

## Teaching Written English Communication Skills to the Students of MANUU Polytechnic Using Multiple Intelligence Approach: An Experimental Study

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### **Abstract**

*This paper is a part of my PhD research, and its objective is to find out the effectiveness of video-based teaching in developing Written English Communication Skills to the first-year diploma students of MANUU Polytechnic, Bangalore. The context of the research is that English communication skills are required for these students to complete the diploma course and to get through job interviews to obtain employment in future. And these students have difficulties in communicating in English in speaking and writing as they are from Urdu and Hindi medium backgrounds. Their one of the difficulties is 'essay writing in English', which is taken for the study. As part of the diploma course in the college, these students study all the core subjects in Urdu medium and English language as a compulsory subject. In this scenario, it's a challenging task for the teacher of English to make the students write essay in English. For this study, Essay Writing in English is taught to these students, and the tools used for this research includes testing of students' multiple intelligences, conducting pre-test in essay writing, teaching Essay writing using videos selected based on Multiple Intelligence Approach (Howard Gardner, 1993) and administering post-test. Finally, data analysis, findings and suggestions will be presented.*

### **Introduction**

Engineering students need English communication skills in academic and professional set ups to perform various duties. According to a researcher, Mandly, N (2008), engineering students do have difficulties in communicating in English and they need spoken and written English communication skills. And the National Knowledge Commission of India (2006) emphasised on the requirement of designing of suitable syllabus to meet the needs of industry. This commission has given a strong direction to the universities to make use of the abilities of engineering graduates for the development of the country as their productive age group is increasing yearly in some crores. Hence, these students must possess not only the subject knowledge but also the English language skills. It is the time for English teachers, who can use a suitable material and method to make the students learn Written English communication skills effectively. The present study uses Howard Gardner's Multiple

Intelligences approach (1993) to enable the students write essay writing in English. In this study, tasks are designed to teach essay writing in English using nine multiple intelligences: Verbal/Linguistic, Logical/mathematical, Visual/Spatial, Bodily/Kinaesthetic, Rhythmic/Musical, Inter & Intra personal and Natural Intelligences.

## **Research Question and Hypothesis**

### **Research Question**

Does the video-based teaching with Multiple Intelligence approach improve the Written English communication skills of the first year Diploma Students of Civil Engineering at MANUU Polytechnic, Bangalore?

### **Hypothesis**

The video-based teaching with Multiple Intelligence approach will not improve the Written English communication skills of the first year Diploma Students of Civil Engineering at MANUU Polytechnic, Bangalore?

### **Significance of the Study**

Maulana Azad National Urdu University, a central university has a constituent Polytechnic in Bangalore. It offers three polytechnic courses in Urdu medium. Students are admitted through national level entrance test. The test is conducted in Urdu medium on basic science subjects but English language is not tested. As part of the curriculum, students are required to study the course in Urdu medium, and English language as a subject. The aim of the course is to teach students English and employability skills. In this context, the researcher with his own experience has found out through various tests that these students do have difficulties in writing essay in English. Hence, the researcher has carried out this study for the research to help students come out of their language difficulties and pass the course and get employment in future.

### **Research Sampling and Tools**

There are three constituent polytechnics under MANUU at three places: Hyderabad, Bangalore and Darbhanga (Bihar). Polytechnics offer Civil, Computer Science, Electronics and Communication Engineering and Information Technology courses. The total number of

students of Civil Engineering courses is 140. And thirty students are taken for the research using sample through simple random method.

The research tools used for this study are Howard Gardner's Multiple Intelligence Test (1993) for finding out students' multiple intelligences, Essay Writing in English test to know the language level of the students, and 'T-test' to compare the results of pre- and post- tests to check the effect of the study.

### **What is the importance of Multiple Intelligence Approach for a teacher in the classroom?**

Teaching English communication skills to the students of mixed language abilities is a challenging task for a teacher. To make them learn the language effectively, multiple intelligence approach could be used. According to Howard Gardner (1993), an American psychologist and educationist, who has talked about Multiple Intelligence theory, in which, he says that a teacher is required to go into the class with the tasks prepared based on students' multiple intelligences to teach a subject effectively. In this study, MI approach has been used to identify students' multiple intelligences to prepare video tasks.

The modified Howard Gardner's Multiple Intelligence Test is used to make the students understand it and answer it. As part of modification, the MI test is used for the students in the classroom for four times, and relevant changes are made regarding level of understanding of vocabulary, examples etc. Along with these, words and sentences are also translated to the students to make them understand the content of the MI test.

