

# To Measure The Effect Of Four Step Strategy On The Spatial Vocabulary Enhancement Of Students

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## Abstract

This study was experimental in nature to investigate the learning of spatial vocabulary in the subject of English through four-step strategy using the single group four cycle designs. The sample of the study comprised of twenty (female and male) students of Grade III. The objective of the study was (i) to explore the effects of four-step strategy on the spatial vocabulary enhancement of students. The venue for the experiment was, Army Public School and College (Iqra) Risalpur Cantt District Nowshera. 20 students of grade III (10 boys... 10 girls) were taken as sample of the study by using purposive sampling technique. To achieve the objective, the following null hypothesis was tested: (i) there is no significant effect of four-step strategy on the spatial vocabulary enhancement of students. Single group four cycle designs were used as a tool for data collection in this study to measure the performance of the students. The duration of the study was four weeks. The data obtained was tabulated and analyzed using paired t-test in the light of the objective of the study. The analysis of the collected data revealed the following findings: it was revealed from the results that four step strategies had significant effect on spatial vocabulary enhancement at elementary level. The results showed that after the treatment with four-step strategy the vocabulary of the students improved. It is recommended that the teacher should apply four-step strategy to foster the academic achievements of the students. This study would be beneficial for students, teachers and curriculum developers alike.

**Keywords:** Four Step Strategy, Spatial Vocabulary, English, Spatial Vocabulary Enhancement.

## Introduction

English has occupied a position of prestige and integrity among the spoken languages in Pakistan. Recently, it has been observed that the English-speaking nations have got a remarkable success in every field; as a result, the people, institutions and governments have directed their interest and attention towards English language. The same perception has been adopted in Pakistan where it is observed that English language exercises intense importance in

the present situation of Pakistan. English has developed into the symbol of an elite status and higher education in Pakistan; it has turned into a gate way to the information related to scientific equipment, technology, computer, media and a way of intra-national and inter-national communication (Din & Ghani, 2019).

As Ghani (2003) said, English provides a gateway to progress and development in Pakistan, to university education and to secure jobs of white collar. Getting of

higher and wider education is impossible without this language in Pakistan. Socially, English has an incredible impact both educationally and economically as a second language. It performs a dominant role in industrial, economical and commercial developments of the country.

English language is playing a role of a Lingua Franca in the country and it is needed to be learnt. In the coming era of globalization, the power of this language will continue to spread. Being able to know English will result in more jobs opportunities (Warsi, 2004).

The principles of drill techniques stresses that language learning is a habit-forming process. When anything is repeated frequently, the deeper the habit of repetition, the higher the understanding will be (Larsen-Freeman, 2000). The substitution drill involves replacing one word inside a phrase with another.

Siddiqui (2014) states that it is vital to know English tenses in order to improve communication either in written form or in verbal form, the reason for this is that tenses enable an individual to develop excellent communication abilities. Regardless of the method chosen by a teacher to teach his or her learners, improving the students' knowledge of tenses is a mandatory in language learning. Many language-learning approaches or practices can be included into the process of teaching and learning of a language. A drill technique is one of them.

- 1 modelling
- 2 giving directions
- 3 asking yes/no questions
- 4 saying the words

**Modelling** is the first step in introducing the children to the concepts of space or location. The teacher uses material from inside the class to help them comprehend the concept

Julie (2006) wrote an article for BBC that in foreign language teaching, this drill technique has been in practice since long. It was a crucial aspect of audio-lingual methods to language learning, where the focus was on oral practice by drilling of different structures. According to Mart (2013) in foreign language teaching, drills can be very helpful because they allow learners to perform whatever they've learned. Richards and Schmidt (2013) have the opinion that drilling is a strategy used in language acquisition to strengthen sentence structure or pronunciation of the learners through repetitions and practicing.

### **Rational of the Study**

The global educational systems are interested in varying learning and teaching processes and using inventive techniques. Several countries have sought to make appropriate changes in teaching techniques in order to manage with the quick changes in knowledge and information purviews. It requires a thorough examination of the education systems in almost every country which results in developing new methods and updating instructional procedures. Though, in Pakistan we are far behind, and in order to reduce the gap, the development of new educational methods, strategies, and tactics are required. The four-step strategy is one of these new techniques and ideas. In this concept the students were taught through following four steps;

in a better way. For example, she can use a toy or any object like a book or pencil to demonstrate the idea of in, on or at etc. the teacher can put a stuffed toy on the table and say that the toy is 'on' the table. Then repeat

the same concept over and over until the students get acquainted with it.

The students are then required to **follow the directions** of the teacher while she asks them to put the toy 'on' the desk or the book etc. at this stage the students are not expected to repeat the words, however their understanding of the concept is observed. Once the students are able to follow the directions, the next step for the teacher is to **ask them yes/no questions**. The students are still not required to repeat the word itself but the teacher monitors their understanding by asking them questions like; is the toy on the table? Or is it not on the table?

