Multiple Intelligences in Communication Classroom

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Abstract

The theory of multiple intelligences was put forward by Dr. Howard Gardner, who is a professor of education at Harvard, in 1983. The theory shifts our attention from the stereotyped conception of intelligence, based on I.Q. testing, to nine different intelligences so as to explain a diverse range of human potential. This paper will identify the type of intelligence each of the target group (students of Communication) has, identify the teaching methods used to teach the target group and find out whether the teaching methods cater to the type of intelligence the target group has. This study shows that target group is diverse in terms of multiple intelligences but the ranking of target group intelligence does not correlate with that of class activities used to teach these students. The linguistic intelligence, predominantly catered to in the class activities, was not the dominant intelligence in this group and the dominant intelligence.

Key Words: *Multiple Intelligences, Diversity, Dominant Intelligence, Teaching Methodology*

1. Introduction

The theory of Multiple Intelligences represents a new point of reference towards intelligences (Goodnough, 2000). Howard Gardner, a professor of education at Harvard University, in his most renowned book, "Frames of Mind", proposed this theory in 1983. Since that time, this theory has been applied to teaching and learning.

According to Armstrong, although the theory of multiple intelligences has been the focus the attention of many educators in the U.S, still out there are many schools that teach in the same outdated way, such as, boring lectures, worksheets and textbooks. The challenge present to the institution in Pakistan is pretty huge as except for the elite schools in Pakistan, the majority of the teaching methodologies does not cater to multiple intelligences and include the traditional teaching methods.

Gardner places his theory as opposed to the traditional view of the intellect. He presented an altogether novel conception of the human intelligence.

This new concept is in contract with the conventionally established concept which states that the human intelligence is a linear concept which is measured by IQ tests. (Abdallah, 2008) MI Theory also suggests that every one has the capability to comprehend and learn about the world around him. The pioneer of the modern day kindergarten, Friedrich Froebel, developed a curriculum based on practical experiences. (Dorathy, 1999)

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Educationists like Maria Montessori and John Dewy developed innovative systems of teaching based upon multiple-intelligences in the 20th century. (Abdallah, 2008) Instruction based on Multiple Intelligences in teaching English can be effective in many ways. Instruction of the English language on MI Theory means that the teacher should use an assortment of teaching strategies to address the intelligences dominated in the students. The model of instruction that employs the MI philosophy teaches English language in a natural environment. (Abdallah, 2008)

2. Literature Review

Kristi A. Schaller and Marybeth G. Callison in the paper titled "Multiple Intelligence and Student Learning: Reframing our Teaching Methods in the Basic Public Speaking Course" elaborates that speaking courses in English language are perfect forum to utilize the strategies to employ multiple intelligences, for example, students can be given choice to select the topic related to their personal intelligence. The paper further recommends a list of assignments and class activities that address the different types of intelligences. The paper suggests that the basic public speaking course is an ideal forum to incorporate MI theory and that instructors should use a variety of teaching methods to stimulate students' multiple intelligences. The paper describes MI theory and suggests assignments and activities that public speaking instructors might consider.

Anna Marie Safi in the paper titled, "Ditch the Dictionary" applies the theory of Multiple Intelligences to vocabulary development and reading instruction in the English as a Second Language Classroom. The paper supports the theory of Multiple Intelligences and maintains that in most of the learners, one kind of intelligence dominates though they possess some degree of all kinds of intelligences. It also states that the fact that the differences are not tolerated in a traditional classroom makes learner internalize that the real intelligent people are only 'word; or 'logic' smart. Ditch the Dictionary was a teacher training workshop presented at the International Institute of Rhode Island in 1994. The workshop evolved a discussion of possibilities for making use of the theory of Multiple Intelligences in a vocabulary classroom. The paper further suggests that a variety of possible activities catering to intelligences should be modeled and practiced; experiments with nontraditional "smarts" and suggests that the students should be allowed time to observe the class in action so as to learn about their own personal learning style.