### **Video material - Method of Selection**

The freely available videos are taken from *YouTube* on popular civil engineering constructions in the world. The video tasks are designed using documentaries on world heritage sites, the longest arch bridges, the canals, the airports, the greatest walls, the historical monuments, the tallest building towers and the biggest auditoriums and open theatres. The reason behind selection of civil engineering videos is that the students get impressed after watching these videos of their own field. Regarding selection criteria, British English as it is been understood by many of the people in India, 2–3-minute length with a good clarity of picture and volume.

### **Definitions of Tasks**

Tasks are activities which mainly focus on meaning-based language use and involves four language skills, and exercises are also activities which mainly stress on form-based language use (Ellis 2003:03); tasks involve basically real-life communication and focussing on meaning (Widdowson,1978); tasks are not necessarily a real-world tasks, can be information tasks Nunan (1989); tasks enable the learners in achieving both grammatical and communicative competences, and the examples of tasks are: real-life tasks, opinion-gap activities, reasoning-gap and information gap activities (N. S. Prabhu, 1991).

The aim of these task-based communicative activities is to improve the written English communication skills of Polytechnic students. Individual, pair and group activities are used in this study to teach tasks. And all the tasks have the similar frame work: rationale, time frame, mode of activity, teaching material, and situation.

### **Tasks to Teach Written English Communication Skills**

There are twenty main tasks prepared to teach Essay Writing in English. And every single task has nine sub-tasks. These sub-tasks are covered with nine intelligences like Verbal/Linguistic, Logical/Mathematical, Visual/Spatial, Body/Kinaesthetic, Rhythmic /Musical, Inter & Intra personal and Naturalist. As a whole, 180 tasks are prepared to teach the skills. Simple to complex method is followed while using them in the classroom. The duration of the teaching is about forty days, in which there is an hour class regularly

### **Written English Communication Skills**

Note-making, writing main, sub and sub-sub points/sentences of a story/commentary/construction; learning the use of linkers of words and sentences; joining sentences, writing a paragraph; linking paragraphs; identification and making a title and writing an essay; learning the use of words with examples, description of a person, place and thing, tools/machines, material; and comprehension of a text.

### **Criteria for Testing Essay Writing in English**

Based on the Common European Framework for writing and speaking (2011), Sample Assessment Rubrics (2016), Readwritethink (2016), ThoughtCo (2016), and Lotecassess (2016) on the rubrics for essay writing, the following criteria are designed with the five rubrics: introduction, main idea, body, conclusion, vocabulary, sentence structure, and grammar, mechanics & Spelling. And four levels are provided with marks in descending order: 4, 3, 2 and 1. Securing 4 marks is the highest and 1 is the lowest, and 2 and 3 come in between.

### **Comparison of Performance in Pre & Post-Tests – Essay writing**

Pre-test			Post-test		
Marks	Number of Students	Percentage of Students (%)	Marks	Number of Students	Percentage of Students (%)
1	26	86.67	1	00	00
2	03	10	2	08	26.67
3	01	3.33	3	15	50
4	00	00	4	07	23.33

The above table represents the details about pre & post-tests and difference of improvement in Essay Writing in English based on the 4marks scale. As a whole, the performance of students' post-test scores: 26 with 1 mark, 3 with 2, 1 with 3 and no student with 4; in the post-test, 15 with 3, 7 with 4, 8 with 2, and none with 0. Here, the highest number of students that 15 have got 3 marks. It is an indication of an improvement.

### **Students' Difficulties in Grammatical elements in Pre-test and Post-test**

#### **Analysis of Language Errors in Essay Writing Test - Pre-test**

These are arranged according to difficulty level from highest to lowest: spelling: 19; required capital: 14; word order: 9; sub-verb agreement: 8; subject plural: 7; omission of preposition (to), simple present tense, unnecessary capital: 6; auxiliary verb, passive voice: 5; omission of 'be', preposition (to), starting capital: 4; substitution of words, use of should: 3; article (the), article(a), article (an), if+will, noun, preposition (in), preposition (on), punctuation (apostrophe), punctuation (full stop), redundancy (words): 2; adjective, adverb, omission of article (a), omission of article (the), omission of full stop, preposition (for), preposition (with), present continuous tense, present perfect tense, to infinitive, use of Hindi language: 1;

conjunction (and) , exclamation mark, modal (can), omission of article (an), omission of preposition (in), omission of preposition (on), possessive, punctuation (comma), subject singular, substitution of has/as, use of short and (&): 0.

Overall, majority of the students have difficulties in the areas of spelling (19), capitalisation (14), word order (9), sub-verb agreement (8), subject plural (7); omission of preposition (to), simple present tense and unnecessary capital (6); auxiliary verb and passive voice (5); omission of 'be', preposition (to) and starting capital (4); substitution of words and use of should (3).

