Accommodating Classroom Activities to EFL Learners' Multiple Intelligences

Nguyen Thi Dung*

Luu Trong Tuan**

*Ho Chi Minh City University of Social Sciences and Humanities

**National University of Ho Chi Minh City

Abstract

Gardner's Multiple Intelligences theory has been among the theories innovating English Language Teaching since the period of the 70s and 80s. In this paper, the literature of Multiple Intelligences theory and its benefits on learners' learning cognition, motivation, interaction and achievement are reviewed. Besides that, types of language learning activities and classroom activities to accommodate to learners' Multiple Intelligences are presented.

Keywords: Multiple Intelligences theory, cognition, motivation, interaction, achievement, classroom activities.

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1. Multiple Intelligences

1.1. Concepts of Intelligence

Gardner (1999) stated that in Western societies, people with intelligence have been put in high regard for centuries. It is thought that those who are considered intelligent are able to get success in many fields of life. However, even though such big significance is strongly attached to intelligence, it is impossible to give an exact definition of what intelligence is (Christison, 1998).

In the field of psychology itself, there existed confusion in defining intelligence. Intelligence can be defined in two different psychological perspectives. One uses intelligence to refer to intelligent acts like composing a poem or designing a house. The other considers intelligence as mental processes such as analyzing and synthesizing action (Kail & Pellegrina, 1985).

Many psychologists have made an effort to define and measure human intelligences. Francis Galton was among the psychologists who trusted that intelligence was inherited and could be measured (Gardner, 1999). He hence built up IQ (Intelligent Quotient) test in the early 19th century. In 1906, Alfred Binet, a French psychologist developed this test all over the world (Armstrong, 2000).

Therefore, in its infancy, "intelligence is defined as the ability to answer items on tests of intelligence" (Gardner, 1999, p. 15). In other words, the traditional description of human intelligence was on the basic of linguistic and logical-mathematical abilities (Richards & Rodgers, 2001). Intelligence was believed as a single, unchanged, inborn capacity on which the IQ test was founded (Snider, 2001). This is the concept of general intelligence with singular characteristic.

However, in the late 20th century, the singular concept of intelligence has been criticized by anthropologists and neuroscientists. Many anthropologists have stated that the various capacities of man are valued in various cultures meanwhile the neuroscientists have proved that in the complicated organization of human being's brain, there exists the links between specific capacities and particular neural networks. The absorbance of knowledge depends on the complex level of these links (Pinker, 1997). Thus, among important factors forming the brain and its functions are experiences got from environment exchange (Le Doux, 2002 & Siegel, 1999).

Discoveries of anthropologist and neuroscientists have opened a new horizon for psychologists to assess the validity of IQ test and the notion of intelligence as a static, singular and inherited characteristic. According to Jencks (1997), traditional IQ tests seem to be a considerably accurate predictor of school performance, not of a profession after formal schooling. Gardner (1999) claims that IQ tests fail to explore the notion of intelligence and the way to assess each individual's intelligence. Sternberg (1985) also indicates that since intelligence could be changed, it can be expanded and increased. In the words of Smith (2003), "intelligence was a basic human right and can be taught" (p. 57).

Intelligence was supposed to involve divergent cognitive and intellectual abilities, instead of a single capacity determining the human performance in the tests (Armstrong, 2000). Many theories on separate areas of human abilities were taken interested in such as Two Factor Theory proposed by Spearman in 1904, Primary Mental Abilities supported by Thurstone in 1938, Structure of Intellect Theory recommended by Guildford in 1959, Multiple Intelligence Theory proposed by Gardner in 1983, and Triarchic Theory argued by Sternberg in 1985 (Chang, 1998). Among these theories, Gardner's Multiple Intelligences theory and Sternberg's Triarchic theory have caught much attention of scholars because they both concerned about the individual difference of human beings (Campbell, 1997; Silver, Strong & Perini, 1997).

On the road to discover the more reasonable notion of intelligence, Sternberg and Gardner revolutionized the view of intelligence through their researches (Tran, 2009). Sternberg supposed that intelligence is "purposive adaptation to, shaping of, and selection of real-world environments relevant to one's life" (Sternberg, 1985, p. 271). He categorized human's intelligence into three facets. Analytical Intelligence related to an individual's cognitive processes; Creative Intelligence was an individual's insight for dealing with new experiences and Practical Intelligence was an individual's ability to settle in and restyle his or her environment. He also asserted that having these three intelligences was not a deciding factor to reach success in life. The much more essential element was that how individual understand their own strengths and weaknesses, how to make use of strengths and remunerate weaknesses (Sternberg, 1999). Howard Gardner meanwhile stated that human being possessed diverse units of mental functioning, which were identified intelligences. He added that

these intelligences, which were expressed during the problem solving process and fashioning products in real-life contexts, had definite sets of abilities that could be observed and assessed. He also advocated that because intelligences could join in various manners, there certainly existed wider analysis of human intelligence (Gardner, 1983).

