

Effect of Multiple Intelligences Supported Project-based Learning on Students' Attitude Towards English Language at Secondary Level

Dr. Harendra Kumar
Associate Professor
D.J. College, Baraut

Richa Rana
Research Scholar
M.A., M.Ed., NET

Abstract

The aim of this study was to explore the effects of multiple intelligences supported project-based learning on attitude score of secondary level students towards English lesson. Higher attitude towards language is an integral part of effective language learning. The present research is quasi experimental and it was carried out during first term of 2017-2018 session on ninth grade students of Karan Public School, Meerut affiliated to CBSE. Based upon previous research literature it was hypothesized that significant difference existed between the Pre-test Post-test attitude score of the experimental group. The research methodology was quasi Experimental and the one group Pre-test Post-test design was chosen for the experiment. The study sample consisted of thirty students of ninth class who were selected through randomization. The attitude questionnaire pre-tested on the subject. After that the group was taught through Multiple intelligences supported project based learning method. The material was used such as lesson plans, worksheets and quizzes, designed to implement MI supported project based learning strategy. The attitude questionnaire piloted again as a post test on the students. The data were analyzed through mean, standard deviation and paired t-test, 0.05 was the selected level of significance. The main result of the study explored that attitude score on Post-test was higher than the pretest. The findings

of the study declared that MI supported project based learning increased the attitude of the students towards English language.

Keywords : Multiple intelligences supported project-based learning, Attitude, English language

Introduction

There is challenge in the education field regarding the variation of student's progress. No two individuals are alike in this world. If students want to reach their goals or aims they have to meet many challenges like cognitive ability, concentration, memory, intelligence, efficient methods of learning, , learning environment and the students progress. Children differ immensely in intelligence. Intelligence refers to the Capacity to learn with speed and accuracy, Capacity to solve problems and Capacity to adjust in the society. Teachers must consider students as individuals; they must use the modern language learning methods and approaches in their classroom in order to create an atmosphere which pays attention to learners with different learning preferences.

Multiple Intelligences Theory and Education

The multiple intelligences theory was originally proposed by psychologist Howard Gardner at Harvard University in 1983. He defined eight types of multiple intelligence: linguistics, logical- mathematics, visual-spatial, interpersonal, intrapersonal, musical, bodily-kinesthetic and naturalist. (Armstrong, 2007; Gardner, 1983). He declares that there are at least eight types of intelligences and individuals are differing from each other in terms of their dominant intelligence(s). Therefore, in order to provide students with an effective instruction, the teachers have to better address different intelligence profiles of the students. If we accept that different intelligences predominate in different people, it suggests that the

same learning task may not be appropriate for all the students. While people with a strong logical / mathematical intelligence might respond well to a complex grammar explanation, a different student might need to comfort of diagrams and physical demonstration because their strengths is in the visual / spatial area. The students who have a strong interpersonal intelligence may require a more interactive atmosphere if their learning is to be effective.

Intelligence has traditionally been defined in terms of intelligence quotient, that measures a narrow range of verbal/linguistic and logical/mathematical abilities According to Gardner the humans possess a number of distinct intelligences that manifest themselves in different skills and abilities. All human beings use these intelligences to solve problems, invent processes, and create things. The theory of multiple intelligences proposes eight ways of teaching and learning styles. In this way, armed with the knowledge and application of the multiple intelligences, teachers can ensure they provide enough variety in the activities they use so that as much of their pupils' learning potential can be tapped as possible. Moreover multiple intelligences could not only provide teachers with more choices in teaching and assessment methods, but also enable students to demonstrate what they have learned in many different ways. Multiple intelligences theory outlines eight intelligences

- (1) Linguistic/Verbal intelligence (Word Smart)
- (2) Logical/mathematical intelligence (Reasoning Smart)
- (3) Spatial/visual intelligence (Picture Smart)
- (4) Bodily kinesthetic intelligence (Body Smart)
- (5) Musical intelligence (Music Smart)
- (6) Interpersonal intelligence (People Smart)

- (7) Intrapersonal intelligence
- (8) Spiritual/naturalistic intelligence

The principles of multiple intelligences offered by Gardner are:

- (1) It Emphasis on the development of certain intelligences;
- (2) It advocates Utilizing of all intelligences in developing different teaching methods;
- (3) Based upon the concept of multiple intelligences, instructors should review lesson plans and ensure they have variety, and richness;
- (4) It Provide students with the opportunity to choose learning activities and assessment methods;
- (5) It Provide students with the opportunity to use the dominant intelligences to develop the weaker intelligences;
- (6) It recommends using the intelligences to fully comprehend broad subjects (Gardner, 1983).

