

5. Musical Activity:

Students can sing songs or recite finger plays about the different parts of the body.

6. Interpersonal Activities:

- a. Create a class poster as described under linguistic.
- b. All four suggested math activities apply here.

7. Intrapersonal Activities:

Student can do an individual project by:

- a. drawing body parts and dictating what they are.
- b. completing a paper entitled "If I was a ___ [choose body part] then I would ___ [choose action]."

drawing and dictating why various body parts are important

8. Assessment:

- a. Draw and label a body with various body parts. (V/S)
- b. Lead class in Simon Says. (K)
- c. Name and describe at least ten body parts. (Ling)

Conclusion

Howard Gardner's Theory of Multiple Intelligences honors and promotes the development of all seven avenues of intelligence in young children. This approach provides a framework to identify how children learn; to build on their strongest assets; to help them become more intelligent by exposing them to a variety of ways of learning; to better individualize for their interests and needs; and to use teaching strategies that make learning more efficient, successful, and enjoyable for all children. We can foster meaningful learning experiences by using multiple teaching tools

and strategies and by building positive, supportive relationships with children. Through environments that offer a variety of stimulating, hands-on materials that children individually select, and by creating learning centers that provide natural opportunities to move, be active, and fully engaged in either solo or small group experiences, we better serve and meet the needs of more children. Theory of Multiple Intelligences provides a theoretical foundation for recognizing the different abilities and talents of students. This theory acknowledges that while all students may not be verbally or mathematically gifted, children may have an expertise in other areas, such as music, spatial relations, or interpersonal knowledge. Approaching and assessing learning in this manner allows a wider range of students to successfully participate in classroom learning.

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