Peter Smagorinsky in "Multiple Intelligences in the English Class: An Overview" describes how he increasingly encouraged students to represent their understanding of literature through unconventional types of compositions and understanding. His reading of Gardner suggested to him that students who would draw or dance an interpretation of literature were engaging in many of the same developmental processes they would experience when writing, and perhaps engage in other important processes as well that were not available through writing. The study revealed that in composing their texts the students engaged in a variety of processes that teachers value in writing, such as, drawing on a wealth of personal experiences to inform their reading of the story and to compose their texts; empathizing with the characters by relating parallel experiences;

imbuing their texts with personal meaning; and representing their understanding symbolically.

Wendy F. Simeone in the paper, "Accommodating Multiple Intelligences in the English Classroom" offers activities for the kinesthetic learner, stating that most of the English teachers plan lessons which accommodate only visual and auditory learners. He describes using kinesthetic approaches, such as, video camera and films. In an activity, students were expected to demonstrate awareness of theme of a book by composing with a camera instead of pen. Students that were interested in music particularly enjoyed the project. One of his favorite kinesthetic language arts activities was a game he called "Chalkboard Pictionary." The activity visualized in concrete terms the symbolic and metaphorical power of proverbs. The author claimed that he was always struck by the talent of some of his students who often were the least talented with paper, pen, and word but were outstanding with picture conceptualizations. This realization had led him to offer more picture alternatives. This selection of kinesthetic activities was designed to stimulate all learning styles, but especially to provide the athletes, musicians, and artists in his classroom with some success and to foster a love for language and literature in all of his students.

The report titled, "Enhancing vocabulary and Language Using Multiple Intelligences" by Pat Condis, Diana parks and Rita Soldwedel describes a program for evolving language development through the use of multiple intelligences. An investigation on the profile of the learners showed that they neither at home nor at school were they offered a variety of learning strategies that could address multiple intelligences .The analysis of results showed a considerable improvement in students' language with a concentrated and regular intervention using the multiple intelligences.

A study by Fozia Naseem and Dr. Fauzia Naeem Khan titled, " Theory of Multiple Intelligences in Classroom: A Case study of Karachi" attempted to find out whether opportunities were provided to children in private public and community based schools to cater to multiple intelligences. Through interview based semi structured questionnaire and class observations, the paper attempted to gauge what strategies were employed in the classrooms to meet the various intelligences of children. It was observed that in the schools of all three sectors much importance was placed on verbal-linguistic and logical mathematical intelligences whereas strategies to trigger the other intelligences were not given emphasis. The assessment techniques in the public and private schools were also based on written examinations conducted at fixed period. However, the community based schools are observed to be better followers of MI theory in terms of assessments and curriculum development. The study recommends an in-depth understanding of the concept of MI through formal training given to the teachers. It further suggests that the community members, the state and parents should also be made a part of this process of change.

Mary E. Buschick, et al in an Action Research Project, May 2007, titled "Increasing Reading Motivation in Elementary and Middle School Students Through the Use of Multiple Intelligences." The objective of this project was to increase reading motivation

in elementary and middle school students using of multiple intelligences. The study showed that the two most dominated intelligences in the classroom were verbal/linguistic and interpersonal, while the least dominated were intrapersonal and naturalistic intelligence. The teacher researchers decided to employ multiple intelligences as their principal solution to increasing reading motivation in elementary and middle school students. The teachers incorporated a number of activities to cater to multiple intelligences. The results of the student survey showed that there was an increase of students reading at home and their interest in reading. The teachers became more understanding of the requirements and needs that students had owing to their dominant intelligence through this study.

3. Research Objectives

The research aims to

- Identify the type of intelligence dominant in the target group
- Identify the teaching methods used to teach the target group
- Find out whether the teaching methods cater to the type of intelligence the target group has?

4. Problem Statement

This paper will find out what sort of intelligences the students of different Communication courses have and whether the teaching methods cater to these intelligences or not; and if they do to what extent each intelligence is catered to.

5. Hypotheses

The literature review of the researches conducted helped to formulate the following hypotheses:

1. The target group, i.e., students of Communication at the Institution in question, is diverse in terms of multiple intelligences
2. The teaching methodologies at the institution employ different ways to cater to the dominant intelligences of the target group.

As there is no acknowledged test particularly devised to find out the dominant intelligence in learners, no research paper in the literature review attempts to find out the dominant intelligences of the target group. The questionnaire used in this study has been formulated by the researcher on her own, with the help of the description of nine intelligences from the literature review.

