Incorporating Multiple Intelligences in the English Classroom

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Abstract

The purpose of this essay is to discuss Multiple Intelligences described and defined by Howard Gardner and other authors who followed and revised the theory in terms of language teaching. In the student-centered approach, individual students' needs, interests, and strengths make sense and every student has a different intellectual profile. Using a common curriculum for these students with different intellectual abilities is a significant challenge for teachers. Incorporating Multiple Intelligences in the classroom fills the needs and expectations. Multiple Intelligences have significant implications for educational performance and they change students' perceptions of intelligence and academic achievement in the learning world. This essay focuses to incorporating Multiple Intelligences in the English classroom and includes grouping and listing possible activities and tasks which are appropriate for language learners with different sets of abilities or intelligences.

Keywords: Multiple Intelligences, individualized education, different intellectual abilities, language teaching, pluralistic view, creativity

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Today's ideas about education focus on individualized education and learner autonomy. Students are supposed to be responsible for their own learning and should be made aware of their strengths and weaknesses (Ibmian & Hadban, 2013). Teachers have always known that their students have different strengths. In the language teaching field, some of the differences among students have been attributed to students' having different learning or cognitive styles. Individual cognitive and affective factors like aptitude, introversion, extroversion, motivation, empathy, anxiety, self-confidence, self-regulation, inhibition and many others have an important influence on the speed and ease of second language learning. People have varying degrees of each of these attributes and, consequently, some are more successful language learners while others are not (Haley, 2004).

 Intelligence has traditionally been measured by using Intelligent Quotient tests but those tests measure only one type of intelligence. Hatch (1974) distinguished between learners who are data gatherers and those who are rule-formers. Data gatherers are fluent but inaccurate; rule formers are more accurate but often speak haltingly.

Dr. Howard Gardner, Professor of Education at Harvard University, asserts that every individual has eight intelligences and they all work together in a unique way. The Theory of Multiple Intelligence was developed by him in the year 1983 and was first published in the book *Frames of Mind: The Theory of Multiple Intelligences.* In this book, he points out that human talents and intelligences are much more complex than the previous IQ tests had shown. It is no longer a question of how intelligent people are; it is how their intelligence works. He presented a new vision on intelligence and the theory is a pluralistic view of mind which recognizes different styles of cognition and cognitive styles.

Gardner (1983) theorized that individuals have at least eight distinctive intelligences that can be developed over a life time. The eight are:

1. Logical/Mathematical – The ability to use numbers effectively to see abstract patterns and to reason well.

2. Visual/Spatial – The ability to orient oneself in the environment to create mental images and sensitivity to shape, size and color.

3. Body/Kinesthetic – The ability to use one's body to express oneself and to solve problems.

4. Musical/Rhythmic – The ability to recognize tonal patterns and sensitivity to rhythm, pitch and melody.

5. Interpersonal – The ability to understand another person's moods, feelings, motivations and intentions.

6. Intrapersonal – The ability to understand oneself and to practice self-discipline.

7. Verbal/Linguistic – The ability to use language effectively and creatively.

8. Naturalist – The ability to relate to nature and to classify what is observed.

Christison (1996, 2005) and Armstrong (1995) provide examples of activities that fit each type of intelligence:

1. Logical/Mathematical – puzzles and games, logical, sequential, presentations, classifications and categorizations.

2. Visual/Spatial – charts and grids, videos, drawing.

3. Body/Kinesthetic – hands on activities, field trips, athletics, pantomime.

4. Musical/Rhythmic – singing, playing music, jazz chants.

5. Interpersonal – pairwork, project work, group problem solving.

6. Intrapersonal – self-evaluation, journal keeping, options for homework.

7. Verbal/Linguistic – note-taking, writing, story-telling, debates.

8. Naturalist – collecting objects from the natural world, learning their names and about them.

Based on Gardner's theory, Chapman and Freeman (1996) draw three implications of intelligence. First, intelligences can be taught or enhanced through teaching. Second, intelligences can change throughout life. Third, the existence of different intelligences that different learners possess results in different learning styles and different needs. According to Armstrong (2008), whether an intelligence develops depends upon three main factors: (1) Biological endowment – including hereditary or genetic factors and insults or injuries to the brain, before, during and after the birth; (2) Personal life history – including experiences with parents, teachers, peers, friends and others who awaken intelligences, keep them from developing, or actively repress them; (3) Cultural and Historical background – including the time and place where one was born and raised and the nature and state of cultural and historical developments in different domains.

