

## EFFECTIVENESS OF LAYERED INSTRUCTIONAL STRATEGY FOR TEACHING ENGLISH AT SECONDARY LEVEL

By

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### ABSTRACT

*This study was conducted to find out the effectiveness of Layered Instructional Strategy (LIS) based on the Elaboration Theory given by Charles M. Reigeluth on the learning achievement of secondary school students in the subject of English. Main objectives were to develop an understanding about instructional strategy, to ascertain the difference between layered Instructional strategy and traditional method, and to compare the learning competencies/abilities of the students taught through layered Instructional Strategy and the students who received traditional instruction. Furthermore, the influence of LIS on writing skills of students taught through LIS and Traditional Method. To achieve these objectives, two leading research questions were formulated. Students studying in class IX constituted the population of the study. The students of Class IX of Federal Government Secondary School, I-9/4, Islamabad were taken conveniently as sample of the study. The sample was divided into two groups after equating them on the basis of scores on pre-test. Each group comprised of 31 students. One group was randomly taken as experimental group and the other one as control. The treatment was given to the experimental group whereas the control group received traditional instruction. The experiment continued for 12 weeks. Post-test was administered immediate after the treatment was over to the whole sample to obtain final data. Data were analyzed through SPSS version 15.0 by applying independent sample t-test. The analysis of data revealed that the experimental group performed significantly better than the control group. LIS was found better instructional strategy when it was compared with traditional instructional technique under experimental setting.*

*Key Words: Elaboration Theory, Component Display Theory, Procedural Sequence, Problem Based Instruction,*

### INTRODUCTION

Innately, human beings intend to learn as well as to instruct. It has been an itching desire and dream of educationists and educators to workout strategies that promote learning. Although there is no rocket science which can make instruction effective yet there are certain instructional strategies that can improve learning process, as Richey (1968) postulates.

Instructional strategy is the systematic development of course content, sequence, methods, and material and instructional theory to ensure the quality of instruction. It is the entire process of analyzing of learner's needs and goals and the development of a delivery system to meet those needs. It includes both development of instructional materials and activities and evaluation of all instruction

and learners' activities.

Although learning may occur without instruction, yet rapid and effective learning is inconceivable in the absence of proper instruction. Instruction can greatly activate, facilitate and support the processes of learning. If instruction is to bring about effective learning then the design of instruction must focus on creating the conditions in which learning best occurs.

Ryder (2004) is of the view that the value of a specific model is determined within the context. Like other instrument a model assumes a specific intention of its user. A model should be judged by how it mediates the designer's intention, how well it can share work load, and how effectively it shifts focus away from itself toward the object of designed activity.

Gagne (1985) introduced the conditions for effective learning and included nine instructional steps. These events have long since been used for the basis of the design of instruction and the selection of appropriate media. His model proposed nine events of learning or instruction. These events are specific functions of communication behaviors.

Keller (1988) introduced four steps in the instructional design process. These are as follows:

- Attention
- Relevance
- Confidence
- Satisfaction

Keller's ARCS Model of motivational design was also closely related to the learner's requirements and needs. Keller (1988) emphasized on grabbing attention of the learners and making the instructional strategies relevant to the learner's environment. He also stresses on presenting a challenging task for learners that provides them meaningful success. Keller wants to provide opportunities for learners to use newly acquired knowledge or skill in a real setting. Merrill (1983) is another profoundly noted instructional designer. Merrill's Component Display Theory (CDT) enhanced the micro elements of instruction.

## **Elaboration Theory**

Reigeluth (1992) introduced Elaboration Theory. He used a sequencing approach that is consistent with Merrill's CDT. He believes that learning will be more effective if the instruction is made out of layers and that each layer of instruction elaborates on the previously presented ideas. This layering has a zoom lens sequencing approach that runs from simple to complex and proceeds from general to specific. Reigeluth (1998) views that the Elaboration Theory enhances retention, maximizes understanding and equips learners with better application behaviors.

