

RESEARCH ARTICLE



EFFICACY OF LOGICAL ARGUMENTATION METHOD FOR ENHANCING META-LINGUISTIC LANGUAGE SKILLS

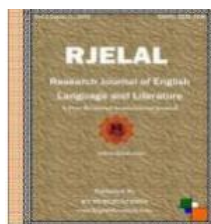
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ABSTRACT

A primary goal of any education should be to teach how to engage in the practice of thinking. This thinking practice would develop a reflection on their own thinking, and therefore, meta-cognition will be enhanced. Logical argumentation is how conclusions can be reached through logical reasoning on certain premises i.e., a set of claims in which one or more of them are put forward to offer reasons for another claim and reach a conclusion. A new pedagogical relationship is established, in which logical argumentation can effectively enhance Meta Linguistic Language Skills and logical thinking. This study is meant to test the effectiveness of logical argumentation for enhancing meta-linguistic language skills and logical thinking in graduate-level language students. The major objectives of the study were to prepare a logical argumentation schedule for graduate students and to test the effect of logical argumentation on Meta Linguistic Language Skills. The major finding of the study was that logical argumentation is an effective strategy for enhancing Meta Linguistic Language Skills

Keywords: Logical argumentation, Metalinguistic skills.

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Introduction

Logic is the science that we use to explain or represent a consistent argument about a particular topic. Everyone argues their position at one time or the other and may choose to do so in various manners. However, a logical argument follows certain guiding principles or procedures in hope of arriving at a desired conclusion which is cogent and rationally acceptable. The ultimate goal is to present an idea that is both consist and coherent.

An argument is a valid product of argumentative reasoning consisting of at least one claim and one premise. It is the process by which many claims are offered based on premises and one reaches a conclusion that is relevant and provides good grounds. Argumentation is the process by which arguments are dialogically and dialectically constructed.

qA logical argument follows a certain order. It starts with a proposition and ends with a conclusion. A proposition is the starting point of an argument or

the statement that one is trying to prove. It is the equivalent of a hypothesis.

The premise is the statement or statements that follow the proposition. The premise is basically one's evidence or reasons used to justify the proposition. Just like scientists must do tests and observations to prove that the hypothesis is true or false, a logical argument must present premises to prove that it is sound. The argument's inference is based on one's premise or evidence, and one may discover new statements. This is the process of using evidence to discover new propositions. After completing the cyclic process of stating our proposition and presenting premises or evidences that may lead us to new propositions, then we will arrive at a conclusion.

Need and Significance of Study

Teaching has gone a long way from the traditional lecturer-listener system to a more interactive experiential endeavour. Today, teachers are not just lecturers, but guides; students are not just listeners but co-explorers of knowledge. Education has become more interactive and experiential for both the parties. In the present era information resources are available equally to the teacher and learner and both collaboratively create new knowledge. Therefore in the present scenario we need students who have Meta Linguistic Language Skills and logical reasoning especially at the graduate level. The present curriculum warrants active participation from the part of the students and one of the most important components of learning in college is academic discourse, which requires argumentation and debate. But these days argumentation and debate inevitably lend themselves to flawed reasoning and rhetorical errors. Many of these errors are considered logical fallacies. Logical fallacies are commonplace in the classroom. In is at this juncture logical argumentation gains significance in teaching and learning. The most immediate and obvious benefit of logical argumentation is that it will improve the quality of the arguments one use. When one create logically unsound arguments, you are much less likely to convince people that one have a valid point to make, or get them to agree with you.

As the need for logical argumentation in developing Meta Linguistic Language Skills can be justified, it becomes inevitable that one teach the students on how an argument should and should not

be presented so that it will be easier to un-muddle the ideas and reform them into a stronger pattern.

Objectives of the Study

1. To prepare lesson transcript based on logical argumentation for graduate students
2. To test the effectiveness of Logical Argumentation Strategy for enhancing meta linguistic language skills of language students at college level

Hypothesis of the Study

(3)There will be significant difference between experimental group and control group in meta linguistic language skill development when they are exposed to experimental treatment using logical argumentation

Statement of the Problem

EFFICACY OF LOGICAL ARGUMENTATION METHOD FOR ENHANCING META LINGUISTIC LANGUAGE SKILLS

Definition of Key Terms

Meta Linguistic Language Skills

Meta linguistic skill can be defined as an individual's ability to focus attention on language as an object in and of itself, to reflect upon language and to evaluate it.

Logical Argumentation

An **argument** is the process by which one explains how a conclusion was reached. **Logic** is the science that we use to explain or represent a consistent argument about a particular topic. Everyone argues their position at one time or the other and may choose to do so in various manners. However, a **logical argument** follows certain guiding principles or procedures in hopes of arriving at a desired conclusion. The ultimate goal is to present an idea that is both consist and coherent.