More recently, Gardner (2009) has developed a related theory, focused on cognitive abilities, that individuals need to develop in order to be successful in a changing world. Gardner proposes *Five Minds*, ways of thinking and acting in the world, which students need to develop. Of the five minds, three focus on intellectual development and two on character development. Gardner feels that these five minds are particularly at a premium in the world of today and will be even more so in the future. They span both the cognitive spectrum and human enterprise and are therefore comprehensive, global and can be cultivated. Education is the key to developing these five minds for the future, and while traditional forms of education will bear the burden of

training young minds, parents, peers and the media also play an as important role in influencing and developing minds of tomorrow. The five minds are described as follows:

1. The Disciplined Mind

It is the first of the intellectual minds in which students master a traditional body of information. The Disciplined Mind refers to the ability to think in ways associated with major scholarly disciplines such as history, math and science, and major professions like law, medicine, management, finance as well as the ability to apply oneself diligently, improving steadily and continuing beyond formal education.

Disciplines represent a radically different phenomenon. A discipline constitutes a distinctive way of thinking about the world. Distinctive ways of thinking characterize the professions and are modeled by skilled practitioners. Study should help students to acquire the habit of these discipline specific ways of thinking. Students need to understand information not as an end in itself or a stepping stone to more advanced information, but rather as a means to better-informed practice. Gardner believes that it is essential for individuals in the future to be able to think in ways that characterize the major disciplines. At the high school level, all students should be introduced and master the ways of thinking in science, mathematics, history and at least one art form. These few main disciplines are gateways to other sciences, the social sciences and other forms of art. Without acquiring these thinking patterns, students will be completely dependent on others to formulate views about the world.

2. The Synthesizing Mind

It is the ability to integrate ideas from different disciplines or spheres into a coherent whole and to communicate that integration to others. It focuses to bring together, organize, understand and articulate information from various disciplines in a unified and coherent whole.

The Synthesizing Mind takes information from disparate sources, understands and evaluates that information objectively, and puts it together in ways that make sense to the synthesizer and also to other persons.

3. The Creating Mind

The third is the creating mind whereby students are encouraged to come up with new ideas, original solutions to problems and creative questions. It puts forth new ideas, poses unfamiliar questions, conjures up fresh ways of thinking, and arrives at unexpected answers. This could include creative writing, or original historical or political analysis. Virtually all innovation can be communicated almost instantly the world over, available to be built on by another with the requisite disciplinary skills, understanding and motivation. Creativity is seen as the trait of certain individuals who could use this talent across various performance domains. However, in recent years this viewpoint has changed as we recognize a variety of relatively independent creative endeavors that do not stretch over to other areas.

4. The Respectful Mind

The Respectful Mind is reflected by an awareness of appreciation for, and openness to the differences and individuality of others. This would naturally include fostering tolerance for people from other cultural backgrounds, religions, races and identities within and beyond the classroom. The respectful mind responds sympathetically and constructively to differences among individuals and among groups, seeking to understand and work with those who are different, extending beyond mere tolerance and political correctness.

Humans exhibit a deep-seated tendency to create groups, to provide distinctive marks for these collectives and to adopt clearly positive or negative attitudes towards neighboring groups. We are inclined to delineate groups, to identify with and value members of our own group and to

adopt caution when dealing with other groups. However, even if biological bases can be found for division between groups, every generation must attempt to deal with these stereotypes and prejudices and to overcome them for peace and unity. Truly respectful individuals offer the benefit of the doubt to all human beings. They avoid thinking in group terms and remain open to the possibility that their past judgment of others may have been wrong. They are alert for a change in behavior that will reinstate a feeling of respect towards others.

5. The Ethical Mind

The Ethical Mind encourages students to cultivate a sense of responsibility for themselves and for the wellbeing of others. The Ethical Mind is able to merge roles at work and as a citizen and act consistently with those conceptualizations, striving towards good work and good citizenship. The ethical mind ponders the nature of one's work and the needs and deserves of the society in which one lives. This mind conceptualizes how workers can serve purposes beyond self-interest and how citizens can work unselfishly to improve the lot of all. The ethical mind then acts on the basis of these analyses.

We all want to live in a world characterized by good work that is excellent, ethical and engaging. An ethical orientation begins at home where children observe their parents at their work and play and in civic responsibilities. In contemporary society, peers and colleagues also assume importance from an early age, and the quality of one's peers proves especially critical during adolescence in the development of ethical training.

