Volume IV
Issue VII
July 2016

IJELLH
International Journal of English Language, Literature and Humanities

ISSN INTERNATIONAL STANDARD SERIAL NUMBER INTERNATIONAL CENTRE
2321-7065

Indexed, Peer Reviewed & Refereed Journal

Developing the English Language skills of school students using Gardner's Linguistic Intelligence and Logical-Mathematical Intelligences

*** E. Suresh Kumar**

Professor of English and Registrar of Osmania University

**** N. Prathyusha**

Research Scholar in the Department of English, Osmania University

Hyderabad

Telangana

India

Abstract

The theory of Multiple Intelligence (MI) suggests that learners have different strengths, learning styles and even learning potential contrary to the belief that only students with strong linguistic, mathematical and spacial abilities are accepted and recognized in the society. Once the teachers recognize the different intelligences possessed by their students, they can design different exercises to enhance the language skills of the students. This article focuses on ways of enhancing the English Language skills among the students, using Gardner's Multiple Intelligence Theory. For the purpose of the study, Gardner's MI questionnaire was administered to 150 school students. A pre-test, intervention programme, and a post - test were conducted to make the study more authentic.

Key words: Multiple intelligence, questionnaire, pre-test, intervention programme, post-test

Introduction

In the traditional framework of learning, in the mainstream education system, only learners with strong linguistic, mathematical and spacial abilities are accepted, whereas learners with different

intelligences which cannot be measured by standard psychometric tests based on behaviorist paradigms are rejected as unable to learn (Weber 1992; Armstrong1993). This difference in the education system is caused by psychometric tests of general intelligence, which are supposed to be the accurate way of finding out the overall academic ability. Since these tests are based on testing linguistic, mathematical and logical abilities, their scope remains limited and much of learner's potential remains untapped, leading to many number of dropouts.

The idea of social, practical, and emotional intelligence or of diverse intelligence indicates what people refer to do or how they work on the abilities they have. A complete interpretation of this brain-based difference in abilities as related to intelligence functions was achieved by Howard Gardner (1983) with his theory of Multiple Intelligences (MI).

Gardner's theory has brought a paradigm shift in all spheres of learning. The focus of this paradigm shift in pedagogy rests with the corollary to MI theory that there can be multiple entry points to understanding, learning and mastering any academic subject (Gardner, 1993a).This means that there can also be multiple ways of teaching language which agree to the brain-based intellectual configurations of the learners, derived from their MI profiles.

Gardner (1983) claims that his view of intelligence(s) is culture-free and avoids the conceptual narrowness usually associated with traditional models of intelligence (e.g., the Intelligent Quotient [IQ] testing model). He posits eight native "intelligences," which are described as follows:

1. Linguistic: the ability to use language in special and creative ways, which is something lawyers, writers, editors, and interpreters are strong in.
2. Logical/mathematical: the ability to think rationally, often found with doctors, engineers, programmers, and scientists.
3. Spatial: the ability to form mental models of the world, something architects, decorators, sculptors, and painters are good at.
4. Musical: a good ear for music, as is strong in singers and composers.
5. Bodily/kinesthetic: having a well-coordinated body, something found in athletes and craftsperson.
6. Interpersonal: the ability to be able to work well with people, which is strong in salespeople, politicians, and teachers

7. Intrapersonal: the ability to understand oneself and apply one's talent successfully, which leads to happy and well-adjusted people in all areas of life
8. Naturalist: the ability to understand and organize the patterns of nature.

The naturalist intelligence is however not very popular and in use. The idea of Multiple Intelligences has attracted the interest of many educators as well as the general public. Schools that use MI theory encourage learning that goes beyond traditional books, pens, and pencils. Teachers and parents who recognize their learners'/children's' specific talents can provide learning activities that build on those inherent talents. As a result of strengthening such differences, individuals are free to be intelligent in their own ways.

According to Richards.C and Rogers S Theorode (2010)

> There are no goals stated for MI instruction in linguistic terms. MI pedagogy focuses on the language class as the setting for a series of educational support systems aimed at making the language learner a better designer of his/her own learning experiences. Such a learner is both better empowered and more fulfilled than a learner in traditional classrooms. A more goal-directed learner and happier person is held to be a likely candidate for being a better second language learner and user. (p.no 118)

However, unfortunately, a similar movement has not occurred in education, especially in India, where the linguistic and logical-mathematical bias continues to predominate. Children who have other gifts do not receive much reinforcement for these in school. In fact, as Gardner (1983) and Armstrong (2000) observed, many learners even end up being labeled as slow learners or slow processors.