Tools of the Study

- (1) Lesson transcripts based on Logical Argumentation
- (2) Meta Linguistic Language Skill test

Methodology of the Study

Investigators adopted Experimental method for the study .Selected 90 Graduate students for the study .45 were grouped as experimental group and others control group.Pre Test on metalinguistic language skill was given to both groups .Scores were tabulated . Experimental group was treated with Logical Argumentation and control group with Lecture Method. After the treatment, again, the same test was administered as Post Tests, and scores were tabulated.

Statistical techniques used for the study

(1)Analysis of Covariance

Analysis and Interpretations of the Data

Since the investigator selected non – equivalent intact class groups as it is inconvenient to sort out students into different equated groups, it is necessary to analyze the data using the statistical

technique, Analysis of Covariance (ANCOVA), in which the difference in the initial status was removed statistically. Before proceeding to ANCOVA, ANOVA was done, and the F ratio for the pre-test and post-test was computed. The summary of Analysis of Variance of Pre Test and Post Test scores is given in Table 1.

Table 1 : Comparison of Pre Test and Post Test Meta Linguistic Language Skills scores for Students of Experimental Group and Control Group (ANOVA)

Source of variation	df	SSx	SSy	MSx	MSy	Fx	Fy
Among means	1	22.44	2161.60	23.89	2371.60		
Within groups	86	5626.48	2661.45	67.03	32.52	0.31	66.86**
Total	87	5441.92	5111.22				

The obtained F ratios were tested for significance. The obtained Fx value (Fx = 0.31, df (1, 87), p > .05) is not significant at .05 level of significance. It implies that there exists no significant difference in the Pre Test Meta Linguistic Language Skills scores for students of experimental and control groups. The obtained Fy value (Fy = 66.86, df (1, 88), p < .01) is significant at .01 level of significance. It revealed that

there is significant difference in the Post Test Meta Linguistic Language Skills scores for students of experimental and control groups.

The adjusted sum of squares for Post Test scores was computed and the F – ratio was calculated. The summary of ANCOVA of Post Test Meta Linguistic Language Skills scores for students in experimental and control groups is given in Table 2.

Table 2: Summary of ANOVA of Post Test Meta Linguistic Language Skills scores for students

Source of variation	df	SSx	SSy	SSy.x	MSy.x	Fy.x
Among Means	1	22.44	2161.60	2419.43	2419.43	75.91**
Within Groups	86	5626.48	2661.45	2772.72	31.87	

The obtained Fyx ratio was tested for significance and found that it is significant at .01 level of significance as the obtained Fyx (Fyx = 75.91, p < .01) is significant at .01 level of significance. It is clear from the result that the final means differ significantly after they have been adjusted for the initial difference on the test. Hence it can be concluded that Logical Argumentation is more effective than the Lecture Method for enhancing Meta Linguistic Language among students at graduate level .

The adjusted means of Post Test Meta Linguistic Language Skills scores for students of experimental and control groups were computed. The difference between the adjusted Post Test scores was tested for significance. The data for adjusted means of Post Test Meta Linguistic Language Skills scores for the students in the experimental and control groups were given in Table 3.

Table 3: Data for adjusted means of Post Test Meta Linguistic Language Skills scores for students of experimental and control groups

Groups	N	Mx	My	My,x(Adjusted)	SEM	t
Control	45	44.78	57.24	57.18		
Experimental	45	43.73	67.51	67.57	1.19	8.71**

** p < .01

From Table 3 It is clear that the calculated value of t (t = 8.71, p < .01) is significant at .01 level of significance. It indicated that the students of experimental and control groups differ significantly in their Post Test Meta Linguistic Language Skills scores as they were adjusted to Pre Test scores. From Table 3 it

is also clear that the mean scores of Post Test Meta Linguistic Language Skills scores for students of experimental group (M = 67.57) is significantly higher than that of control group (M = 57.18). It leads to the inference that Logical Argumentation is effective for

enhancing Meta Linguistic Language Skills of students at graduate level

Findings of the study

- (1) The prepared logical argumentation material is effective in enhancing Meta Linguistic Language Skills.
- (2) The study also revealed that logical argumentation is an effective way to promote interest in learning.

Conclusion of the study

The study conclusively revealed that logical argumentation is highly effective in enhancing Meta Linguistic Language Skills of graduate students. This study can be adopted in different levels of learning to enhance not only language skills but also the thinking skills and creativity of the learner. It will help develop the listening and speaking skills of the learners.

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