Gardner concludes that each person may have strengths in one or more area and should endeavor to develop a balance of all five minds. Regarding the development of these five minds in the lives of a young children, parents and teachers should focus first on instilling a respectful mind, then a disciplined mind, followed by a synthesizing mind and finally, in secondary school,

an emphasis on ethics. Creativity goes hand in glove with disciplinary thinking. In the absence of relevant disciplines, it is not possible to be genuinely creative and in the absence of creativity, disciplines can be used only to go over the status quo. These five minds are likely to be crucial in a world marked by the hegemony of science and technology, global transmission of information, handling of routine tasks by computers and increasing contact between diverse populations. Those who succeed in cultivating the pentad of minds are most likely to thrive in the world.

Multiple Intelligences and Language Teaching

Armstrong (1995) believes that before we apply any model of learning in the classroom, we should apply it to ourselves as educators. Therefore, the first step in using Multiple Intelligence Theory in the classroom is to first determine our own Multiple Intelligence profile. Armstrong (2000) asserts that language teachers today have to be aware that students have different strengths, learning styles and even learning potentials but with the Multiple Intelligence theory we can teach students effectively in different ways. It is a good idea to give the students a Multiple Intelligence test to see which intelligences are outstanding for each student. Then the teacher can create a learning environment that is suitable for each student. By observing the students and keeping track of how they react to different activities. It is possible to improve teaching by appealing to the students' strengths. As long as teachers use a range of different activities according to the intelligences, there will always be a time during the day or week when students have their highly developed intelligences actively involved in learning.

As a tool to help students develop a better understanding and appreciation of their own strengths and learning preferences, Christison and Kennedy (1999) created some inventories or surveys which might help the students to define their predominant type of intelligence.

According to Christison, different language tasks and activities can be created in order to cater for the needs of multiple intelligences and the needs of the language learners. According to Christison & Kennedy (1999), raising students' awareness of their strengths and weaknesses can make them more responsive to a variety of learning activities and tasks which might otherwise be unfamiliar to students based on their backgrounds and experiences. Here, Multiple Intelligence types are explained with various activities applicable for the English language classroom.

Activities for Multiple Intelligences

Linguistic Intelligence

Armstrong (2000) states that people with high Linguistic Intelligence show abilities with words and languages. They like reading, writing, telling stories and playing word games. They are sensitive to sound structure and how language and words function. Linguistic Intelligence is the capacity to use language to express what's on one's mind and to understand other people. Linguistic Intelligence is an important skill for writers, orators, speakers, lawyers or any other persons who have great passions for language. The following are some activities and assignments that can promote linguistic intelligence:

- Reading, Writing, Narrating - Stories, Sequels, Poems, Drama, Jokes, Descriptions, News Reports;

- Doing oral activities before writing like story-telling, discussing and interviewing;

- Encouraging - Debates, Declamations, Impromptu Speech on current affairs, life and practically everything;

- Answering multiple questions related to a text;

- Choosing appropriate word to fill in a gap in a sentence;

- Choosing an appropriate synonym or antonym for a given word;

- Starting - a Newsletter, Magazine, Journal;

- Conducting - Mock Interviews, Chat Shows, Role Plays, Dramas, Story Telling;

- Creating Slogans, Defense, Case Studies etc.;

- Solving - Puzzles, Crosswords, Vocabulary Games;

- Initiating Vocabulary Banks;

- Preparing and Giving Presentations;

- Using virtual libraries and desktop publishing.

Logical and Mathematical Intelligence

According to Armstrong (2000), people with high Logical-Mathematical Intelligence have the ability to use numbers effectively and are sensitive to logical patterns and relationships. They like experimenting, questioning, and figuring out logical puzzles. They have a unique way of searching for relationships and connections, categorizing, sequencing and outlining. The logical-mathematical learner typically solves problems with logic, calculates mathematics problems quickly and prefers to see things categorized in a logical sense of order. People with logical/mathematical intelligence are known to:

- Be good with numbers;

- Have a good understanding of logical concepts;

- Have above-average reasoning skills;

- Be skilled at understanding and applying scientific principles;

- Be skilled at manipulating numbers and operations;

- Enjoy solving puzzles and mysteries;

- Enjoy experiments;

The following are some activities and assignments that can promote Logical-Mathematical Intelligence:

- Word order activities;

- Story telling with the essential concepts of puzzles;

- Brain storming ideas to develop group project;

- Tape recording to record students' thoughts on tape as an alternative mode of expression;

- Problem solving activities;

- Computer games;

- Critical thinking activities;

- Journal writing;

- Publishing articles and compositions;

- Sequencing events in a chronological order, finding logical errors;

- Presenting timelines of events presented in a story or a text;

- Jigsaw puzzles and games, concept maps;