6. Research Methodology This research was both quantitative and descriptive.

6.1 Target Group

The target group of this study was the students of Communication at a business school in Karachi. Hundred students were a part of this study but only 96 questionnaires which were completely filled out were included in the study.

6.2 Data Collection and Methodology. The sampling was convenience based.

A questionnaire was formulated on the basis of literature review read for this research. Likert Scale was employed in the questionnaire. Questions of Part one of the questionnaire were formulated to find out which intelligences the target group had: question 1-5 were based on Visual-Spatial Intelligence; question 6-10 on Linguistic-Verbal Intelligence; 11-14 on Logical-Mathematical Intelligence; 15-18 on Bodily-Kinesthetic Intelligence; 19-22 on Musical Intelligence; 23-26 on Interpersonal Intelligence; 27-30 on Intrapersonal Intelligence; 31-34 on Naturalistic Intelligence; question 31 was based on Existential intelligence.

In the second part of the questionnaire the target group was asked about the class activities they were involved in. Question 1-4 were formulated to find out whether they were involved in activities/teaching methods that catered to Linguistic-Verbal Intelligence; question 5-11 asked them if they were involved in activities/teaching methods that catered to Visual-Spatial Intelligence; question 12-14 were formulated to find out whether Musical Intelligence was catered to; question 15-20, 21-23 , 24-26 and 27-28 were formulated to find out whether they were involved in activities/teaching methods that catered to Bodily-Kinesthetic Intelligence; Logical-Mathematical Intelligence; Interpersonal Intelligence and Intrapersonal Intelligence, respectively; question 29 was formulated to find out whether Naturalistic Intelligence was catered to and question 30 was formulated whether they were involved in activities/teaching methods that catered to existential intelligence.

6.3 Data Analysis Methodology

The response to each questions in the questionnaire was considered positive when out of 4/5 questions, 3 were responded in the affirmative (i.e., always /mostly). All responses were then ranked in a sequence. Spearman Co relation Co efficient was used for data analysis.

7. Results

Spearman rank correlation coefficient '?' was 0.04 (statistically not different from zero). The class activities did not cater to students predominant "intelligence" as shown by the ranking in the two orders were different with the exception of one intelligence (Table 1-2).

Table 1. Rank order of the student intelligence

1	Bodily-Kinesthetic Intelligence	88(92)
2	Interpersonal Intelligence	85(88)
3	Intrapersonal Intelligence	76(79)
4	Naturalistic Intelligence	73(76)
5	Mathematical Intelligence	72(75)
6	Visual- spatial Intelligence	70(73)
7	Linguistic Intelligence	69(72)
7	Existential Intelligence	69(72)
9	Musical Intelligence	56(58)

*number and percentage n (%)

Table 2. Rank order of the intelligences catered to in the class activities/teaching methodologies

1	Linguistic Intelligence	76(79)
1	Interpersonal Intelligence	76(79)
3	Visual- spatial Intelligence	72(75)
4	Naturalistic Intelligence	62(65)
5	Existential Intelligence	56(58)
6	Mathematical Intelligence	55(57)
7	Bodily-Kinesthetic Intelligence	49(51)
8	Musical Intelligence	45(47)
9	Intrapersonal Intelligence	14(15)

*number and percentage n (%)

4. Discussion

The distribution of various intelligences in the study group was as follows: Bodily/Kinesthetic 88(92%), interpersonal 85(88%), intrapersonal intelligence 76(79%), naturalistic intelligence 73(76%), mathematical intelligence 72(75%), visual-spatial intelligence 70(73%), linguistic intelligence 69(72%), existential intelligence 69(72%) and musical intelligence 56(58%) as shown in Table 1. The majority of the classroom activities catered to linguistic intelligence 76(79%), 76(79%) of class activities catered to interpersonal intelligence, 72(75%) catered to visual- spatial intelligence, 62(65%), 56(58%), 55(57%), 49(51%), 45(47%) and 14(15%) catered to naturalistic, existential, mathematical, bodily-kinesthetic intelligence, musical and intrapersonal intelligence, respectively (Table 2). Table 1 shows that body-kinesthetic intelligence 88(92%) was

predominant in the students followed by interpersonal 85(88%) and intrapersonal intelligence 76(79%). However, the class room activities catered predominantly to linguistic intelligence in 76(79%) followed by interpersonal 76(79%) and visuo-spatial intelligence in 72(75%), respectively (Table 2). Only the classroom activities catering to natural intelligence 62(65%) correlated with natural intelligence 73(76%) of the target group (Table 1-2).