The importance of the multiple intelligences in education is:

- (1) To Highlighting uniqueness of each student;
- (2) Bring out the students' dominant intelligences;
- (3) Dominant intelligence helps learning;
- (4) Variety of learning experiences;
- (5) Variety of assessment methods;
- (6) Variety of means of expression (Hoerr, 2000)

Multiple Intelligences Supported Project based Learning and English Language Teaching

Applications of Multiple intelligence based teaching in the educational settings are growing so rapidly. There is no one definite way through which the

theory can be applied in education. This theory is very flexible and it can be adapted to the context in which it is applied. For over 100 years, educators like John Dewey have reported on the benefits of experiential, hands-on, student-directed learning. "Doing projects" is a long-standing tradition in education. By using MI theory, educators develop students' eight intelligences and students learn by using these intelligences. Multiple intelligence theory opens the door to a wide variety of teaching strategies that can be easily implemented in the classroom. English language learner thrive in project based learning environment because projects give them the opportunity to learn with others through peer to peer exchange, to develop their academic vocabularies through conversation, to use their own strength and cultural backgrounds and to accelerate their language acquisition at the same time that they are learning about topics of interest. Project based learning require the punctuation of authentic language from English language learners. There is research studies that explain the advantages of using projects based learning in Educational setting. However only a few of them have focused on project based learning in English teaching and there are no studies which integrate multiple intelligence with project based learning method in English teaching. So this study is believed to open a new path to the integration of multiple intelligences with project based learning method. The key points of MI are useful to the English language teaching as well as to the other domains. To base the instruction of the English language on MI Theory means that the teacher should use a variety of teaching strategies which should be used in a way that makes this instruction address the intelligences which the students possess.

Integration of MI supported project based learning into English language teaching enables the language learners to benefit from eclectic, effective, and creative approaches to teaching a second language.

Review of Related Literature

After the introduction of MI theory, changes have been made in curriculum and teaching methodology of schools. Many government and private institutions based their curriculum on MI theory after the publication of Frames of Mind by Gardner in 1983. Recently MI theory has been considered in language teaching. Language teacher started to relate MI model with learning styles and to consider the benefits of using MI theory to enhance learner's abilities individual needs. According to Snider (2001) MI theory-related materials have the strong potential to improve foreign language (FL) instruction because theory engages learner's innate abilities. (p. 6)

By applying MI theory EFL/ESL teachers can address the great diversity in learner, develop learner's intelligences and "create an individualized learning environment". (Christison, 1996. p. 10) Richard and Rodgers (2001) define MI theory as a way that not only have been attended to in public instruction but also in teaching English and its application in teaching English is recent and new. (p. 117) .Nowadays one of the problems of education is lack of interest and motivation and difficulty of students in special course including English whose main consequence is weak educational performance in the related course. However, many learners have difficulty in using English correction and independently in reading, writing, speaking, and meaningful communication (Bell, Ziegler, & McCallum, 2004; Curtin, 2005). Several factors can be mentioned as the reason for this lack of interest and weak performance among which, lack of cognitive approaches in

teaching can be mentioned (Klinger, Artiles, and Mendez Barletla, 2006). The current strategies in teaching English are mainly on memorizing grammatical rules. Memorizing strategy would lead to negative consequences in fluency and social skills which learners need during the process of learning English for development (Harris and Grenfell, 2004). This problem would be intensified without providing teaching strategies for language learning programs (Barrington, 2004; Lightbown & Spada, 2006; Lombardi, 2008; Lujan, 2008).

Ahanbor and Sadighi (2014) conducted a study to investigate the relationship between learning styles and MI to determine whether a combination of styles and intelligences could improve students' learning or not. The main objective of this study was to determine if there exists a significant relationship between male and female students' learning styles and their types of MI. This significant correlation was observed for both male and female participants.

Ibnian S.S.K (2013) had investigated about "Implications of Multiple Intelligences theory in ELT Field". He stated that in the second language classroom is possible to motivate learners by activating multiple ways of meaning-making through the use of tasks relating to the different intelligences or Multiple Intelligences.

Abu Jarad's (2012) study aimed at investigating the Effect of Multiple Intelligences Based Teaching on Developing Seventh Graders' Achievement in English Tests in Palestine. The results showed statistically significant differences between the two groups in favor of experimental group due to the multiple intelligences based teaching.

Soleimani, et al (2012) had explored his research under the title "The Effect of Instruction Based on Multiple Intelligences Theory on the Attitude and Learning

of General English”. . Analysis of the statistical results indicates that there statistical difference between mean Scores of the experimental and control groups in pre- test and post-test. Consequently it can be said that generally there is a meaningful difference between Multiple intelligences based teaching and traditional -based teaching in achievement of English course in students. In other words, instruction based on Multiple Intelligences in comparison with traditional way of teaching has been more effective.