### **Analysis of Language Errors in Essay Writing Test - Post-test**

These are arranged according to difficulty level from highest to lowest: spelling: 15; unnecessary capital: 10; required capital: 9; starting capital: 4; punctuation (comma), subject-verb agreement and subject plural: 3; article (the), article(a), article (an), noun, preposition (in), preposition (on), punctuation (apostrophe), punctuation (full stop), redundancy (words): 3; article (the), article(a), article (an), noun, preposition (in), preposition (on), punctuation (apostrophe), punctuation (full stop) and redundancy (words): 2; article (an), exclamation mark, modal (can), if+will, omission of article (a), omission of 'be', omission of preposition (in & to), omission of full stop, passive voice, possessive, preposition (in & with), subject singular and use of short and (&): 1; adjective, adverb, article (the), article (a), auxiliary verb, omission of article (an & the), omission of preposition (on), preposition (for, on & to), present continuous tense, present perfect tense, punctuation (apostrophe), redundancy (words), substitution of has/as, to infinitive, use of Hindi language, use of should and word order: 0.

Overall, majority of the students have difficulties in the areas of spelling (15) and capitalisation (10 +9+4= 23).

### **Results of T-test for Essay Writing Test**

#### **T-test results of Essay Writing test**

As per the online calculation of the t-test done from *graphpad.com* (2017), the Paired *t* test results:

**P value and statistical significance:** The two-tailed **P value is less than 0.0001**. By conventional criteria, **this difference is considered to be extremely statistically significant**.

**Confidence interval:** The mean of Group One minus Group Two equals -1.80  
95% confidence interval of this difference: From -2.05 to -1.55.

**Intermediate values used in calculations:**  $t = 14.8398$ ;  $df = 29$ ; standard error of difference = 0.121.

**Review of data:**

Group	Group 1 (Pre-test)	Group 2 (Post-test)
Mean	1.17	2.97
SD	0.46	0.72
SEM	0.08	0.13
N (Number of Students)	30	30

As per the t-test calculation from the M-S Excel, the T-test value is 4.42981E-15.

Conclusion: There is a **significant difference** between pre and post-tests. It means students have improved their abilities in writing essay in English better than the pre-test.

**Research findings of the study**

Overall, majority of the students (15+7=22) have improved their performance in writing essay in English. There is a significant improvement from pre-test to post-test. Hence, the study gives positive result.

Majority of the students (26) have difficulties of essay writing in English in the pre-test, and these students have improved from grade 1-3 & 1-4. It shows the improvement.

All the selected videos of great constructions are motivating to all the students. These videos have brought a positive change and a confidence among the students in setting strong career goals.

Majority of the students have improved: Note-making, writing main, sub and sub-sub points/sentences of a story/commentary/construction; learning the use of linkers of words and sentences; joining sentences, writing a paragraph; linking paragraphs; identification and making a title and writing an essay; learning the use of words with examples, description of a person, place and thing, tools/machines, material; and comprehension of a text.

Regarding playing of the videos with the British English, initially students haven't understood, and understood them in subsequent classes; it has been found that 3–5-minute length of video is comfortable to all the students (30) for watching videos to learn; each video

has been played to the students from 3-5 times to make them comprehend the content of the video; it is required to play the video at medium level of speed.

It has been observed that students have felt bore in watching the videos continuously for a long time. During the longer classes of playing videos, students have requested for playing comedy videos. And the same has been done, and it has brought a change.

It has been a tough task for the researcher to design a task with rhythmic/musical intelligences using the civil engineering construction videos.

### **Suggestions for further research**

Conducting a pilot study before the actual study will help the researcher in getting the accurate results.

The prepared tasks can be tested by using them with the similar kind of students to do changes to meet the objective of the tasks.

Standard tests can be modified as per the level of the students to give significant results.

Further research may be done on the students of other branches other than Civil Engineering.

Number of classes may be increased from 40 to 60 with the time 1: 00 to 2: 00 daily to get better results.

Care should be taken in selecting a video material, related to clarity, language and speed of the voice to make the videos understood to students.

Researcher should have clear objective in selecting the videos and watch the videos thoroughly before teaching it to students to get better results.

Researcher should conduct a sample study to identify the duration of video for playing to students. Classes should be conducted for the study as per the convenience the students to get good results.

Playing same kind of videos on construction continuously will bore students; hence alternative may be decided based on the students' interests for a short period.

### **Conclusion**



Students of MANUU Polytechnic, Bangalore have got motivated and improved their abilities in essay writing in English after attending the classes conducted during the research. The multiple intelligence approach is effective in enabling the students' learning. Therefore, the tasks can be designed and used for teaching English communication skills in a classroom.

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