Multiple Intelligences and ELT Curriculum Development

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ABSTRACT

Curriculum Development is one of the major topics that should be discussed in this modern era where technology has taken its pivotal role in influencing the young. Technology may not be able to fulfill all the needs of modern learners because it creates a sense of dependency and leads an individual to dangerous trends such as psychological addiction. Therefore, effective curriculum must be designed accurately so that students can benefit from it and have a holistic growth. This paper supports the ideas of Gardner (1983) on intelligence and highlights the essence of Multiple Intelligences in order to show that when MI theory is incorporated into the curriculum, the growth of the students would become holistic and mature. The researcher conducted a minor study on the application of MI theory and received feedback from the students at Loyola College, Chennai. The students received it with satisfaction. The need for incorporating MI theory into the curriculum was welcomed by the students.

Key Words: Multiple Intelligences (MI); ELT Curriculum; MI-based approach.

Introduction

Gardner (1999) defines intelligence as "a biopsychological potential for information process that can be activated in a cultural setting to solve problems or fashion products that are a value of in a culture" (pp. 33-34). He also states that intelligences are located in different parts of the brain according to their function. Therefore, when we activate all the intelligences, holistic growth takes place. There are eight types of Intelligences according to Gardner (1983). These

Intelligences are: Linguistic Intelligence, Logical-Mathematical Intelligence, Spatial Intelligence, Bodily-Kinesthetic Intelligence, Musical Intelligence, Inter-Personal Intelligence, Intra-Personal Intelligence, and Naturalist Intelligence.

The purpose of this article is to demonstrate that there is need for Multiple Intelligences (MI) theory to be incorporated into the curriculum. What is MI theory? It states that every human possesses all the eight intelligences; all eight intelligences need not be fully developed in all individuals. It is a matter of being less or more developed in a particular intelligence. Moreover, the undeveloped or inactive intelligences can be activated and developed at any point of time. Another interesting fact is that intelligences seldom act individually. They always act as a group. Each intelligence is supported by one or two other intelligences.

Curriculum Development

Curriculum development is an organized preparation of whatever is going to be taught and documented in schools and colleges in a stipulated time. The teachers are to follow it as an obligation. If curriculum is designed properly, keeping students in mind, then success is certain regarding the acquisition of language. Curriculum mainly refers to lesson planning and academic content; therefore, the objective must be students' holistic growth. The learning of the students depends much on the curriculum that is incorporated into the educational system. Therefore, proper steps should be taken to alter the present curriculum in order to achieve maximum results. Curriculum can be integrated with many theories in ELT to get positive results, but it should not be overloaded or monotonous. Multiple Intelligences Theory is one of the new perspectives in recent times which has strong focus on holistic development. It allows every learner to assess his/her talents and skills as a whole individual. When curriculum is integrated with Multiple Intelligences, the result is Integrated Learning (Fogarty 2008, xiii). Only integrated learning leads an individual to progress. Therefore, MI theory may serve as

a tool for curriculum development if it is taken into consideration.

The Eight Intelligences

Verbal/Linguistic Intelligence: Linguistic intelligence is the ability to learn languages and the capacity to use language to accomplish goals (Gardner 1999, p.41). This intelligence is actively used by most of the students in schools and colleges because schools and colleges generally insist on Linguistic and Logical/Mathematical Intelligences. Linguistic Intelligence involves both speaking and listening. The arts and sciences use receptive language as well as expressive skills. Receptive skills are listening and reading, whereas speaking and writing are productive skills. When one has this type of intelligence, "the student mainly focuses on dialogue, arguments, whispers, laughter, handwritten invitations, letters of correspondence, and poems and essays" (Fogarty 2008, p. 11).

Logical-Mathematical Intelligence:

Logical-mathematical intelligence is the ability to analyze problems logically and carry out all the mathematical operations scientifically (Gardner 1999, 42). Logical/ Mathematical intelligence encompasses reasoning skills. "The reasoning of a scientific hypothesis, the logical presentation of a computer program, the dichotomous classification of a species, the sequence of operations in mathematical equations, the cause-and-effect cycle of societal trends, the predictability of a plot in a novel, the patterned complexity of the periodic table of the elements, and the layered textures of an archeological dig. All

of these things are sights and sounds of this incredibly rigid, yet incredibly expansive intelligence" (Fogarty 2008, 9). This intelligence goes from a concrete level to an abstract level. Students who are active in this type of intelligence will analyze and compartmentalize any information that they get and thereafter apply it practically. Arguments and lively discussions with lots of practical problem-solving exercises should be given to students to make them learn English. This leads to critical thinking which is needed in writing and debate. This intelligence makes a learner analyze, compare, classify, and prioritize whatever he/she reads.