In summary, much effort has gone into finding manageable explanation for the concept of intelligence, which has been a topic of widespread discussion in many researches. In fact, this concept has been partially enlightened by Gardner who offers a rationale to more easily explain the cognitive, affective and socio-cultural variables (Smith, 2001).

1.2. Gardner's Multiple Intelligences Theory

Gardner proposed a new theory of intelligences which was called multiple intelligences. He originally sketched seven intelligences: verbal-linguistic, logical-mathematical, visual-spatial, bodily-kinesthetic, musical, interpersonal and intrapersonal. The first two have been associated with schools; the next three are more inclined towards arts; and the final two are what Gardner labeled personal intelligences (Gardner, 1999). In the late nineties, naturalist intelligence was added. Other intelligences such as existential, spiritual and moral were under consideration to attach. But Gardner acknowledged only eight intelligences up to now (Botelho, 2003).

Gardner (1993) stated that he decided consciously when writing about "multiple intelligences". He supposed that "multiple" to emphasize indefinite amount of various human capacities; "intelligence" to highlight that these capacities were as essential as those traditionally confined within the IQ test.

In the book *Frames of Mind: the Theory of Multiple Intelligences*, Gardner (1983) presented a definition of intelligence as "the ability to solve problems or to create products that are valued within one or more cultural settings" (p. 11). In the same direction, in *Intelligence Reframed: Multiple Intelligences for the 21st Century*, Gardner (1999) advanced the notion of intelligence as "a biopsychological potential to process information that can be activated in a cultural setting to solve problems or create products that are of value in a culture (pp. 33-34).

According to Gardner, each person possesses a different intelligence profile, which is a combination of at least eight intelligences in different manners. He stated that intelligence profile can

be changed through certain elements like "the values of a particular culture, the opportunities available in that culture, and the personal decisions made by individuals and/or their families, schoolteachers, and others" (p. 34). In fact, each individual has some strong intelligences that are known as strengths and some are not well developed that are identified weaknesses (Gardner, 1993).

To summarize, Gardner judged the restrictive view of intelligence through IQ tests. His view of intelligence is different from the traditional one. He argued that, "Multiple Intelligences theory, on the other hand, pluralizes the traditional concept" (*ibid*., p. 15).

1.2.1. Criteria for Determining an Intelligence

Gardner (1999) presented a series of eight separate criteria to determine an intelligence after making examinations to produce evidence on the survival of many candidate faculties.

1. Isolation by brain damage

This criterion means that one candidate intelligence can be separate from others. People are believed to have multiple intelligences because they have multiple neural modules which have different ways of working and memory systems. When people suffer from brain damage, one intellectual skill may be sometimes spoiled while other skills remain. To illustrate, musicians who have brain injury may have impaired speech but they are able to play music (Hodges, 1996). That is to say, since an individual can lose ability in one area while others are spared, there is impossible to be existent a single intelligence.

2. Evolutionary history

Each intelligence proves a significant part during the evolutionary history of human being as well as shows its ability to face with the environment. In this case, spatial ability was believed to be essential to the man survival, particularly on the way to find out different terrains.

3. The presence of core operations

An intelligence is thought to have an identifiable core set of operations. For example, the core operations of musical intelligence are timbre, harmony, rhythm and pitch.

4. Susceptibility to encoding

An intelligence has to be susceptible to encode in a symbol system to exactly and systematically express information. Several instances of encoding are written and spoken language,

charts and maps.

5. A distinctive developmental history

Different intelligences have different developmental history. This difference is clearly shown in its time of arising, its time of peaking, and its time of declining. It is said that, for example, musical intelligence peaks early whilst linguistic intelligence peaks very late.

6. The existence of exceptional individuals

Some individuals like prodigies are regarded as accidents of nature. Another instance of extraordinary intelligence is the autistic person who excels at numerical calculations or musical performance.

7. Psychological tasks

Experimental psychology is supported to show the relation between two operations. Having a look at people demonstrating two activities at the same time can lead to identify if those activities depend on the same mental capacities or different ones. As an illustration, a person doing a crossword puzzle cannot effectively talk since both these tasks are related to linguistic intelligence. Whereas, one can take a walk and carry on a conversation simultaneously because two different intelligences take part in these tasks.

8. Psychometric findings

Many standardized tests support the multiple intelligences theory such as. The Weschsler Intelligence Scale for Children-Revised test.

In a word, when introducing these criteria, Gardner desired to make a clear distinction between an intelligence and a talent or skill. These eight criteria were supported by biological sciences, developmental psychology, logical analysis as well as traditional psychological research (Gardner, 1999).

1.2.2. The Description of Eight Intelligences

The list of eight intelligences proposed by Gardner is not meant to be final and the point is not the exact number of intelligences. All what Gardner desires to emphasize is the plurality of the intellect (Christison, 1998). Weinreich-Haste (1985) stated that some intelligences selected by

Gardner have brought a big surprise to many people since they think of them more as talents rather than intelligences.