Visual-Spatial Intelligence

Visual-Spatial Intelligence has to do with vision and spatial judgment. People who are strong in this intelligence have an exceptional visual memory and are often artistic. They are sensitive to colors, shapes, form, space and relationships that exist between these elements. They like designing, drawing and visualization (Armstrong, 2000). Visual-spatial intelligence deals with shapes, patterns, designs and the entire spectrum of colors and with the placement and relationship of objects in space including distance and direction. It includes the capacity to visualize, dream and imagine. People with this intelligence possess the ability to visualize the world accurately, modify their surroundings based upon their perceptions, and recreate the

aspects of their visual experiences. People with high visual-spatial intelligence are good at remembering images, faces, and fine details. People with Visual-Spatial Intelligence are known to:

- Be observant;

- Pay attention to visual details;

- Have good visual imagination;

- May doodle and mind-map;

- Have spatial awareness;

- Have good sense of direction;

- Have good color sense;

- Can read maps;

- May be a good driver;

- May have vivid dreams.

The following are some activities and assignments that can promote Visual-Spatial Intelligence:

- Organizing vocabulary using Mind-maps or Spidergram;

- Making spelling words into pictures, drawing images for the vocabulary words, using pictures and to illustrate a project;

- Making charts and drawing diagrams and maps.

- Using pictures as prompts for writing and matching pictures with words;

- Creating videos for grammar, listening, speaking, reading and writing;

- Entering vocabulary words into Google Images provides a wide range of pictures that vividly illustrate each word;

- Doing imagination exercises like imagining what their ideal school would look like;

- Taking photographs and describing pictures or images;

- Creating slide shows and making arts and craft projects;

Body-Kinesthetic Intelligence

According to Armstrong (2004), this area has to do with movement and actions. In this category, people are generally skilled at physical activities such as sports or dance and often prefer activities which include movements. They may enjoy acting, dancing, touching, gesturing and in general they are good at building and making things. They like hands-on learning and tangible experiences. People with this intelligence are good at building things and like to stay active. They have good motor skills and are very aware of their bodies. They learn best through movement and experimentation. The word "kinesthetic" derives its meaning from another technical term called "Kinesthesia" which means a sense for any movement. In other words, it also refers to a keen awareness for perceptible changes in our body momentum, balance, position and stationary presence. With this sense, we can easily know how our bodies and their components are moving in a perfect balance. Three of the most significant aspects of kinesthetic intelligence include: Invisible control of motions within the body; an ability to handle objects and things with good skills; and an ability to use the entire body to get required motions. People with Body-Kinesthetic Intelligence are known to:

- Excel at dancing, sports and activities that involve movements of bodies;

- Learn and remember by "doing", rather than hearing or seeing;

- Have excellent physical coordination - children are very active and agile with their bodily functions;

- Explore independently with objects or tasks versus listening about the object or task;

- Be adept at achieving their goals by using their body and mind;

- Have very good motor control, hand-eye coordination and muscle coordination;

- Possess an ability to create things and patterns with their hands;

- Have excellent physical shape and strength;

- Learn best through movement and experimentation;

The following are some activities and assignments that can promote Body-Kinesthetic

Intelligence:

- Curriculum related field trips and excursions;

- Computer typing related to English concepts;

- Movement games especially popular in English classes like 'Guess who' games;

- Role plays and dramatization using dialogues;

- Pantomime vocabulary activities;

- Facial expression games;

- Small group work and team competitions;

- Peer teaching;

- Drawing and coloring;

- Making and using models of objects, games;

Musical/Rhythmic Intelligence

According to Armstrong (2000), Musical and Rhythmic Intelligence has to do with rhythms, music and listening. People who have high musical intelligence are more receptive to sounds, rhythms, tones and music. They like singing, whistling, humming and tapping feet and hands. This intelligence enables them to recognize, create, reproduce, and reflect on music, as

demonstrated by composers, conductors, musicians, vocalist, and sensitive listeners. People with musical intelligence are able to hear and recognize patterns easily. They are very sensitive to rhythm and sound. They remember things by turning them into lyrics or rhymes. People with musical intelligence have a strong appreciation of music. Many of them learned the alphabet through this intelligence and the "A-B-C song."

People with Musical-Rhythmic Intelligence are known to:

- Seek patterns in their environment and be drawn to sound;

- Easily memorize phrases and words in foreign languages;

- Enjoy dancing and singing;

- Use patterning to remember things;

- Have good rhythm;

- Be skilled at playing several instruments;

- Be zealous about music;

- Have the ability to easily remember songs;

- Have a high level of understanding of musical structure, notes, tone, and rhythm.