Musical Intelligence: Gardner (1982) states that musical ability is packaged in the brain in more varied ways than verbal and spatial skills. When a person is given an opportunity to develop the skill in music, he or she develops to an extent of performing better. Music is played everywhere from market to gym when people engage in work, and even in schools and colleges during prayer. A general opinion about Musical/ Rhythmic Intelligence is that many people across the world regard it as an innate talent, but when this intelligence is nurtured, it produces good results. Therefore, practice and effort will make a person acquire this skill. If this is applied in the learning of a language, learners would easily acquire the language. Language is naturally musical and musical elements in the language break the monotony of speaking.

Visual/Spatial Intelligence: Visual/Spatial Intelligence features the potential to

recognize and manipulate the patterns of wide space (those used, for instance, by navigators and pilots) as well as the patterns of more confined areas (Gardner 1999, p. 42). To learn a language one must also activate spatial intelligence because similes, metaphors, analogies need this type of intelligence to be creative: "His teeth were as white as pearls"; "Transfer of learning is like a bridge that connects two things"; or Carl Sandburg's famous line, "The fog comes on little cat feet." (Fogarty 2008, p. 8). Everybody possesses this type of intelligence but due to lack of opportunity this intelligence is not tuned. Generally, for comparisons and descriptions in the use of language, we need to tune in Spatial Intelligence. Therefore, when the teacher activates Spatial Intelligence among the students, students' language will be rich in expression.

Bodily/Kinesthetic Intelligence: Bodily/ Kinesthetic Intelligence entails the potential of using one's whole body or parts of the body (like the hand or the mouth) to solve problems or fashion products (Gardner, 1999, p. 42). Action is the key to unlock this intelligence. The overriding implications for the full development of the Bodily/ Kinesthetic Intelligence lie in a rich classroom that invites activities. This intelligence is activated in students when they are given exercises outside the class. Outdoor activities benefit them a lot. Field trips and excursions, followed by feedback on them will enhance this skill.

Interpersonal Intelligence: Interpersonal Intelligence denotes a person's capacity to understand the intentions, motivations, and

desires of other people and, consequently, to work effectively with others (Gardner, 1999, p. 43). Interpersonal Intelligence embodies people's interactions and involves the give-and-take of communication and the goal of not only understanding others and their motivations, but also of effectively empathizing with their feelings (Fogarty, 2008, p. 15). Social behaviour is very important for language learners to come out of fear and shyness. When a person undergoes a course in language learning and when asked to speak in front of his or her classmates, shyness and fear may prevent the person from speaking. As a result the person stumbles and stammers to speak. If Interpersonal Intelligence is activated, one can get rid of fear and shyness because it is a team-centered approach (Fogarty, 2008).

Intrapersonal Intelligence: Intrapersonal Intelligence involves the capacity to understand oneself, to have an effective working model of oneself - including one's own desires, fears, and capacities, and to use such information effectively in regulating one's life (Gardner, 1999, p. 43). Education is not just memorizing the content but a transformation of ideas into values. When a person is unable to transform the education and ideas to values, education becomes a failure. Therefore, Intrapersonal Intelligence helps a person to think, meditate, and transform the education that he or she receives into values. Writing diaries, articles, and journals is the manifestation of Intrapersonal Intelligence. The growth of a person depends on how much he/she is reflective. Intrapersonal Intelligence develops, according to Swartz and Perkins

(1987), in four incremental stages: tacit, aware, strategic, and reflection. Tacit behaviour refers to using a skill or idea in an oblivious state. For example, young students may seem able to read, but they may be totally unaware of the strategies they use – or even that they have an exceptional ability in this area. When students enter the next stage, awareness, they become cognizant of their strategies and/or their level of performance. They are able to step back from the action and "freeze frame" their behaviour. Subsequently, as they become more introspective, they advance to the strategic phase. In this phase, they consciously select particular models of behaviour. For example, our readers might deliberately plan to "skim" or "scan" an essay for needed information because they know it is an effective strategy for certain tasks (Fogarty 2008, p. 17). If one has to have a long-lasting transfer of learning, Intrapersonal Intelligence must be activated.