Following is the full descriptions of each intelligence together with suggested classroom activities. These descriptions are combined from several sources (Lazear, 1993; Christison, 1996; Shaw & Hawes, 1998; Christison & Kennedy, 1999; Gardner, 1999; Snider, 2001; Stefanakis, 2002; Smith, 2003, Tran, 2009)

Verbal-Linguistic Intelligence

Verbal-Linguistic Intelligence is the ability to use language and to communicate both in speaking and writing in an effective manner. It also represents the capacity to understand patterns of a language, to remember information as well as to use language to convince others. People who have a strong verbal-linguistic intelligence are keen on reading books and possess a wide amount of vocabulary. This intelligence is involved in "any use of metaphors, similes, and analogies, and, of course, in learning proper grammar and syntax in speaking and writing" (Lazear, 1993, p. 15). People with linguistic intelligence often choose the careers like teachers, reporters, librarians, linguists, editors, lawyers, storytellers, and radio or television announcers.

Teachers can help students to strengthen this intelligence by holding following activities:

- ✓ Sustained silent reading

- ✓ Reading books, newspaper or parts of a play

- ✓ Telling jokes and riddles

- ✓ Writing letters, diaries, stories, poetry, instructions, lists, book reviews

- ✓ Retelling stories, identifying with characters, extracting information from text

- ✓ Enriching vocabulary through word games and puzzles

- ✓ Brainstorming, debates, discussion, giving speeches

- ✓ Memorizing, journal keeping, note taking

- ✓ Summaries, translation exercises

Logical -Mathematical Intelligence

Logical-Mathematical Intelligence represents the ability to think about problems logically and systematically as well as to use numbers effectively. People with this kind of intelligence often do

well on standardized comprehension/written language tests. They like to recognize abstract patterns, make predictions sequence, solve problems and investigate science. This intelligence is related to "scientific thinking" (Lazear, 1993, p. 15). People who are strong in this kind of intelligence often choose careers as statisticians, science teachers, economists, computer analysts, scientists, mathematicians, accountants, logicians, etc.

In order to improve or strengthen logical-mathematical intelligence, it is crucial to carry out these following activities:

- ✓ Sequencing events into story line and sequential presentation of subject matter

- ✓ Presenting television shows about science, science demonstrations and experiments

- ✓ Reading about famous scientists and their discoveries, or detective stories

- ✓ Organizing with Venn diagrams, sorting, classification; using symbols

- ✓ Logical-mathematical games like Clue

- ✓ Following directions to accomplish a goal, hypothesizing, predicting, and experimenting

- ✓ Problem-solving language activities using logic, reasoning puzzles and logical argumentation

- ✓ Analyzing grammar, pattern identification, code making, code breaking

Visual-Spatial Intelligence

Visual-Spatial Intelligence is the ability to visualize things mentally and graphically. It also involves the sensitivity to shape, color, line, form and space. People who use spatial intelligence would rather draw a picture than write a paragraph. They enjoy solving problems related to the notion of space like using a map to locate a place. The spatially intelligent people often rearrange the furniture in their house. They see things that other people maybe ignore and they can foretell the effects of movement, design or construct 3D objects. Some professionals who are strong in visual-spatial intelligence are graphic artists, painters, mechanics, photographers, pilots, decorators, etc.

To develop the visual-spatial intelligence of students, teacher should create chances for students to do these following activities:

- ✓ Working on Jigsaw puzzles

- ✓ Using pictures to create, interpret, and illustrate stories

- ✓ Giving guided visualization

- ✓ Drawing maps, diagrams, illustration, graphs, tables, photos

- ✓ Making mind maps, using charts and grids

- ✓ Designing, drawing, using imagination and fantasy

- ✓ Watching videos, slides and movies

- ✓ Visual awareness activities

Bodily-Kinesthetic Intelligence

Bodily-Kinesthetic Intelligence is the ability to solve problems using the body and to express thoughts, ideas, and emotions through gestures and movements. People with this intelligence have skills like flexibility, strength, coordination and balance endurance. They have an excellent body control as well as sense of touch. They like physical movement than just sitting still. The bodily kinesthetic intelligence is evident in acrobats, models, mimes, gymnasts, dancers, athletes, surgeons, etc.

This intelligence can be improved by doing the following activities:

- ✓ Incorporating movement into the lessons

- ✓ Mimes, dramas and role-plays

- ✓ "Simon says" type games, creative movement, body language

- ✓ Kinds of physical education and dance, classroom aerobics

- ✓ Human sculptures, graphs and tableaux

- ✓ Hands-on activities, construction and manipulative activities

- ✓ Cooperative group rotation

Musical Intelligence

Musical Intelligence is the ability to convey sentiment and feelings through music. It also involves the ability to recognize and use pitch, rhythm, melody. People who are musically intelligent can remember songs easily, play some music instruments and compose songs. They have hobby of creating music from objects that are not musical instruments. They enjoy listening to music and

usually hear music. They tend to choose careers like music therapists, songwriters, music teachers, piano tuners, disc jockeys, and studio engineers.