Hajhashemi (2011) conducted his research under the title “The Relationship between Iranian EFL High School Students“ Multiple Intelligences Scores and their Use of Learning Strategies”. He had investigated the relationship between Multiple Intelligences (MI) profiles and Language Learning Strategies (LLS) used by Iranian EFL high school students. The findings revealed that there is a low, positive correlation between the two variables, $r= 0.24$. A low, positive correlation between MI and different strategy types was another finding of the present study. Also, the highest correlation was found between meta- cognitive strategies and MI, followed by compensation and cognitive strategies

Ibragimova (2011) carried out his study about “Multiple Intelligences Theory in Action in EFL Classes: A Case Study”. The results of his study may have some practical and theoretical implications. The findings of this study may contribute to the related literature regarding of the application of Multiple Intelligences in language classes.

Farooq and Regnier (2011) claimed that when learning styles are identified, educators are able to understand students’ means of perceiving and processing information. They advised teachers to identify their own teaching styles

to gain an understanding about themselves as well as to modify their teaching to develop successful interactions with their students.

Gokhan B. (2010) carried out a research entitled, 'The Effects of Multiple Intelligences Instructional Strategy on the Environmental Awareness Knowledge and Environmental Attitude Levels of Elementary Students in Science Course.' The aim of the research was to investigate the effects of Multiple Intelligences strategy and traditional methods of instruction on elementary students' environmental awareness knowledge levels and their attitudes towards the environment. The results of the research showed a significant difference between the environmental awareness knowledge levels and attitude scores of the experiment group and the control group. It was also found out that the Multiple Intelligences instructional strategy activities were more effective in the positive development of the students' attitudes and their environmental awareness knowledge levels.

MI theory can be a new and effective method for presenting different strategies of teaching and can help students achievements ameliorated. (Barrington 2004; Kornhaber, Fierros, and Veenema 2004; Cohen & Weaver 2004; Curtin 2005; Mitchel & Myles 2006; Oxford, Cho, Leung, & Kim 2004; Oxford & lee 2008). While previous researches have investigated the effect of MI on learning language, more studies are needed for explaining the application of MI theory in improving language learning particularly in secondary education. In spite of emphasizing language skills, examination results are indicative of decreasing language learning (Chan 2008). Many studies have been conducted to explore the nature of students' attitudes towards learning foreign language in general and EFL in particular, compared with the studies concerning the attitudes of ESL learners

during the past three decades (Al-Zahrani,2008). For instance, Shams (2008) conducted a study attempting to investigate students' attitudes, motivation and anxiety towards the learning of English. The findings underlined that the students had affirmative attitudes and high enthusiasm towards English. This also highlighted that most of them showed positive attitudes towards English language and its learning which, in turn, emphasized the value of English language efficiency in the daily life. Momani (2009) also investigated the secondary stage students' attitudes towards learning English as a foreign language and their achievements in reading comprehension. The findings showed that the respondents had neutral positive attitudes toward learning English. Also, there was a strong correlation between the students' attitudes toward learning English and their performance in reading comprehension. Regarding the gender variable, Fakeye (2010) investigated the correlation between attitude and achievement in English among 400 senior secondary students selected randomly from five secondary schools. The findings revealed that there was a significant relationship between attitude and achievement. Additionally, it was explored that students' attitude is not gender-related.

Detecting language learning problems need presenting solutions such as using MI theory as an instructional plan (Armstrong 2007; Fugarti & Stoehr 2007). Therefore, the present study is going to investigate the effect of suchan approach on learning improvement and attitudes towards general English course. As a result, the problem is whether there is a difference between MI-based instructions and traditionally based teaching which emphasize just verbal-linguistic intelligence on learning and attitude towards English course among the students.

The previous studies show that most experimental studies stress the effective use of Multiple intelligence as a facilitating strategy, it helps in delivering the educational material to students easily and it plays a positive role in enhancing the general trend toward the use of student centered instruction. MI based teaching activities has a positive impact on cognitive achievement, academic achievement, comprehension and application.

The current study is an attempt to support the previous studies in using the experimental method in studying variables and also it stimulates the activation of MI based instruction in academic teaching

Statement of the Problem

A study of the Effect of multiple intelligences supported project-based learning on student's attitudes towards English language at secondary level in Meerut city.

Need and Significance of the Study

Language is considered as the principal means of communication with others. It provides the basis for concept development. People share their feelings, tell their needs and ask questions while communicating through language (Benczik, 2003). The language of human society is the main element to deal with others (Tavil, 2009).

This is a worldwide reality that learning and understanding a second / external language justify a person's professional needs, brings innovative ideas into their understandings of life, and broadens their minded and enhance level of tolerance. Now a day's English has been frequently considered as "world language" and plays a significant role in national development. Coleman (2010)

enlisted following key roles played by the English language in relation to development:

- “increasing individual’s
- “employability”
- “enabling international collaboration and co-operation”
- “providing access to research and information”
- “facilitating the international mobility of students, tourists, workers and others”
- “facilitating disaster relief and disaster preparedness”
- “acting as an impartial language in contexts of disharmony”.