Naturalist Intelligence: Naturalist Intelligence combines a description of the core ability with a characterization of a role that many cultures value. A Naturalist demonstrates expertise in the recognition and classification of the numerous species - the flora and fauna - of his or her environment (Gardner 1999, p. 48). This intelligence helps a person to observe and differentiate various elements in this world. When language is taught in an open environment at least once a week, students who have high Naturalist Intelligence will do better in learning the language. This will also activate the Naturalist Intelligence of others whose Naturalist Intelligence is not activated. Here the learner is connected to nature and he or she feels one with it. Feeling at home makes a person comfortable. This comfortable atmosphere increases self-confidence in students.

Application of MI theory in ELT

Each Intelligence can be applied in ELT classrooms effectively. Fogarty (2008) gives an example for the simple application of one or two intelligences for beginners of English language learning. Bodily Kinesthetic Intelligence can be applied by introducing activity in the classroom. When a teacher engages in teaching nouns and verbs to the students, he/she can make the students stand up after the explanation of nouns and verbs. The instruction would go like this: when nouns are pronounced, students have to sit; when verbs are pronounced students have to stand. This makes students learn and remember nouns and verbs because learning them becomes practical in the classroom.

Interpersonal Intelligence could be activated by giving students the opportunity to form groups, which should be changed in every other class. Forming groups and learning in groups make the students gain confidence. A leader should be chosen in the group and he or she takes the place of the teacher and directs the group. Change of the leader for every group discussion is a must in order to avoid monotony and domination. This activity develops in the students the ability to face the crowd and accept everybody. Likewise, all the intelligences can be applied in the ELT classrooms.

The Study

The researcher wanted to find out whether students are in favour of MI theory. Two questionnaires were administered to the first year General English students from different departments in Loyola College, Chennai. Seventy-one students were the respondents.

The students were given the questionnaires to find out how far they were for or against the traditional educational system. The questionnaire also included items related to activities and tools used in MI theory to find out how far the students were for or against MI theory and its application. The results (given in number of respondents as well as in percentage) show clearly that students were in favour of MI theory (see **Appendix**). They welcomed application of this theory into their curriculum.

The first part of the questionnaire consisted of items based on the traditional approach as well as some of the activities based on MI theory. The main objective of the first part was to find which approach was frequently used in the General English class. For example, 55% of the students said that the 'chalk-and-talk' method was very frequently used. However, composing tunes in the class for poems was not used, according to 89% of the respondents. Composing tunes for poems is one of the activities in the MI approach. Responding to another item on acting and dancing, 79% of the students said that acting and dancing were not at all used in the General English class. From the responses to the first part of the questionnaire, it is clear that the

students were exposed much to the traditional approach in their classes.

The second part of the questionnaire consisted of items to find out how far students appreciated and welcomed the inclusion of MI theory in the curriculum. It is clear that 73% of students strongly disagreed with the 'chalk-and-talk' method in their class and 25% of students disagreed with it. Only 2% of the students in the class agreed and strongly agreed. On the importance of lectures, only 8% of the students agreed and the rest disagreed or strongly disagreed. The approval, acceptance and appreciation of tasks based on MI theory by the students revealed that students enjoyed a curriculum based on MI theory much more than they did the existing traditional curriculum. They also felt the immediate need for application of the MI theory in the curriculum.

Conclusion

Language learning is not an individual process but a group process. A group need not be a homogeneous group. There is great variety among students who come to learn English. Teachers must give opportunity and make students feel at home. There must be a strong interpersonal relationship among the members in the group at least to proceed with the basics in the class. This also breaks the silence of the class and erases fear, anxiety, shyness, and all psychological barriers that students face daily. When all the intelligences are activated, holistic growth can be seen in students. This holistic growth makes

students learn the language and apply it practically wherever they go, and the language comes naturally to students. It bears creativity, logic, actions, strong words, values, social growth and, a feel for nature. Therefore, the curriculum must be reshaped and redesigned in order to enable the holistic growth of students. Multiple Intelligences can be an innovative method in the teaching of the English language. As a result, students will shape themselves into models of language use in society. From the results reported, it is clear that students prefer the MI approach to the traditional approach. It is student-friendly and focuses on the strengths of the students rather than their weaknesses. It enhances the learning process and learners of all levels will achieve holistic growth.