It is essential to design these following activities to develop learners' musical intelligence:

- ✓ Background music to relax and enhance learning
- ✓ Turning some parts of lessons into a song or rhythmic chant
- ✓ Using raps, jazz and chants to memory lesson
- ✓ Playing recorded or live music
- ✓ Making music instruments
- ✓ Choral reading, singing and speaking
- ✓ Creating and forming songs or tunes
- ✓ Encouraging awareness of surrounded sounds

Interpersonal Intelligence

Interpersonal Intelligence involves the sensitivity to other people's moods, feelings, thoughts, needs, struggles and motivations. It is also the ability to understand, to empathize with, to care for and to deal with people in an effective way. It entails the ability to influence others. One who possesses this intelligence can use an innate understanding of others in order to motivate them to certain actions. In other words, people with a high preference for this intelligence are good at persuasion, negotiation and work well in teams. Interpersonal intelligence is often found on the people working as lawyers, business executives, travel agents, psychologists, school principals, and counselors, all kinds of team leaders (supervisors, directors, and coordinators)

The following activities are helpful to develop this intelligence:

- ✓ Group brainstorming, and group problem solving
- ✓ Project work
- ✓ Pair work, group discussion
- ✓ Peer teaching and peer editing
- ✓ Intercultural awareness activities
- ✓ Circle time and self-esteem activities
- ✓ Giving and receiving feedback and constructive criticism

✓ Board games such as "Scrabble" and "Taboo"

Intrapersonal Intelligence

Intrapersonal Intelligence is the ability for self-analysis, self-reflection, self-awareness, self-consciousness and introspection. It is also the capacity to understand oneself and then regulate one's own life. Those who are strong at intrapersonal intelligence can realize the similarities and differences between themselves and others. They remind themselves to do something and they are good at handling their feelings. People with this kind of intelligence often become writers, therapists, psychiatrists, theologians, philosophers, counselors, etc.

Teachers can consider the following activities to help students enrich this intelligence:

✓ Activities with a self-evaluation component

✓ Personal journal keeping

✓ Individualized projects

✓ Reflective learning activities

✓ Writing about personal goals and hopes for the future

✓ Goal setting

✓ Recording thoughts, feelings and moods

✓ Self evaluation

✓ Circle time and self esteem activities

Naturalist Intelligence

Naturalist Intelligence is the ability to recognize, classify and categorize species in the natural world like animals, plants and minerals. Naturalist people can make difference harmful species from beneficial ones. They always seem to be absorbed in physical environment as well as natural phenomena. People with a strong naturalist intelligence often choose careers as ornithologists, geologists, conservationists, environmentalists, biologists, farmers and botanists.

Naturalist Intelligence can be developed by doing the following activities:

✓ Talking about pets or natural places to classmates

✓ Collecting natural things like leaves, flowers to show and describe to others

✓ Reading books, magazines, newspapers on the nature

- ✓ Showing slides, films that features nature

- ✓ Organizing activities that involves nature like bird watching

- ✓ Growing a plant and describing the developing process

- ✓ Discussing animal rights and earth preservation

- ✓ Drawing or photographing natural objects

To sum up, although each intelligence is separately described, it is not assumed that each intelligence is active in isolation. Gardner suggests that it is common for different intelligences to be used together in a learning episode (Christison, 1998).

1.3. The Educational Implications of Multiple Intelligences Theory

According to Nguyen (2002), when initially discussed the educational implications of the theory, Gardner did not take classroom into much consideration. He primarily hoped to explore how many educational goals were observed and practiced and how education progress met one's potential. He therefore suggested educators to realize some essential factors of the learning process such as knowledge to transmit, teaching methods, and learning environment. He also encouraged them to assess the intellectual profiles of learners. A satisfactory educational system, according to Gardner, should consist of histories, traditions, culture, as well as various combinations of intelligences. In other words, more biology and psychology would be explored in education. On that account, Gardner (1983) showed the applicability of his theory to such an effort. Above all, Gardner offered proposal an educational planning system revision. Gardner acknowledged that all he could do was just to plan some expectations.

Nevertheless, since the book created a great influence on the educational community, Gardner greatly attempted to make a closer connection between the theory and educational practices (Gardner, 1993). He made recommendations on some educational strategies from his viewpoint (Gardner, 1985, 1991, 1993). More and more effort has been put into investigating the educational implications of Multiple Intelligences theory by Gardner and his colleagues at Project Zero, an educational research organization at the Harvard Graduate of Education. Arts PROPEL and Project Spectrum were two such research projects.