Elaboration Theory is an extension of the work of Ausubel (1962) an advance organizers and Bruners' (1966) Spiral Curriculum. Elaboration theory proposes seven major strategy components:

## ***I-An Elaborative Sequence***

The first and the most important is the development of an Elaborative Sequence. This simple to complex procedure takes many forms: an overview, an advance organizer, web learning and spiral curriculum. This sequence is one in which the general ideas epitomize rather than summarized, and the epitomizing is done on the basis of a single type of content.

## ***II-Learning Prerequisite Sequence (Organization)***

The next component of Elaboration Theory is a learning-Prerequisite Sequence. It has to be ensured if the learners have the essential knowledge that will allow them to learn the specific content on hand. If the necessary knowledge is not present, it must be provided.

## ***III-Summarization***

Summarization is the third component. A summarizer provides a concise statement of each idea, as well as, reference example and diagnostic items for said idea. Two types of summarizers are used; internal, where the summary comes at the end of the lesson and deals specifically with the content of that lesson, and within-set, which deals with all that has been learned so far in a particular set of lessons.

## ***IV-Synthesis***

The fourth component is a synthesizer. The purpose of this component is to integrate and inter-relate the ideas, taught so far. It aims to facilitate deeper understanding, meaningfulness and retention.

## ***V-Analogies***

Analogy is the next component. Analogy is the use of a familiar idea or concept to introduce or define a new idea or concept. Analogies aid the teacher in reaching the learner's field of experience. Presenting analogies throughout the instruction help the learners to build on their present knowledge or skill.

## ***VI-Cognitive Strategy Activator***

A Cognitive Strategy Activator allows the teacher to present the learner with a situation in which cognitive processes and skills are put into practice. The objectives of cognitive strategy activator are the creation of mental

images and the identification of analogies. There are two categories of cognitive-strategy activators: imbedded, as with pictures, diagrams, analogies and other elements that force the learner to interact with the sequence and content; and detached, which causes the learner to employ a previously acquired cognitive skill.

## **VII-Learner Control**

It deals with the freedom of the learner to control the selection and sequencing of such instructional elements as contents, rate, components and cognitive strategies. Instruction will be more effective if it follows an elaboration strategy, i.e. the use of epitomes containing motivators, analogies, summaries, and synthesis (Reigeluth, 1999).

Keeping in view the significance and immense global influence of English language, Government of Pakistan (2006) introduced English as compulsory subject in its scheme of studies from Classes I-XII w.e.f. academic session 2007. Consequent upon this decision, National Curricula for English (2006) for classes I-XII have been developed. It seems the need of the hour to adopt an effective instructional strategy for teaching English especially at secondary level (Khan, 2004). The result of secondary boards also reinforce the need for teaching English with a newer instructional flavor and flair to enhance students' learning abilities/competencies because stereotype instructional practices in our country are making dismal reading (Haq, 2005). It is truly an appropriate time to teach English with context-transforming approach as Kirk (2005) views. Therefore the researchers were inspired to explore the effectiveness of Layered Instructional Strategy for Teaching English at Secondary Level.

## **Research Questions**

The researchers endeavored to explore the effectiveness of layered instructional strategy through following questions.

- Is there any difference between layered instructional strategy and traditional method on learning achievement of secondary school students in the subject of English?

- How much influence LIS has on writing skills of the students taught through layered instructional strategy comparing with the students who received traditional instruction?

## **Population and Method**

All the students of class IX studying English textbook published by Punjab Textbook Board, Lahore constituted the population of the study. To find out the answers of research questions two sections out of three of class IX of F.G. Boys Secondary School, I-9/4, Islamabad was conveniently taken as sample of the study. The sample sections were re-divided into two groups, i.e. experimental and control group having equal mean scores on pre-test. Each group comprised of 31 students. Experimental group received instruction according to Layered Instructional Strategy whereas the control group was taught as customary manner.

## **Instrumentation**

Before the allocation of students to experimental and control groups, the groups were equated on the basis of their scores on pre-test. As regards the age of the students of both groups, socio-economic conditions and education of their parents, the both groups were almost same. A post-test was developed, keeping in view the curriculum objectives for teaching English Language for grade IX given in the National Curriculum of English (2002) and the latest techniques of test construction.