Language learning attitude seriously affects the behavior and performance of the students (Oxford & Nyikos, 1989). Literature review on language learning attitude indicates the occurrence of a number of factors which impact on language learning attitudes. Students behave more distinctive than the others indicating the existence of some more factors than the sole motivation of the teachers which stimulates student attitude towards learning. This behavioral distinctiveness of the students towards learning attracts the researchers for deep investigations of the presence of various stimulating factors of learning (Dornyei,2005).

Learning process has social as well as psychological aspects besides the cognitive approach. Attitude concept can be viewed from these three dimensions. Each one of these dimensions has different features to bring out language attitude results. Accordingly, the attitude concept has three components i.e., behavioral, cognitive and affective. These three attitudinal aspects are based on the three theoretical approaches of behaviorism, cognitivism and humanism respectively. In

the following, the three aspects of attitude concept i.e., behavioral, cognitive, and emotional aspects are briefly described.

Behavioral Aspect of Attitude

Kara (2009) stated that, “Positive attitudes lead to the exhibition of positive behaviors toward courses of study, with participants absorbing themselves in courses and striving to learn more. Such students are also observed to be more eager to solve problems, to acquire the information and skills useful for daily life and to engage themselves emotionally.”

Cognitive Aspect of Attitude

This aspect of attitude involves the beliefs of the language learners about the knowledge that they receive and their understanding in the process of language learning. The cognitive attitude can be classified into four steps of connecting the previous knowledge and the new one, creating new knowledge, checking new knowledge, and applying the new knowledge in many situations.

Emotional Aspect of Attitude

Feng and Chen (2009) stated that, “Learning process is an emotional process. It is affected by different emotional factors. The teacher and his students engage in various emotional activities in it and varied fruits of emotions are yield.”

Teaching and learning in language education, attitudes have been observed to affect a student's proficiency in the second language. Positive attitudes normally effect about higher proficiency. Moreover, achievement in learning also involves the learner's attitude towards the language (Stem, 1983). There are two beliefs about the nature of attitudes, one is the mentalist and other is the behaviorist (Fasold, 1984). The mentalist beliefs about the nature of attitudes, is that it is an

internal state of mind provoked by the motivation and can produce varieties of response. The Behaviorists beliefs about the nature of attitudes, is that attitudes are originated in people's reactions. Brown (1981) described that attitude is a product of parental views, peer views and the views with other people. Student's performance is significantly affected by their attitudes toward learning a second language (Oxford & Nyikos, 1989). Higher attitude towards language is an integral part of effective language learning. So many researchers of the current time prefer to investigate the learner's attitudes towards English language in addition to many other relevant topics.

People generally value English language and hearing about English learning of children often stimulates common man's desire about sending their child to public schools from the early classes (shamim, 2011). However, it is crystal clear that in India English is considered a symbol of priority which leads to increased demand English learning in the country. Government of the India is spending a lot of money in developing educational programs towards English teaching at Primary to higher levels, but due to many gaps / deficiency of research data in the relevant field desired targets are looking much away. However this study is an effort to find out the increment in the attitude of students towards English with multiple intelligences supported project based learning strategy. This study would be helpful for all stakeholders, especially involved in educational planning and policy development regarding English language teaching. This study would be helpful to Teachers and students at the school level to better understand the learning process of English language learning. This study could also be used as a baseline for other scholars willing to work on similar topic.

The Objectives of the Study

To study the effectiveness of Multiple intelligences supported project based learning on the attitude of secondary level students towards English language.

Hypotheses of the study

Following null hypothesis was formed :—

1. There is no significant difference between the attitude of the students on pre-test and post-test mean scores towards English language in terms of the usage of multiple intelligences supported project based learning.
2. There is no significant difference between the attitude of the male and female students on post-test score towards English language in terms of the usage of multiple intelligences supported project based learning.
3. There is no significant difference between the cognitive aspect of attitude of the students on pre-test and post-test mean scores towards English language in terms of the usage of multiple intelligences supported project based learning.
4. There is no significant difference between the behavioral aspect of attitude of the students on pre-test and post-test mean scores towards English language in terms of the usage of multiple intelligences supported project based learning.
5. There is no significant difference between the emotional aspect of attitude of the students on pretest and posttest mean scores towards

English language in terms of the usage of multiple intelligences supported project based learning.

Population of the Study

The Public schools affiliated to CBSE in Meerut city constitute the target population of the study.

Sample of the Study

Random sampling technique was used to select the sample of the study. At first Karan public school was selected randomly among the CBSE affiliated public schools in Meerut city. There are five sections in ninth class in that school. Section 'C' of ninth class which was randomly selected formed the subject for this study. There were thirty students, Seventeen boys and thirteen girls in the selected class. Majority of the students were the children of middle class background.

Delimitation

The study limits were confined to the following:

1. The study was restricted to the IX Class students.
2. Population of the study consisted of male and female students studying in Public School affiliated to CBSE
3. The study was confined the Quasi Experimental type of research method.
4. The study was restricted to the Meerut city only.
5. The Present study was delimited to English subject only.