The target of Project Spectrum was exploring all intellectual strengths in the age of three or four at the Eliot-Pearson Children's School in Medford, Massachusetts (Malkus, Feldman, & Gardner, 1988; Ramos-Ford, & Gardner, 1991; Wexler-Sherman, Gardner, & Feldman, 1988). With its list of suggestions for assessment activities and domain-specific assessment instruments that are compatible with school curricula, Project Spectrum significantly contributed to the education (Krechevsky, 1994). The primary aspiration of the second project, Arts PROPEL, was creating assessment techniques in order to detect potential intelligences in these domains of art at the middle and secondary levels (Gardner, 1989; Zessoules, Wolf & Gardner, 1988).

In other words, Multiple Intelligences theory shows many educational implications that are interesting for educators to considerate (Christison, 1998). Following are four key points to explain why Multiple Intelligences theory originally developed to take into account human cognition gained the interest of educators.

1. Each individual possesses all eight intelligences.

Multiple Intelligences theory, which is a cognitive functioning theory, proposes that each person has capacities in the eight intelligences to some degree. This intelligences function together in unique ways (Armstrong, 1994). This combination triggers to the differences among individuals (Gardner, 1999)

2. Most people can develop each intelligence to an adequate level of competency.

Gardner (1999) pointed out that everyone has the capacity to develop all eight intelligences to a reasonably high level of performance if provided appropriate instruction, enrichment as well as encouragement. In other words, multiple intelligences can be changed and raised in response to the biological and environmental experiences (Krechevsky & Seidel, 1998).

3. Intelligences usually work together in complex ways.

Gardner (1999) claimed that no intelligence exists by itself in life (except perhaps in very rare instances in savants and brain-injured individuals). Intelligences are always interacting with each other. Some of the intelligences will be complicatedly developed at the same time when inspired by multi-sensory activities. Psychological studies also proved that even though human brain is acknowledged to perform distinct functions at different area in both hemispheres, these hemispheres

interact in a harmonizing way to bear holistic and integrated activities (Jenson, 1998). As an illustration, to cook a disk, one may take up his verbal-linguistic intelligence to read the recipe, logical-mathematical intelligence to divide the recipe in half, interpersonal intelligence to prepare satisfactory dishes to others, and intrapersonal intelligence to fulfill one's own appetite (Armstrong, 1994).

4. There are many ways to be intelligent.

According to Armstrong (1994), there is no standard set of attributes to be regarded intelligent. For instance, a person may not be able to read, yet be highly linguistic because he can tell interesting stories or possesses a rich source of oral vocabulary. Both these activities require verbal linguistic intelligence. Similarly, a person may be quite awkward in dancing, demonstrates marvelous capacity in building construction. These activities need bodily kinesthetic intelligence. Multiple Intelligences theory highlights the diversity of ways in which people show their donations within intelligences as well as between intelligences (Gardner, 1999).

With Multiple Intelligences theory, Gardner did not intend to either design a curriculum or prepare a model for schools (Hoerr, 1994). However, the theory has been taken by a large number of educators. They applied the theory to plan lessons and build up curriculum. The key points given above are of great usefulness to language teaching. They facilitate teachers in recognizing the diversity in learners and provide a framework to address these differences (Christison, 1998).

1.4. Benefits of Multiple Intelligences

Thousands upon thousands of researches on Multiple Intelligences theory have been published in the last twenty years (Johnson, 2007). The positive outcomes it yielded such as a striking increase in learners' interaction, achievement, cognition and motivation has been proved through the findings of many researches.

1.4.1. Enhancing Learners' Cognitive Growth

Multiple Intelligences theory offers a model that confirms every learner's strengths, talent and abilities (Johnson, 2007).

Goodnough (2001) believes that MI-based instruction supplies "meaningful, personalized, and

relevant" curriculum (p. 180). An MI-based action-research project that explores the value of Multiple Intelligence theory in the context of science education was conducted. The data collecting from interviews, observation, and journal writing revealed that the MI-based curriculum supported learner-centered learning, enhanced each learner's unique cognitive profile, promoted conceptual understanding in science and positive attitudes toward science as well as helped learners connect to scientific concepts in a broader context (Johnson, 2007).

Rubado (2002) integrated Multiple Intelligences theory into her instructional practices and found that learners naturally began to identify their abilities. Through the process of self-reflection, they started to recognize which intelligences would boost their performance. In addition, even though learners did not know much the complication of each intelligence, they understood that they possessed the ability to use all eight intelligences effectively and they were, in fact, better than they had primarily thought. Most notably, Rubado found that the learners became conscious of multiple ways to learn and various types of academic strengths and life skills.

1.4.2. Enhancing Learners' Motivation

Emig (1997) supposed that when Multiple Intelligences theory is applied, learners' engagement and investigation in their individual learning process are developed, participation is enhanced, confidence is raised and interest in learning is increased.

In the lesson on rain forests, Multiple Intelligences theory was applied to promote learners' learning motivation. Learners at Westmark School in Encino California were asked to decorate their classroom like a rainforest when studying about rainforests by using sound effects, music, and humidifiers. They also to collect photos and internet sites about rain forests, learn about rain forest bugs, insects from a visiting entomologist, learn about forest animals by touching an iguana and a monkey. Learners were immersed such exciting, practical and interesting activities which enhanced their learning motivation (Wagmeister & Shifrin, 2000).