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APPENDIX
MI SURVEY PART-I - RESULTS

[VFU-Very Frequently Used; FU-Frequently Used; U-Used; RU-Rarely Used; NU-Not Used]

| # | Questions | No. | % | No. | % | No. | % | No. | % | No. | % |
|----|---|-----|-----|-----|----|-----|----|-----|----|-----|----|
| | | VF | VFU | | FU | | U | | RU | | NU |
| 1 | Listening exercises | 12 | 17 | 14 | 20 | 40 | 56 | 4 | 6 | 1 | 1 |
| 2 | Vocabulary activities | 6 | 8 | 13 | 18 | 41 | 58 | 9 | 13 | 2 | 3 |
| 3 | Grammar exercises | 5 | 7 | 13 | 18 | 40 | 57 | 11 | 15 | 2 | 3 |
| 4 | Reading exercises | 10 | 14 | 20 | 28 | 37 | 52 | 4 | 6 | 0 | 0 |
| 5 | Chalk and Talk method | 39 | 55 | 11 | 15 | 12 | 17 | 5 | 7 | 4 | 6 |
| 6 | Lecture | 36 | 51 | 16 | 23 | 11 | 15 | 7 | 10 | 1 | 1 |
| 7 | Bilingual explanation | 31 | 44 | 17 | 24 | 16 | 22 | 4 | 6 | 3 | 4 |
| 8 | Oral presentation | 6 | 8 | 16 | 23 | 41 | 58 | 7 | 10 | 1 | 1 |
| 9 | One minute spontaneous speaking before class | 3 | 4 | 3 | 4 | 19 | 27 | 17 | 24 | 29 | 41 |
| 10 | Debates in classrooms | 0 | 0 | 10 | 14 | 9 | 13 | 15 | 21 | 37 | 52 |
| 11 | Writing essays, short stories, dramas | 3 | 4 | 10 | 14 | 12 | 17 | 31 | 44 | 15 | 21 |
| 12 | Riddles, storytelling, and word games in classrooms | 1 | 1 | 2 | 3 | 3 | 4 | 14 | 20 | 51 | 72 |
| 13 | Translation exercises | 1 | 1 | 1 | 1 | 7 | 10 | 31 | 44 | 31 | 44 |
| 14 | Logical presentation of subject matter | 2 | 3 | 5 | 7 | 9 | 13 | 9 | 13 | 46 | 64 |
| 15 | Use of organisers such as charts, maps, Venn diagrams etc., in classrooms | 0 | 0 | 3 | 4 | 6 | 8 | 11 | 15 | 51 | 73 |
| 16 | Comparing and contrasting the lessons | 2 | 3 | 8 | 11 | 10 | 14 | 14 | 20 | 37 | 52 |
| 17 | Mind maps, collages, designs, drawings, paintings in classrooms on a topic | 0 | 0 | 3 | 5 | 10 | 14 | 8 | 11 | 50 | 70 |
| 18 | Photographs, video making on a topic | 1 | 1 | 3 | 4 | 7 | 10 | 12 | 17 | 48 | 68 |
| 19 | Imaginative storytelling, creative expressions in classrooms | 2 | 3 | 7 | 10 | 13 | 18 | 30 | 42 | 19 | 27 |
| 20 | Composing tunes for poems | 0 | 0 | 2 | 3 | 2 | 3 | 4 | 6 | 63 | 88 |
| 21 | singing, humming, choral reading in class | 2 | 3 | 1 | 1 | 6 | 8 | 11 | 15 | 51 | 73 |
| 22 | Acting, dancing, | 0 | 0 | 2 | 3 | 4 | 5 | 9 | 13 | 56 | 79 |
| 23 | Facial expression and use of body language and expressions in classrooms | 3 | 4 | 4 | 5 | 9 | 13 | 24 | 34 | 31 | 44 |
| 24 | Field trips | 0 | 0 | 1 | 1 | 3 | 4 | 7 | 10 | 60 | 85 |
| 25 | Group discussions in classrooms | 4 | 6 | 5 | 7 | 36 | 51 | 15 | 21 | 11 | 15 |
| 26 | Peer teaching, peer learning in classrooms | 0 | 0 | 5 | 7 | 14 | 20 | 14 | 20 | 38 | 53 |
| 27 | Giving and receiving feedbacks from the peers after presentations | 4 | 6 | 6 | 8 | 12 | 17 | 29 | 41 | 20 | 28 |
| 28 | Joint presentation and team learning | 1 | 1 | 5 | 7 | 11 | 15 | 15 | 21 | 39 | 56 |
| 29 | Writing biography | 1 | 1 | 5 | 7 | 4 | 6 | 15 | 21 | 46 | 65 |
| 30 | Independent study in classrooms | 5 | 7 | 6 | 8 | 13 | 18 | 31 | 44 | 16 | 23 |
| 31 | Concentration skills | 2 | 3 | 6 | 8 | 12 | 17 | 25 | 35 | 26 | 37 |
| 32 | Self-reflections | 3 | 4 | 4 | 6 | 14 | 20 | 15 | 21 | 35 | 49 |
| 33 | Writing autobiography | 0 | 0 | 4 | 6 | 3 | 4 | 10 | 14 | 54 | 76 |