Study Variables

Independent Variable : Multiple Intelligences supported project based learning method

Dependent Variable : Attitude towards English language

Methodology

The present study was a Quasi-experimental one with one group pre-test & post-test design. To this end, participants were assigned to the experimental group randomly.

In order to investigate the effects of MI supported project based learning method on student's attitude towards English language, the participants were given the attitude questionnaire (ELAS) as a pre-test at the beginning of the study. After the pre-test, the experimental group was instructed through MI supported project based learning method. The implementation process of the method lasted for three weeks. The group had three hours of English lesson per week; therefore the implementation lasted for nine hours of English. The duration of the implementation process was determined considering the time allocated for the target unit in the curriculum. After the implementation process, the Participants in the group were given ELAS as a post-test.

TOOL USED

“English Lesson attitude scale” (ELAS)

ELAS in present study was adopted from the research paper by Majid Pour-Mohammadi (2012) <http://dx.doi.org/10.5539/ass.v8n2p119>. It was an attitude questionnaire which focused on the attitudes towards learning English. Additionally, it aimed to explore the differences in the participants' attitudes by their demographic information. The items were partly adapted from the attitude questionnaire test employed in a study by Boonrangsri et al. (2004). Other items were taken from Attitude and Motivation Test Battery (AMTB) designed by

Gardner (1985). Furthermore, there were some items based on the researchers' experiences in teaching English (Appendix). On the whole, there were 45 items concerning language attitudes in terms of: behavioral, cognitive, and emotional aspects of attitude. Overall, 30 items were positive and 15 items were negative. The items were put in a 5-point Likert scale from Level 1: Strongly Disagree to Level 5: Strongly Agree.

Reliability of ELAS

A pilot study was conducted to measure the reliability level of the questionnaire items. To do so, 30 students were randomly selected from the target population. These students did not take part in the actual study. They were required to present their personal information based on the Likert scale of the questionnaire items. By using The Statistical Package for the Social Science Program (SPSS) version 17.0, an analysis of item reliability was determined through the reliability coefficient test. The acceptable value of Cronbach Alpha was 0.878 which shows acceptable consistency of reliability. This shows that the questionnaire items were completely appropriate for research goals. Table 1 indicates the reliability of the questionnaire items in terms of the three aspects of attitude separately. The value of Cronbach's Alpha regarding the behavioral aspect is 0.731, the cognitive aspect obtained 0.772, and the Cronbach's Alpha value of the emotional aspect is 0.677.

Validity of ELAS

To investigate the validity of the questionnaire items, the questionnaire was given to two specialists, a psychologist and an expert in TEFL, chosen from the teaching staff of University of Science Malaysia. Their comments were taken into consideration and they advocated that the items of the questionnaire are valid and reliable to investigate the research objectives.

Administration of ELAS

Researcher had to explain the instructions of the questionnaire form to the participants. Respondents were asked to signify the extent to which they agree or disagree with the items of the questionnaire. The total administration to complete answering the questionnaire lasted about 25 minutes.

Statistical Technique

- Mean
- Standard Deviation
- T-test (paired)

Procedure

The following procedure was adopted for experimentation and data collection:

Researcher prepared the lesson plans of English based on multiple intelligences supported project based learning from the selected units of the text book "LITERATURE READER". The MI activities which were integrated with project based learning included in the lesson plans in the form of charts, posters, paintings, crosswords, puzzles, riddles, grids, songs, project worksheets and quizzes, designed to implement MI supported project based learning methodology. ELAS as a pre-test was given to the subject before the experimentation. After that Researcher standardized the procedure and the implementation of the treatment in experimental groups. An attitude scale tests were employed on the experimental group after the experimental process as a post-test.

One group Pre-test Post-test experimental design was used in this study. A small number of homogenous subjects provided us with information over a period

of three weeks. To begin with, the subjects described what they actually did in the process of multiple intelligences supported project-based learning method.

Analysis of Data

Table-1

Pared Samples t-test Results for Experimental Group on Pre-test and Post-test Scores

	N	Mean	S.D.	Standard Error of Mean	t	df	Significance level 0.05
Pre-test	30	106.96	7.88	1.43	-46.56	29	Significant
Post-test	30	143.83	9.61	1.75			

df = 29; t-value = - 46.56

The table value at 0.05 level is -46.56 The obtained value - 46.56 > 2.04. Hence null hypothesis is rejected.

Table-2

Independent Samples t-test Results for Experimental Group on Post-test Scores

	N	Mean	S.D.	Standard Error of Mean	t	df	Significance level 0.05
Pre-test	17	150.19	5.86	1.46	.807	28	Insignificant
Post-test	13	148.50	5.53	1.47			

df = 28; t-value = - .807

The permissible value from t table at 0.05 level of significance is 2.05. Then, t = .807 < 2.05 Hence null hypothesis is accepted.