Multiple Intelligences theory cultivates "marked changes in curriculum, assessment and pedagogy" (Kornhaber, Fierros, & Veenema, 2004, p. 70). In order to explore these "marked changes" as well as to search the benefits of Multiple Intelligences theory, Project Zero, the Howard Gardner's research group out of Havard's Graduate School of Education, carried out a research

investigation. In an investigation whose aim is addressing to "identify, document, and disseminate practices that are employed in schools that link Multiple Intelligences theory with benefits for learners", (*ibid.* p. 11). The data was collected from 41 diverse schools from 18 different states in a three -and-a-half year study through many data collection methods like telephone interviews, school visits, classroom observations, conversations. One of the outcomes that the data revealed is approximately 80 percent of schools reported improvements in learning motivation for learners with learning disabilities.

1.4.3. Enhancing Learners' Interaction

MI-based instructional planning has the potential to empower learners to interact. Highland, Mc Nally, and Peart (1999) documented a study on Multiple Intelligences theory. Learners in pre-kindergarten, kindergarten, and first grade took part in sixteen MI-based lessons. Research data was collected through three- months of classroom observations, anecdotal records, progress reports, and report cards. The data revealed that 77 percent of the learners showed an improvement in taking turns talking; sharing, helping others; being respectful to peers, accommodating group changes, and enthusiastically participating in classroom activities. In fact, there was an improvement in learners' interaction.

During the 1989-1990 school year, Campbell (1991) conducted an action research project to assess the effects of the multimodal learning format through Multiple Intelligences theory. Her third grade classroom in Marysville, Washington participated in this research. The research data revealed that learners became highly skillful at listening, helping each other, sharing leadership in different activities, recommending new classmates to the program, being more respectful to each other, appreciating and calling upon the unique gifts and abilities of their classmates, being eager to take part in group activities to accomplish learning projects. Briefly, it is clear that learners' interaction significantly improved and increased (Campbell, 1991).

1.4.4. Enhancing Learners' Achievement

MI-based instruction has special power in increasing learners' achievement (Campbell & Campbell, 1999; Kornhaber, Fierros, & Veenema, 2004).

Multiple Intelligences theory enhances learners' achievement in many subjects. An increased achievement in history, geography, literature and music is reported by Hickey in his researchers

(Hickey, 2004). The data of the five case studies revealed that learners increasingly engaged and participated among others. In a music unit, learners were keen on participating in any music activities, remembered what teacher said for longer period of time. In history, a teacher stated that MI-based history curriculum stimulated learners to develop sense of learning responsibility and get better quality work, while another teacher reported that history curriculum promoted learners to remain on task. The five case studies supplied clear instances of learner learning success attributed MI-based instruction.

The application of Multiple Intelligences theory enhanced learner performance on standardized tests. This conclusion is drawn by Greenhawk (1997) when she discussed the implementation of Multiple Intelligences theory at White Marsh Elementary School in Maryland. The data that Greenhawk together with her colleagues collected in a five-year research revealed that MI-based curriculum aided learners understand their learning abilities, raise confidence, take educational risks, and retain more knowledge. Greenhawk assumed that Multiple Intelligences theory changed her school's learning community and facilitated teachers and learners to attempt toward excellence by valuing "excellence, diversity and achievement" (p. 64). It produced a "school-wide culture of achievement" (p. 62).

In summary, researches on the benefits of Multiple Intelligences theory have drawn much attention of many educators for the positive results on learners' cognition, motivation, interaction, and achievement (Johnson, 2007).

2. Language Learning Activities

A language learning activity is a task chosen to attain a particular teaching/learning goal (Richards & Lockhart, 2002). The notion of activity affects on teachers when they conceptualize teaching as well as plan lessons (Clark & Yinger, 1979). Macdonald (1965) and Eisner (1967) suggest that it is in the process of rising activities that concern of objectives grows to be significant because this is where there is an integration between ends for learning and means for learning. Classroom activities therefore are considered the central structural component of planning and action (Clark & Yinger, 1979).

2.1. Types of Language Learning Activities

Although the fact that there are many kinds of activities adopted in language teaching, some activity types recur whatever kinds of approach or methodology used. Richards & Lockhart (2002) classified these activity types under categories as shown on fig.1.

2.1.1. Presentation Activities

These tasks are used to present new learning material for the first time. A presentation activity introduces and sheds light on a new learning item such as lexical item, a grammatical item, etc. However, presentation activity is not always included in all lessons. For instance, in a grammar lesson, a teacher may use charts as the first activity to present patterns with "if clauses".

2.1.2. Practice Activities

These are tasks in which the item that has been previously presented is performed or learnt. Practice activities often relate to either the control over student performance or the use of a model. For example, in a conversation lesson, dialogues may be adopted to practice sentence patterns, and drills to practice pronunciation.