The class activities did not cater to students' predominant "intelligence" as shown by the ranking in the two orders. The ranks were different, with the exception of naturalistic intelligence, which is the fourth in both rank orders. This means that a good emphasis is given to group work, solving communication problems at work and responding to requests, sales letters, etc. in the communication classroom in the university in question.

The most dominant intelligence in the target group is Bodily-Kinesthetic Intelligence but the results show that only few class activities cater to this intelligence. The third dominant intelligence in number was Intrapersonal Intelligence and once again in the rank of intelligences catered to in the class, this intelligence was the last one, which means that this type if intelligence is almost ignored in the class and the students in whom this intelligence dominates will only engage in other activities that do not cater to their needs.

The study shows that the majority of class activities were based on Linguistic Intelligence (which is on rank seven on the rank order of the dominant intelligences in the target group), such as, rewriting/revising messages, writing and reading assignments and oral presentations only and therefore will not cater to a classroom which is diverse in terms of multiple intelligences. Therefore, the first hypothesis, i.e., the target group, i.e., students of Communication at the Institution in question, is diverse in terms of multiple intelligences has been validated in the research whereas the second one, i.e., the teaching methodologies at the institution employ different ways to cater to the dominant intelligences of the target group has been rejected by the analysis of the results of the research.

8. Conclusion

This study shows that target group is diverse in terms of multiple intelligences but the ranking of target group intelligence do not correlate with that of class activities used to teach these students. The linguistic intelligence, predominantly catered to in the class activities, was not the dominant intelligence in this group and the dominant intelligence, i.e., Bodily-Kinesthetic is not catered to by the majority of the teaching activities. It is important to determine dominant intelligences in a class room and plan out activities/ teaching methodologies that match with the preferred learning styles to those intelligences so as to achieve the desired goals in the field of education.

9. Limitations of the study

The limitation of the study was that there were no authentic tests for multiple intelligences available or used in the studies discussed in the literature review that could have been

used as a sample. Hence, the reliability and authenticity of the questionnaire used in this research can be questioned.

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Appendix

Questionnaire

This questionnaire will be used for a research project. The information collected will be **kept confidential.**
Name (optional):_____
Gender: _____
Age: _____

Note: Please tick the appropriate answer.

1	Do you enjoy reading and writing?	Always Never	Mostly	Occasionally
2	Are you good at putting puzzles together?	Always Never	Mostly	Occasionally
3	Are you good at interpreting pictures, graphs and charts?	Always Never	Mostly	Occasionally
4	Do you enjoys drawing, painting and the visual arts?	Always Never	Mostly	Occasionally
5	Do you recognize patterns easily?	Always Never	Mostly	Occasionally
6	Are you good at remembering written and spoken information?	Always Never	Mostly	Occasionally
7	Do you enjoy reading and writing?	Always Never	Mostly	Occasionally
8	Are you good at debating or giving persuasive speeches?	Always Never	Mostly	Occasionally
9	Are you able to explain things well?	Always Never	Mostly	Occasionally
10	Do you often use humor when telling stories?	Always Never	Mostly	Occasionally
11	Are you good at problem-solving skills? Never	Always	Mostly	Occasionally
12	Do you enjoy thinking about abstract ideas?	Always Never	Mostly	Occasionally
13	Do you like conducting scientific experiments?	Always Never	Mostly	Occasionally
14	Are you good at solving complex computations?	Always Never	Mostly	Occasionally