Aim of the research

The present study aims at developing the English language skills of the school students in the state of Telangana, using Gardner's Linguistic and logical Mathematical Intelligences

Statement of the problem

There is a lot of hue and cry on the poor English language skills of the students. If the foundation is good, the students can excel both in their personal as well as their personal lives. The teaching-learning process in many schools is not innovative and students are not encouraged to try out different ways of learning.

Hypotheses

1. Teaching-learning process in most of the schools of Telangana State is by and large traditional.
2. No innovative methodology is adapted to tap the potential of the students.
3. Linguistic and logical-mathematical intelligences of the students are given least priority.
4. Students are unaware of their own potential.

Objectives of the research

1. To find out the innovative methodology adopted by the teachers of English to tap the hidden potential of the students.
2. To make students aware of their own hidden potential.
3. To design a module for learning English based on the linguistic and logical-mathematical intelligences of the students.

Research Design

The present study focuses on developing the English language skills of the school student's using Gardner's linguistic and logical–mathematical intelligences. For this purpose a preliminary study was carried out by the researcher in different schools. It was observed in the preliminary study that English language learning was not given priority by the school authorities. A structured questionnaire based on Gardner's linguistic and logical–mathematical intelligences was administered to 150 randomly selected students. After collecting the data from the learners, their perceptions were analyzed, tabulated and interpreted. For each question, three options such as frequently, sometimes, never were given.

Score for each option is given as:

Frequently	3
Sometimes	2
Never	1

Linguistic intelligence

It is the ability to learn languages both spoken and written, and the capacity to use language to accomplish certain goals. Learners good at linguistic intelligence have the ability to use language to express themselves rhetorically or poetically. The following questions under this intelligence

were asked to find out if the students are interested in reading, appreciating and understanding the language:

- I like to read English books, Magazines and Comics
- I like to learn new words in English
- I enjoy playing Word games in English
- I enjoy public speaking and participating in debates in English
- I get annoyed with people who use improper English

Logical Mathematical intelligence

It consists of the capacity to analyze problems logically, and investigate issues scientifically. These learners can identify the relationships between different things easily. The following questions under the logical mathematical intelligence were asked to find out the sample students' arithmetic and logical reasoning.

- I ask a lot of questions about how things work
- I find computer games interesting
- I enjoy playing chess, checkers or brain teasers
- I often see patterns and relationships between numbers faster and easier than others
- I can add or multiply in my head

Methodology

The data was analysed and calculated according to the Likert scale. The following is the score of the two intelligences:

Linguistic Intelligence	2.2
Logical Mathematical Intelligence	2.1

A pre-test was conducted for 50 randomly selected students. Based on the scores of the sample learners a training programme was designed.

The class was further divided into two groups:

- The experimental group

- The control group

An intensive training programme was designed by the researcher to give training to the experimental group in the English language using the linguistic and logical–mathematical intelligences, by including a variety of language activities in their routine. The control group on the other hand continued with the same teaching techniques used in the school. The training schedule was conducted for a period of 1 week.

Training

The learners worked on the following activities given by the researcher to enhance their English language skills using their linguistic and logical Mathematical intelligence

Activity 1

Story Telling

Story telling is a unique human skill shared between people, and is one of the oldest art forms. Stories are effective educational tools as the learners will be engaged in the story and remember well. Story telling also explores the learner's unique expressiveness and helps them to communicate thoughts and feelings in an articulate, lucid manner.

The researcher gave the learners an unfinished story 'My Chocolate Brother'. The learners were given 15 minutes to read the story and 20 minutes to think about the possible climax to the story. The sample learners read the story with great enthusiasm. Since the story revolved around a boy who turned into chocolate (their favorite food) they were greatly excited. The learners were curious for a climax and came out with innovative and creative conclusions.

Activity 2

Conducting an Interview

The purpose of an interview is to learn about a candidate's personality and determine whether he or she will be a 'good fit' in any given job or task.

The learners were given a situation, wherein they should be interviewing their classmates who have applied for the post of school Head Boy. The learners came up with different questions as to why they wanted to become the School Headboy? Some of them are:

- What are responsibilities they wanted to take up
- What changes they wanted to make and how they would become a role model for other

The learners were very enthusiastic in conducting the interview. They finished the work in the stipulated time given to them i.e., 30 minutes. The learners not only gained confidence, but also developed their language skills through this activity.

Activity 3

Review of a Movie

The learners were asked to write a review of the film that they have seen recently in about 150 words. The researcher gave a few words, which would be of help to the learners.