Table-3

Pared Samples t-test Results for Experimental Group on Pre-test and Post-test Scores

	N	Mean	S.D.	Standard Error of Mean	t	df	Significance level 0.05
Pre-test	30	36.00	3.07	.56	-20.357	29	Significant
Post-test	30	48.97	3.09	.56			

df = 29; t-value = - 20.35

The table value at 0.05 level is 2.04.The obtained value - 20.35 > 2.04.Hence null hypothesis is rejected

Table-4

Pared Samples t-test Results for Experimental Group on Pre-test and Post-test Scores

	N	Mean	S.D.	Standard Error of Mean	t	df	Significance level 0.05
Pre-test	30	35.20	3.11	.568	-18.39	29	Significant
Post-test	30	48.13	2.62	.479			

df = 29; t-value = - 18.39

The table value at 0.05 level is 2.04.The obtained value - 18.39 > 2.04. Hence null hypothesis is rejected.

Table-5

Pared Samples t-test Results for Experimental Group on Pre-test and Post-test Scores

	N	Mean	S.D.	Standard Error of Mean	t	df	Significance level 0.05
Pre-test	30	36.13	3.18	.58	-19.69	29	Significant
Post-test	30	49.10	3.08	.56			

df = 29; t-value = - 19.69

The table value at 0.05 level is 2.04. The obtained value - 19.69 > 2.04. Hence null hypothesis is rejected

Table1 : The obtained t value is - 46.56 and table t value at 0.05 level of significance is 2.04. As the obtained t value is more than the table value, null hypothesis is not retaining. Hence the study reveals that there is a significant difference between the attitude of the students on pre-test and post-test scores towards English language in terms of the usage of multiple intelligences supported project based learning.

Table2 : The obtained t value is .807 the table t value is 2.05 at 0.05 level of significance. As the obtained t value is less than the table value, null hypothesis is retained. Hence the study reveals that there is no significant difference between the attitude of the male and female students on post-test towards English language in terms of the usage of multiple intelligences supported project based learning.

Table3 : The obtained t value is -20.35 the table t value is 2.04 at 0.05 level of significance. As the obtained t value is more than the table value, null hypothesis is not retaining. Hence the study reveals that there is a significant

difference between the Cognitive aspect of attitude of the students on pre-test and post-test score towards English language in terms of the usage of multiple intelligences supported project based learning.

Table 4 : The obtained t value is -18.39 the table t value is 2.04 at 0.05 level of significance. As the obtained t value is more than the table value, null hypothesis is not retaining. Hence the study reveals that there is a significant difference between the Behavioral aspect of attitude of the students on pre-test and post-test score towards English language in terms of the usage of multiple intelligences supported project based learning.

Table 5 : The obtained t value is -19.69 the table t value is 2.04 at 0.05 level of significance. As the obtained t value is more than the table value, null hypothesis is not retaining. Hence the study reveals that there is a significant difference between the Emotional aspect of attitude of the students on pretest and posttest score towards English language in terms of the usage of multiple intelligences supported project based learning

Findings of the Study

- MI supported project based learning enhanced the attitude of the students towards English language.
- Males and Females students have the same level attitude towards the language learning.
- MI supported project based learning enhanced the Cognitive aspect of attitude of the students towards English language.
- MI supported project based learning enhanced the Behavioral aspect of attitude of the students towards English language.

- MI supported project based learning enhanced the Emotional aspect of attitude of the students towards English language.

Conclusion

This study attempted to explore the effects of multiple intelligences supported project based learning on attitude of the ninth grade students in Meerut city. The results of the study suggested that the experimental group instructed through multiple intelligences supported project based learning showed more improvement on their post-test scores than the pre-test. When the mean scores of the pre-test and post-test were considered, it was also found out that the attitude of experimental group enhanced towards the English language positively. On the basis of the results and discussions it can be concluded that the MI supported project based learning method were more effective than the traditional way of instruction in increasing the attitude of the students towards language learning. The three aspect of the attitude significantly increased through the MI supported project based learning strategy. Thus overall attitude towards English language learning is positively affected. The basic reason for these findings can be the idea behind MI Theory, which considers each learner as a “unique” person and suggests that all children have different inclinations in the eight intelligences.

Our major motivation, when implementing Gardener's theory, is to provide learners and their meaningful self-reflection regarding each one's potentials. Perceptions of individual strengths are also connected to self-concept and attribution. An individual's effort is most effective when it is sustained by some urge to express himself to make to do something in a unique way. MI supported

project based instruction yields positive implications for student achievement including increased performance on standardized tests, and increased intrinsic attitude, engagement, and confidence. Educators on a global level should be exposed to literature documenting the incredible affects of MI supported project based learning and inspired to utilize this innovative instruction in their classrooms. Furthermore, teachers should be educated in ways to implement their curriculum with a multiple intelligence framework to help create more authentic, engaging learning experiences for students. Curriculum makers should review the content and the design of the curriculum to meet the needs and the interests of the students. They are recommended to consider that the EFL learners have different perceptions about learning other languages due to their differences regarding gender, specialization, year of study, etc. Thus, taking all these issues into account, the curriculum design should be reevaluated so that students could see something different concerning the activities, content, topics, teaching practices etc. and be more motivated to learn English.