2.1.3. Memorization Activities

These tasks require learners to memorize information or learning material. Memorization activities are regarded as a strategy to aid consolidate new learning items to prepare for the next activity. As an illustration, learners may be required to memorize vocabularies, which will be later used in a speaking task.

2.1.4. Comprehension Activities

These tasks involve development or demonstration of learners understanding in written or spoken texts. Different levels of comprehension addressed in comprehension activities are literal comprehension, inferential comprehension, and evaluation. For instance, learners are asked to summarize a lecture after listening to it.

2.1.5. Application Activities

These are tasks require learners to creatively apply knowledge or skills that have been previously presented and practiced. These activities, involve integration of knowledge and skills,

application of learned items to a new context or situation, or personalization of learning items. For instance, after practicing a dialogue, learners may be required to perform a role play.

2.1.6. Strategy Activities

These tasks facilitate learning by developing particular learning strategies and approaches. For example, to help learners easily guess new words in a reading text, some exercises on suffixes, prefixes, and word order may be given as linguistics clues.

2.1.7. Affective Activities

These activities are significant to enhance learners' learning motivation as well as improve the learning environment of the classroom. For example, learners may keep a journal about their feelings, fears, satisfactions that they have in the class then share these with their classmates and the teacher.

2.1.8. Feedback Activities

These are tasks in which feedback on learning or on some aspects of performance is given. For example, in a writing lesson, after finishing writing the first draft, learners may be asked to work in pairs, exchange what they have written for revision.

2.1.9. Assessment Activities

These tasks enable the teacher and learners to have an evaluation on the extent of accomplishment what they have done on activity or lesson. These activities are helpful in diagnosing parts which need further teaching or in evaluating student performance. Examples of assessment activities are tests of different kinds.

This classification shows the relationship between activity types and the purposes for which they are used in language teaching. It is impossible to regard it definitive, because some activities may be adopted for many purposes, and distinctions among activity types may overlap (Richards & Lockhart, 2002).

2.2. Learning Activities to Accommodate to Learners' Multiple Intelligences

There are numerous of classroom activities that teachers may apply to match learners' intelligence profiles. It is essential to highlight that one MI-based classroom activity may be used in many types of language learning activities which have been just concerned above. However, many MI-based classroom

activities can simultaneously appear in one type of language learning activity. Teachers should be flexible to adapt these activities in order to meet learners' motivation. Following are some MI-based classroom activities adapted from Puchta & Rinvolucri (2005) and Tran (2009).

2.2.1. Activities Based on Verbal-Linguistic Intelligence

Speed up

A small gift is ready

1. Select a passage of the previous unit and ask the learners to copy words in this passage correctly in 3 minutes. The learner with the most words will win the gift.

2. Ask learners to pen on and only start writing down after hearing "one, two three, GO!"

3. At the end of 3 minutes, learners mark each other's work, and then count the number of correct words. The winner is the person with the highest score.

Listening with your mind's eye

1. Ask learners to listen to a text with their eyes closed then concentrate on the picture of what they see, hear, feel, etc, while listening.

2. Learners describe the picture they receive while listening on a piece of paper.

3. Swap the piece of paper with a classmate then tell the whole class the difference between two pictures.

2.2.2. Activities based on Logical-Mathematical Intelligence

How many dollars?

1.   Dictate this situation to the learners

The mother put the envelope with cash in it on her desk and ask her son to go and buy some food.

Ten minutes later, the son came up to the desk and on the envelope he read 98.

Taking the money, he rushed to a shop where he chose 90 dollars' worth of stuff.

However, at the cash desk, he was 4 dollars short. What had happened?

2. Learners figure out what had happened.

3. Learners present all the solutions they come up with as well as their thinking process.

Language tricks

1. Get the learners' attention and then tell them this riddle:

There were twenty six sheep in field. One died. How many left?

(When saying it, be sure to run "six" and "sheep" together, so that the sentence could equally well be heard as: "There were twenty sick sheep in field".

2. All thoughtful answers are accepted and written up on the board. Learners figure out how this can be so.

3. If learners find it difficult to realize the second meaning of the sentence, give them a clue. Tell them suggested good answer is 19.

2.2.3. Activities Based on Visual-Spatial Intelligence

Storyboarding the coursebook dialogue

1. Photocopy the dialogue from a future unit in the coursebook.

2. Learners read the dialogue, identify the place the dialogue takes place and imaginatively describe all people in the dialogue.

3. Draw an empty six-frame storyboard then ask learners to work in pairs to film the dialogue.

4. Learners choose 6 moments in the dialogue and in each of the six frames they draw what the camera will see.
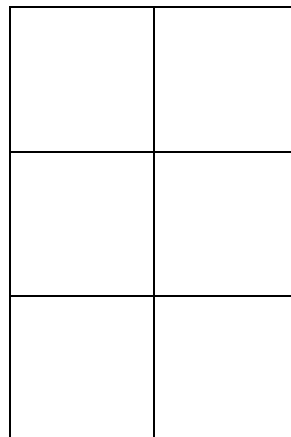
5. Learners stick their frames up on the walls and go round to see the films that the others have imagined.