Interesting – exciting – crisp – too long – funny – great songs – action – too many dialogues – slow movie – great photography – good acting – story too complicated – film could have been shorter

At the end of the activity, the learners could write about the movie clearly. The words given by the researcher were of great help to the learners and helped them in improving their writing skills

Activity 4

Sudoku

Sudoku is a puzzle that has enjoyed worldwide popularity since 2005. To solve a Sudoku puzzle, one needs to use a combination of logic and trial and error. The learners were given a simple Sudoku and were asked to explain the step by step process of how they have solved it. They were initially reluctant to solve the Sudoku, as they found it tough. But after explaining the technique for solving it, they all solved the puzzle and tried to explain the process. They used the problem solving strategy to generate possible solutions to the problems. The learners developed cognitive skills and in the process could also hone their written skills.

Activity 5

Flow Chart on 'The Evolution of Life on Earth'

A flowchart is a visual representation of the sequence of steps and decisions needed to perform a process. Each step in the sequence is noted within a diagram shape. Steps are linked by connecting lines and directional arrows. The learners were shown a video clipping titled 'The Evolution of Life on Earth' for 6 minutes. Later they were divided into pairs. After watching the video, the learners were asked to discuss the important points and make a flow chart.

Through this activity, the sample students enhanced their creativity, problem solving in a simplified way and developed their interpersonal skills. At the end of this activity, the sample learners learnt to think rationally of what they have learnt, understood, and how to reproduce what they have learnt.

Activity 6

Geometric Shapes and Objects

Geometry is the study of the size, shape and position of two dimensional shapes and three dimensional figures. The sample learners were asked to develop one or more objects using the shapes.

The learners started the activity with enthusiasm, but after a while, they ran out of the ideas and were hesitant to complete it. However, with the experience they derived from the other activities, they managed to complete the activity with a lot of determination. The learners not only developed many objects, but also explained the process thus developing their English language skills.

Post-test

After the completion of the one week of training, a post-test was conducted to measure application and impact of the learning during the training period. The post-test was also conducted to the control group. The average scores are as follows:

IJELLH
International Journal of English Language, Literature and Humanities
INTERNATIONAL STANDARD SERIAL NUMBER INTERNATIONAL CENTRE
2321-7065
Indexed, Peer Reviewed & Refereed Journal

Sl. No.	Name of the test	Average score
1	Pre test (Entire Group)	21
2	Post Test (Control Group)	23
3	Post Test (Experimental Group)	31

A significant increase in score can be observed in the experimental group after the training programme. The improvement was mainly observed along linguistic and communicative dimensions. The sample learners also felt they developed a natural instinct for learning more with MI inputs intervention.

Findings

- It was proved that the English language skills can be honed through linguistic and logical-mathematical intelligences.

- The learners appeared to value knowledge more by 'getting it themselves, instead of being handed down by the teacher from the text.

- The inclusive framework of the MI tasks enabled discovery learning to take place within new roles and procedures that evolved as a part of learning.

- It was learnt that most of the learners did not show much interest in learning vocabulary. But after the training programme, they started developing interest in learning vocabulary using different activities of their own.

- It was observed that the learners never had the chance to explore / exhibit their leadership qualities, as they never got any choice to take lead in the classroom discussions.

- The sample learners tried to evaluate themselves after trying out a new activity as they wanted to know where they stand.

IJELLH
International Journal of English Language, Literature and Humanities
INTERNATIONAL STANDARD SERIAL NUMBER INTERNATIONAL CENTRE
2321-7065
Indexed, Peer Reviewed & Refereed Journal

Conclusion

As a broad result of the MI project initiated during this study, students, teachers, parents and the management together thought that a multiple learning framework which includes an anxiety-reducing quotient needed to be planned integrally into the school curriculum itself instead of being confined to any particular period in the timetable as the results shown were very impressive.

Bibliography:

Armstrong, Thomas (1993). 7 Kinds of Smart: Identifying and Developing Your Multiple Intelligences. New York: Plume.

Armstrong, T. (2000). Multiple intelligences in the classroom. Alexandria, VA: ASCD

Gardner, H. (1983). Frames of mind. The theory of multiple intelligences. New York: Basic Books.

Gardner, H. (1993). Frames of the mind: The theory of multiple intelligences. 10th Anniversary Edition. New York: Basic Book

Richards, J. & T. Rodgers. (2001). Approaches and methods in language teaching. Cambridge: Cambridge University Press.

Weber, Ellen, 1992. Curriculum of Success. New Horizons for Learning Online Journal. Retrieved from http://www.newhorizons.org/strategies/mi/weber1.htm