The post-test was developed including all the text content taught during the experiment. The same contents were taught to the control group by traditional method. The test was reviewed by the same experts who reviewed the pre test. The test was pilot tested to the students of Federal Government Boys Model School, Islamabad having same characteristics of the sample of the study. The post-test was developed including all the text contents taught during the experiment. The same content were taught to the control group by traditional method. After piloting, the weaker items were discarded. On the basis of item analysis, the test was found reliable. The reliability coefficient (Alpha) of the test was found as 0.89.

## Data Collection and Analyses

The experiment continued for 12 weeks. The experimental group was instructed according to layered instructional strategy and the control group according to routine teaching. The post test was administered immediately after the treatment was over. The purpose of the test was to measure the learning achievement of the students constituting the sample of the study. So, through the administration of post test to whole sample final data were collected from 62 students; 31 from each group.

Table 1 shows mean difference on the scores on post-test between experimental and control groups. The mean of Experimental Group was 61.10 and of Control Group was 52.90. This mean difference i.e. 8.19 is statistically significant as P is less than .05 and the t-value is greater than the table value at 0.05. Therefore, the research question stating difference between the mean scores on post-test of experimental and control group is supported in favor of LIS. It is, therefore, concluded that the experimental group which was taught through Layered Instructional Strategy showed better results than the control group which received traditional instruction.

Table 2 indicates that mean difference and t-value on the scores on writing, of post test, between experimental and control groups. The mean difference i.e. 6.19 is statistically highly significant as P-value is less than 0.05 and t-value is greater than the table value. Therefore, the research question stating that there is a significant difference between the mean scores on writing, of post test, of experimental and control groups. Hence it was

Group	N	Df	Mean	SD	t-value	p-Value
Experimental	31	30	61.10	15.87	2.159	.005*
Control	31	30	52.90	13.94		

\*Significant value at 0.05

Table 1. Mean difference and t-value on the scores of post test of experimental and control groups.

Group	N	Df	Mean	SD	t-value	p-Value
Experimental	31	30	171.10	5.381	3.79*	.000
Control	31	30	10.90	7.314		

\*Significant t-value at 0.05

Table 2. Mean difference and t-value on the scores on writing, of post test, of experimental and control groups.

concluded that the students of experimental group who were taught according to the Layered Instructional Strategy showed better results than the students of control group who were taught by traditional method.

## Discussion

Analysis of data revealed that the Layered Instructional Strategy based on the Elaboration Theory of Reigeluth (1992) is applicable in Pakistan's teaching learning situation. This empirical evidence can trigger off attempts in changing instructional patterns in Pakistan. This is also in line with Richard's (2001) suggestion that teachers of language should go beyond traditional methods and focus on exploring the nature of effective classroom teaching, so sequenced and organized instruction can be very meaningful because the situation of language teaching is quite discouraging. As a result, students learn little and teachers get discouraged. Wilson (1997) declared layered Instructional Strategy the best theoretical innovation in instructional strategy. He also believes that it has the potential to stay current with the growing knowledge. Bibi (2006) discovered such type of effectiveness when she used a newer instructional strategy for teaching English language. Khan (2008) also found improved writing skills of secondary school students when introduced the learner control strategy as suggested by Reigeluth, (1999). The findings regarding writing skills are also in accordance with the findings of Pervez (2004). The findings also support the claim of Merrill (1983) who has been closely associated with the founder of the Elaboration Theory.

The performance of experimental group was also superior to the control group on post test on writing skills. These findings support the findings of the study conducted by Pervez, Johnson and Emery (2004).

## Conclusions and Recommendations

Findings and conclusions of the present study indicated that the modern instructional techniques and strategies might be used in Pakistan's classrooms setting. The teachers' main task is not only to acquaint the learners with information but to use that information in an appropriate way in the real world. Both teachers and learners

understand and use instructional material well if effective instructional strategies are adopted. Students learn better, when learning material is chunked into small epitomes. Similarly, they also retain well and their writings abilities improve. In the light of the findings revealed and conclusions drawn from the study, it can safely be recommended that working and prospective teachers may be trained keeping in view the sequential approach of Elaboration Theory so that easier and real learning could occur.

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