As educators we must honor student differences and acknowledge a variety in excellence. MI supported project based learning provides a powerful framework in helping educators create authentic and innovative learning experiences. MI supported project based learning provides a scope to validate and monopolize on the strengths of each individual student. Although MI supported project based learning is not a step-by-step recipe for success, it provides a powerful and pragmatic structure for designing curriculum. Furthermore, MI supported project based learning enables educators to address the needs of each student on an individual basis and make content and curriculum exciting and accessible to every

learner. As our students continue to change and diversify, we must persevere and continue to find new ways to engage and support a variety of learners.

Students do not understand the significance of English language in their daily lives. They consider English just a compulsory subject and do not pay attention towards its learning compared to other subjects. The high value of different features of attitude and its relation to the demographic profile of the learners is well recognized and must be considered as a priority by the English language teachers while planning their lectures. It is concluded that, positive attitudes towards learning English language can enhance the student's performance in final tests. That is why topics of language learning attitudes must be taken by researchers on priority.

The findings of the study have certain implications for English language teaching, teachers had better not try to cover everything in their lessons as this leads to superficial learning, which is easily forgotten. Instead, a thorough covering of the target stuff can lead to real learning and this can be achieved through integrating MI supported project based learning activities in the curriculum. Moreover, MI theory suggests that teachers make use of a larger treasure of techniques, tools and strategies beyond the typical linguistic and logical ones. As they involve more tools and techniques, they can reach more students and this can lead to more effective teaching. In addition, while planning curriculum and lesson plans, individual differences in intelligence profiles of the students need to be taken into consideration. Instead of trying to teach everything through traditional linguistic and logical techniques, the techniques and the strategies to be implemented in the classrooms need to be varied. This variety in techniques and

tools can be expected to lead to real learning of the target stuff rather than mere memorization.

References

- Abdi, Ali. (2011). A comparison of the strategy of MI-based teaching and the classical way on achievement in experimental sciences course. *Research and science innovations periodical*, 9(37).
- Al-Zahrani, M. (2008). Saudisecundary school male students' attitudes towards English: An exploratory study. *J. King Saudi University, Language and translation*, 20, 25-39.
- Armstrong, T. (2000). *Multiple intelligence in the Classroom* (2nd ed.). Alexandria, VA: Association for Supervision and Curriculum Development.
- Armstrong, T. (2005). Special education and the concept of neurodiversity. *NewHorizons for Learning Online Journal*, XI(3), 1. Retrieved July 29, 2010, from the ProQuest database
- Barrington, B. (2004). Teaching to student diversity in higher education: how multiple intelligence theory can help. *Teaching in Higher Education*, 9(4), 422. Retrieved January 11, 2010, from the EBSCOhost database.
- Bas, G. (2008). Integrating multiple intelligences in ESL/EFL classrooms. *The Internet TESL Journal*, 14(5), May.

- Bell, S. M., Ziegler, M., & McCallum, R. S. (2004). What adult educators know compared with what they say they know about providing research-based reading instruction. *Journal of Adolescent and Adult Literacy*, 47, 542–563. Retrieved August 24, 2007, from the EBSCOhost database.
- Boonrangsri, K., Chuaymankhong, D., Rermyindee, N., & Vongchittpinyo, N. (2004). The Attitude towards English Language Learning of the Students in Vocational Certificate Level under Curriculum in 2002. A Case Study of Ayutthaya Technical College studied by Naresuan University, Thailand.
- Chan, D. W. (2008). Giftedness of Chinese students in Hong Kong: Perspective from different conceptions of intelligences. *The Gifted Child Quarterly*, 52(1), 40. Retrieved August 2010, from the ProQuest database. <http://dx.doi.org/10.1177/0016986207311058>
- Christion, M. A. (2004). Applying multiple intelligence theory: In perspective and in-service TEFL education programs. *Forum*, 36(2), 2. Retrieved February 3, 2010, from the ProQuest database. www.ccsenet.org/elt English Language Teaching Vol. 5, No. 9; 2012
- Christison, M. A. (1996). Teaching and learning languages through multiple intelligence. *TESOL Journal*, 6(1), 10-14.
- Cohen, A. D., & Weaver, S. J. (2004). *Styles and strategies-based instruction: A teachers' guide*. Minneapolis, MN: Center for Advanced Research on Language Acquisition, University of Minnesota.
- Curtin, E. (2005). Instructional styles used by regular classroom teachers while teaching. Emig, V. B. (1997). A Multiple intelligence inventory. *Educational Leadership*, 55(1), 47-50.