The following are some activities and assignments that can promote Musical-Rhythmic Intelligence:

- Songs and English Rhymes;

- Tongue twisters;

- Reciting poetry aloud and clapping to accentuate the rhythm of the words;

- Playing songs in order to introduce a topic or analyze the lyrics, transforming lyrics into a text;

- Listening to raps and having students write their own;

- Singing folk songs and having students write new verses;

- Creating readers' theatre with writing;

- Practicing stress and intonation;

- Writing their own songs and music;

- Listening to videos and CDs that teach writing concepts (e.g., parts of speech, sentence structure).

Interpersonal Intelligence

According to Armstrong (2000), people who have high Interpersonal Intelligence are usually friendly and are sensitive to others' moods, feelings and motivations. They always have interaction with others. They like leading, organizing and relating and work best as part of a group. Interpersonal intelligence is the ability to understand and interact effectively with others. It involves effective verbal and nonverbal communication, the ability to note distinctions among others, sensitivity to the moods and temperaments of others, and the ability to entertain multiple perspectives. People with interpersonal intelligence are able to pick up on the mood, characteristics, emotions, and intentions of those around them. They are also able to use this information to tailor their approach of interacting with each individual.

People with Interpersonal Intelligence are known to:

- Work well with others;

- Have many friends and empathy for others;

- Be skilled verbal and non-verbal communicators;

- Enjoy being around others;

- Be able to examine a situation from multiple points of view and have good problem solving skills;

- Be good at socializing with others and enjoy discussion;

- Form strong positive relationship with others and are natural leaders among peers and groups.

The following are some activities and assignments that can promote Interpersonal Intelligence:

- Peer-teaching and paired activities;

- Using peer groups for brainstorming, revising, and editing;

- Working with cooperative learning groups to design and complete writing projects;

- Connecting writing activities to the community outside the school;

- Interactive computer games;

- Inviting guests to the classroom to tell stories or to give lectures;

- Tutoring young students or classmates;

Intrapersonal Intelligence

According to Armstrong (2000), people with high Intrapersonal Intelligence have great self-knowledge and they have an accurate picture of themselves. They know about their strengths and weaknesses as well as their motivations, desires and intentions. They are good at setting goals for themselves, planning and reflecting on their work. They prefer to work alone. People with Interpersonal Intelligence are known to:

- Have deep understanding of their own feelings;

- Have the ability to discriminate among people;

- Have thorough knowledge of their strengths and weaknesses, desires, and intelligences;

- Be lifetime authors of classic autobiographies;

The following are some activities and assignments that can promote Interpersonal

Intelligence:

- Have students choose their best writing pieces for portfolios;

- Have students write in a daily or weekly journal;

- Write essays from the perspective of famous literary figures;

- Assign independent projects;

- Have students keep personal journals and write reflections on topics studied in class;

- Use life maps and personal topics as springboards for writing and incorporating mind-maps;

- Research activities and using software;

- Exploring personal interest.

Naturalist Intelligence

According to Armstrong (2000), people with high Naturalist Intelligence possess

expertise in the flora and fauna of the environment. They might like playing with pets,

gardening, investigating nature and caring for the Earth. Naturalist Intelligence describes a

person who is curious about living things and the planet. It is the ability to understand, relate to,

categorize, classify, comprehend, and explain the things encountered in the world of nature.

People with Naturalist Intelligence are known to:

- Have the ability of observation in nature;

- Have awareness of changes in weather, climate and atmosphere;

- Have intense interest in learning about nature;

- Have dramatic enthusiasm and joy when in contact with nature;

- Have physical and emotional adversity to pollution;

The following are some activities and assignments that can promote Naturalist Intelligence:

- Attending class outside and caring for classroom plants;

- Reading books and articles about nature and the environment;

- Keeping a nature journal to record changes or discoveries in nature;

- Writing articles, poems and short stories about nature;

- Researching animal habitats and writing essays on the topic;

- Performing skits about nature and its cycles;

- Observing natural surroundings in preparation for writing;

- Conducting mini-projects about local foliage;

- Enacting role-plays on real environmental topics;

- Participating in park/playground clean-ups, recycling drives, and beautification of the environment.

Conclusion

Multiple Intelligence Theory can be applied by educators, and language educators specifically, in the classroom. Using the multiple intelligences approach in the English classroom, a teacher can provide opportunities for authentic learning based on students' needs, interests, and talents. There are many Multiple Intelligence assessment tools available online or in print for use in the classroom. These tests can provide a fascinating snapshot for teachers to identify their students' innate abilities. Identifying students' abilities, teachers are able to organize a variety of contents that offer learners ways to engage in active learning that matches or enhances their Multiple Intelligences.

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