The roman room

1. Ask learners to design a room with pieces of furniture by their own imagination then draw a floor plan of the room.

2. Learners then work in pairs and describe their rooms to each other.

3. Learners write a list of objects, swap the list and memorize the objects.

4. Learners in turn check the amount of object that their partner remembers.

2.2.4. Activities Based on Bodily-Kinesthetic Intelligence

Human camera

1. Learners work in pairs, person A is the photographer and person B is the "camera". A stands behind B, putting the hands on B's shoulders, B stands up with eyes closed.

2. A selects the space available that he/she wants to take photograph. He/she gets the camera into the right position, then takes the photo by pressing B's shoulder. B opens eyes for four seconds and remembers exactly what can see.

3. Swap roles after taking 2 photos using B as camera.

4. Learners come back, and draw rough outlines on paper of the two pictures they took when they were cameras.

Handing a word round the circle

1. Ask the learners to stand in a circle

2. Get one person to imagine he/she is holding an object and then he/she passes it to the person on their right. This person receives it and passes it on in the same way.

3. Get a learner to write on the board any new word. The first person tells the group what they gave to their neighbor.

The second one is then to say:

I got a… and then I gave him/her a…

4. Continue until all the learners in the circle have said what they got and what they gave (what learners get is different from what they have been given)

2.2.5. Activities Based on Musical Intelligence

The musical intelligence on holiday

1. Ask learners to recall to a holiday away from home that they really enjoyed (if they have not had a holiday, imagine).

2. Learners work in group of five to answer the questions:

What new sounds did you remember hearing?

What tunes, lyrics or music did you take with in your head on the holiday?

What musical experiences did you have while there?

3. Hand out copies of a song with some blanks then play the tape with the song, learners listen and fill in the blanks.

Making a coursebook dialogue musical

1. Ask learners to listen carefully to the new coursebook dialogue twice, book closed.

2. Tell the learners to open the books and read the new dialogue.

3. In groups of four, learners make the dialogue musical.

4. Give representative of groups an opportunity to perform to the whole class.

2.2.6. Activities Based on Interpersonal Intelligence

Sequence in a story

1. Learners work in group of five. Each group is given one of the paragraphs numbered 1 to 5. The paragraph is taken from somewhere in a story.

2. Learners write the very short paragraph they think precedes it and the one that follows it.

3. Representatives of groups read their original paragraph first, and then the preceding and following paragraph that they have written.

4. Hand out copies of the complete story and ask learners give comments on how new stories are written.

Dynamic questions

1. In group of five, learners write 10 open questions they would like to be asked on 10 pieces of paper.

2. Put all the paper slips of all groups in a box which is then given to a certain learner who picks one paper slip up and reads the question.

3. The group writes this question gives the answer.

4. Continue to pass the box on

5. The group has the most chances to answer the questions is the winner.

2.2.7. Activities Based on Intrapersonal Intelligence

The story of your hopes and dreams

1. Ask learners to make a list of dreams they have, or objectives they desire to reach in their lives in the form of a mind map.

2. Write a story about the dream based on this mind map.

3. Ask learners to put their story in an envelope and seal it.

4. After collecting all envelopes, hand out one envelope per each learner to share story.

Fifteen minutes of yesterday

1. Put learners into a "going inside" mood by asking them to close their eyes in about 20 seconds.

2. Tell learners to pick any moment from their memories of yesterday and to write down what they felt, thought or did during that moment.

3. Call volunteers to read what they wrote to the rest of the class.

4. Learners listen and choose the pieces of writing that attract the attention of the whole class (which the piece of writing is the funniest, the most profound, the saddest, etc.)

2.2.8. Activities Based on Naturalist Intelligence

Blindfolded walk race

1. Identify a safe location for five minute blindfolded walks (e.g. aisles in the classroom.

1. Put some obstacles like chairs, desks or books on that way.

2. Divide students into pairs and give each a blindfolded. Assign one student to be a leader and the other, who will be blindfolded, as a follower.

3. The leader guides the blindfolded student along the walkway. The follower should be instructed to use her sense of touch, smell and hearing to explore the environment.

4. The roles are reversed when they go back to the starting point.

Mystery bags

1. Gather natural objects such as a shell, a flower, a feather and put each in a paper bag out of the class's view.

2. Select one bag for the first round of questioning.

3. In group of five, learners select one observer.

4. The observers come to the front of the class and silently look into the bag without revealing clues about its content.

6. After guessing the object, a new observer is selected and the next round begins with the new object.

Conclusion

To summarize, Gardner's Multiple Intelligences theory has built up an impressive contribution to the innovation of language learning and teaching (Tran, 2009). The author hence would like to examine whether MI-based classroom activities enhance adult learners' learning motivation in Vietnam context.

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Figures

Figure 1.