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MI SURVEY PART-II – RESULTS [SA-Strongly Agree; A-Agree; D-Disagree; SD-Strongly Disagree]

| # | Items | | % | No. | % | No. | % | No. | % |
|----|---|----|----|-----|----|-----|----|-----|----|
| | | | 4 | A | | D | | SD | |
| 1 | English teachers must teach only lessons in English class. | 2 | 3 | 3 | 4 | 14 | 20 | 52 | 73 |
| 2 | English teachers should teach only grammar in class. | 0 | 0 | 3 | 4 | 28 | 39 | 40 | 57 |
| 3 | Chalk and Talk method should only be used. | 1 | 1 | 1 | 1 | 18 | 25 | 51 | 73 |
| 4 | Lecture alone should be given importance in class | 0 | 0 | 6 | 8 | 45 | 64 | 20 | 28 |
| 5 | Bilingual explanation of the lessons. | 15 | 21 | 39 | 55 | 13 | 18 | 4 | 6 |
| 6 | Summarizing or explaining only lessons. | 0 | 0 | 9 | 13 | 38 | 53 | 24 | 34 |
| 7 | Writing only the summary of the lessons taught. | 1 | 1 | 9 | 13 | 41 | 58 | 20 | 28 |
| 8 | Singing, humming, music will help you to get better pronunciation. | 41 | 58 | 26 | 37 | 4 | 5 | 0 | 0 |
| 9 | Acting, dancing, using body language will help you get rid of stage fear. | 46 | 65 | 25 | 35 | 0 | 0 | 0 | 0 |
| 10 | Group discussions, peer teaching and peer learning will help you to understand others better. | 49 | 69 | 21 | 30 | 1 | 1 | 0 | 0 |
| 11 | Painting, drawing, mind maps, making videos and photographs will help you develop imaginary power and creativity. | 52 | 74 | 18 | 25 | 1 | 1 | 0 | 0 |
| 12 | Data collection, chart and graph presentation will help you develop logical thinking. | 42 | 59 | 27 | 38 | 2 | 3 | 0 | 0 |
| 13 | Independent study and self-reflection will help you think deep and produce good results. | 40 | 57 | 30 | 42 | 1 | 1 | 0 | 0 |
| 14 | Listening exercise, vocabulary activities, readings will help you to learn English better. | 45 | 64 | 25 | 35 | 1 | 1 | 0 | 0 |
| 15 | A field trip for practising English out of the classroom. | 44 | 62 | 26 | 37 | 0 | 0 | 1 | 1 |
| 16 | Writing essays, stories, biographies and autobiographies in English class will enhance written communication. | 15 | 21 | 53 | 75 | 3 | 4 | 0 | 0 |
| 17 | Tapping imagination will increase creativity. | 48 | 68 | 23 | 32 | 0 | 0 | 0 | 0 |