15	Are you good at dancing and sports?	Always Never	Mostly	Occasionally
16	Do you enjoy creating things with your hands?	Always Never	Mostly	Occasionally
17	Are you good at physical coordination?	Always Never	Mostly	Occasionally
18	Do you tend to remember by doing, rather than hearing or seeing?	Always Never	Mostly	Occasionally
19	Do you enjoy singing and playing musical instruments?	Always Never	Mostly	Occasionally
20	Do you recognize musical patterns and tones easily?	Always Never	Mostly	Occasionally
21	Are you good at remembering songs and melodies?	Always Never	Mostly	Occasionally
22	Do you have an understanding of musical structure, rhythm and notes?	Always Never	Mostly	Occasionally
23	Are you good at communicating verbally?	Always Never	Mostly	Occasionally
24	Do you see situations from different perspectives?	Always Never	Mostly	Occasionally
25	Do you create positive relationships with others?	Always Never	Mostly	Occasionally
26	Are you good at resolving conflict in groups?	Always Never	Mostly	Occasionally
27	Are you good at analyzing your strengths and weaknesses?	Always Never	Mostly	Occasionally
28	Do you enjoy analyzing theories and ideas?	Always Never	Mostly	Occasionally
29	Are you good at self-awareness?	Always Never	Mostly	Occasionally
30	Do you clearly understand the basis for your own motivations and feelings?	Always Never	Mostly	Occasionally
31	Are you interested in subjects such as botany, biology and zoology?	Always Never	Mostly	Occasionally
32	Are you good at categorizing and cataloguing information easily?	Always Never	Mostly	Occasionally
33	Do you enjoy camping, gardening, hiking and exploring the outdoors?	Always Never	Mostly	Occasionally

| 34 | Do you enjoy learning topics have connection to nature? | Always Never | Mostly | Occasionally |

35   Are you sensitive to, or have the capacity for, conceptualizing or tackling deeper or larger questions about human existence, such as the meaning of life, why are we born, why do we die, what is consciousness, or how did we get here?   Always Mostly Occasionally Never

<div align="center">

In this part of the questionnaire you will have to tick the class activities your are involved in

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1	Rewriting/revising messages/ speeches	Always Never	Mostly	Occasionally
2	Writing assignments	Always Never	Mostly	Occasionally
3	Reading assignments	Always Never	Mostly	Occasionally
4	Debating or giving persuasive speeches	Always Never	Mostly	Occasionally
5	Reading	Always Never	Mostly	Occasionally
6	Writing	Always Never	Mostly	Occasionally
7	Interpreting a message	Always Never	Mostly	Occasionally
8	Videos	Always Never	Mostly	Occasionally
9	Pictures	Always Never	Mostly	Occasionally
10	Charts	Always Never	Mostly	Occasionally
11	Explaining things	Always Never	Mostly	Occasionally
12	Music /rhythm incorporated into report/oral presentations	Always Never	Mostly	Occasionally
13	Write about the importance of music	Always Never	Mostly	Occasionally
14	Use of music in the background while writing messages	Always Never	Mostly	Occasionally
15	Speeches/ writings about the importance of sports/wellness programs at work	Always Never	Mostly	Occasionally

16	Transferring new information from the text books to a other medium, such as computers and posters	Always Never	Mostly	Occasionally
17	Role plays	Always Never	Mostly	Occasionally
18	Projects	Always Never	Mostly	Occasionally
19	Games	Always Never	Mostly	Occasionally
20	Describe objects related to the subject by touching or operating	Always Never	Mostly	Occasionally
21	Exercises dealing with problem solving, such as, what sort of messages would be appropriate in the given situation	Always Never	Mostly	Occasionally
22	Puzzles/ crosswords	Always Never	Mostly	Occasionally
23	Matching exercises	Always Never	Mostly	Occasionally
24	Group work	Always Never	Mostly	Occasionally
25	Resolving communication problems at work	Always Never	Mostly	Occasionally
26	Responding to requests, sales letters, etc	Always Never	Mostly	Occasionally
27	Report writing/ letters presentations about your self (self disclosure/ self awareness/ your goals)	Always Never	Mostly	Occasionally
28	Keep a journal about your speaking/ writing experience	Always Never	Mostly	Occasionally
29	Observe communication between individuals at real workplace	Always Never	Mostly	Occasionally
30	Questions about human existence, such as the meaning of life, why are we born, why do we die, what is consciousness, or how did we get here.	Always Never	Mostly	Occasionally