- Fakeye, D. (2010). Students' Personal Variables as Correlates of Academic Achievement in English as a Second Language in Nigeria. *Journal of Social Sciences*, 22(3), 205-211.
- Farooq, M., & Regnier, J. (2011). Role of learning styles in the quality of learning at different levels. *Informatica Economica*, 15(3), 28–45. Retrieved from Business Source Complete database. (Accession No. 69706009)
- Feng, R. & Chen, H. (2009). An Analysis on the Importance of Motivation and Strategy in Postgraduates English Acquisition. *English Language Teaching*, 2, 93-97. [Online] Available: <http://www.ccsenet.org/journal/index.php/elt/article/viewFile/3700/3301> (August 10, 2011)
- Fugarty, R., & Stoehr, J. (2007). Integrating the curricula with multiple intelligence: Teams, themes, and threads (2nd. ed.). Thousand Oaks, CA: Corwin-Sage Press.
- Gardner Howard. (1999). *The Disciplined Mind: What All Student Should Understand*. Simon and Schuster: New York.
- Gardner, H., & Moran, S. (2006). The science of multiple intelligence theory: A response to Lynn Waterhouse. *Educational Psychologist*, 41, 227-232. http://dx.doi.org/10.1207/s15326985ep4104_2
- Gardner, H. (1983). *Frames of mind. The theory of multiple intelligence*. New York. Basic Books.
- Hajhashemi. K. (2011). The Relationship between Iranian EFL High School Students' Multiple Intelligence Scores and their Use of Learning Strategies. Iran. (<http://www.ccsenet.org/elt> and accessed on January 15, 2014)

- Hall, H. M. (2004). Learner-centered instruction and the theory of multiple intelligence with second language learners. *Teachers College Record*, 106(1), 63-180. Retrieved January 17, 2010, from the ProQuest database.
- Harris, V., & Grenfell, M. (2004). Language-learning strategies: A case for crosscurricular collaboration. *Language Awareness*, 13(2), 116. Retrieved January 19, 2007, from the EBSCOhost database.<http://dx.doi.org/10.1080/09658410408667090>
- Hoerr, T. R. (2000). *Becoming a multiple intelligences school*. Alexandria, USA: Va. Assoc.
- Ibnian, S. S. K., Hadban, A. D. (2013). Implications of multiple intelligence theory in ELT field. *International Journal of Humanities and Social Science*, 3(4), 292-297.
- Kara, A. (2009). The Effect of a 'Learning Theories' Unit on Students' Attitudes towards Learning. *Australian Journal of Teacher Education*, 34(3), 100-113. [Online] Available: <http://ro.ecu.edu.au/ajte/vol34/iss3/5> (August 10, 2011)
- Klingner, J. K., Artiles, A. J., & Méndez Barletta, L. (2006). English language learners who struggle with reading: Language acquisition or LD? *Journal of Learning Disabilities*, 39(2), 108-128. Retrieved June 29, 2007, from the ProQuest database.
- Kornhaber, M. L., Fierros, E., & Veenema, S. (2004). *Multiple intelligence: Best ideas from theory and practice*. Needham Heights, MA: Allyn & Bacon.
- Lightbown, P., & Spada, N. (2006). *How languages are learned* (2nd. ed.). Oxford: Oxford University Press.

- Lombardi, J. (2008). Beyond learning styles: Brain-based research and English language learners. *Clearing House*, 81(5), 219-222. Retrieved June 20, 2010, from the EBSCOhost database. <http://dx.doi.org/10.3200/TCHS.81.5.219-222>
- Lujan, J. (2008). Linguistic and cultural adaptation needs of Mexican nursing students related to multiple-choice tests. *Journal of Nursing Education*, 47(7), 327-330. Retrieved June 20, 2008, from the EBSCOhost database.
- Momani, M. (2009). The Jordanian Secondary Stage students Achievement in Reading Comprehension according to their views towards Learning English as a Foreign Language. *Journal of Human Sciences*, 42, 1-36. [Online] Available: <http://www.ulum.nl/The%20Jordanian.pdf> (August 11, 2011)
- Shamim, F. (2011). English as the language for development in Pakistan: Issues, challenges and possible solutions. *Dreams and realities: Developing countries and the English language*, 291-310.
- Shams, M. (2008). Students' attitudes, motivation and anxiety towards English language learning. *Journal of Research*, 2(2), 121-144.
- Snider, D. P. (2001). Multiple intelligence Theory and foreign languageteaching. Unpublished doctoral dissertation. University of utha.
- Soleimani. H, Moinnzadeh. A, Kassaian.Z and Ketabi S. (2012). The Effect of Instruction Based on MultipleIntelligences Theory on the Attitude and Learning of General English. University of Isfahan, Isfahan, Iran. (<http://www.internationalresearchjournal.com> and accessed on January 15, 2014)
- Stem, H. H. (1983). *Fundamental Concepts of Language Teaching*, Oxford: OUP.