After observing the performance of the students in the above three steps the teacher now decides to move to the final step, which is asking the students to **say the words**. This is the only step in which the students are required to repeat the word themselves.

The present study was therefore, designed to investigate the effect of this four-step strategy on the spatial vocabulary enrichment of student of Khyber Pakhtunkhwa studying the subject of English.

### **Literature Review**

Recent research indicates that when dimensional adjectives is first grasped by kids, these kids see these dimensional adjectives as permanent identities, including such calling a car large but not calling a comparable car little when it is linked with a city bus (Maratsos, 1973). When asked to categories big and little items, English language three- and four-year-old kids might appear to do worse than two-year-old kids, dependent on the motivations employed (Susanto, 2017).

According to Susanto (2017) in the later preschool years, thoughtfulness about the comparative character of these phrases develops, while certain errors may still be

found in the speech of three- and four-years-old kids.

The tendency for three and four years old children to handle tall and thin things didn't seem to be universal one, the children of age three to four years speaking Arabic language behaving differently to the children speaking other languages (Gathercole, 1982).

Levine et al. (1999) this quantity was evaluated on two hundred and eighty kids of age four to six years and six months. Kids were divided into six groups on the basis of their age, each group was lasting six months (e.g., four years to four years and five months), with the goal of examining overall ages and gender differences in children achievements. They discovered a substantial age-related main impact, with the youngest two age groups (e.g, four years old) being significantly lower in aggregate to the remaining four age groups. Furthermore, the middle age group, i.e third group performed much better than the two youngest age groups but shockingly their performance in comparison to older groups was worse. There were almost no notable differences in the other three eldest age groups. Whenever the researchers stimulated the gender disparity, they discovered that at four years six months, a significant manly superiority was seen, this superiority of gender lasted across the major groups based on age. Although this research made abundantly clear that measurement is capable of assessing improvements in kid's logical rotating and transition capability, it didn't state what causes may have been at the root of personal performance differences. Though there's several reasons that could contribute to significant difference in achievements of the learners, one significant element could be the child's psychological factors of dimension. At these years, child's perceptions of dimension alter dramatically, with some three or four years old producing

apparent alluding errors (Levine et al., 1999).

### Statement of the Problem

The drive of teaching of spatial vocabulary is to enable the learners to identify the correct use of the preposition. They will be expected to easily recognize the place of an object whether in the subject of English or any other discipline. By using these techniques, we can enhance the cognitive abilities of the students/learners.

### Objective

- To measure the effect of four step strategy on the spatial vocabulary enhancement of student.

### Method and procedure

#### Population

All students of Grade-III learning English of Khyber Pakhtunkhwa Province were the population of this study.

$O_1$  T  $O_2$

$O_3$  C  $O_4$

$O_5$  C  $O_6$

$O_7$  T  $O_8$

Where

$O_1, O_3, O_5$  and  $O_7$  = Pretest

$O_2, O_4, O_6$  and  $O_8$  = Posttests

### Research Instrument

A test (pre-test and post-test) was developed for the subject students. There were 6 items

### Sample

The venue for the experiment was, Army Public School and College (Iqra) Risalpur Cantt District Nowshera. 20 students of grade III (10 girls, 10 boys) were taken as sample (subject) of the study by using purposive sampling technique. As it was the beginning of the academic session, all of the 20 students constituted the subjects of the study. Out of total population, 10 girls and 10 boys students of Grade-III from Army Public Schools and College (Iqra) Risalpur Cantt District Nowshera constituted the sample of the study by using random sampling technique.

### Research Design

Randomized Groups, Pretest-Post Test-Design was used for this research. In this design of quasi-experimental study, research design was single group four cycle pretest-posttest designs but we compare the score of first two cycle (weeks).

in the test. Test was constituted on fill in the blanks and matching the column. The researcher personally developed and administered the test (pre-test and post-test for four week) to the respondents. It is an instrument, consisting of a collection of items, techniques or processes that needs performance on the part of the test taker.

## **Treatment**

The researcher developed lesson plans from the selected lessons of textbook for both experimental and control group, having the same learning outcome, but control group was taught through traditional method and experiment group was taught through four step of special learning vocabulary.

The students in experiment group were treated as:

### **(1) Modelling or labelling;**

The instructor used flashcards and pictures to introduce the concept of 'up' to the students. The teacher showed students the pictures and told them about the position of the object by repeating it over and over until the students got familiar with the idea. In the pictures a monkey was climbing 'up' the tree, a ladder and a mountain. So, the teacher used these objects and activities to familiarize the students with the use of this preposition. Here, she was especially careful not to introduce a new concept like 'down'. Therefore, instead of saying the 'monkey is climbing down a tree' she said, 'it is not going up the ladder' so the students only had to comprehend one word during the lecture.

### **(2) Giving directions to the students**

After thoroughly explaining and repeating the concept of 'up' to the students, the instructor asked the students to follow the directions, like putting the toy monkey up the ladder or getting up on the chair themselves. By giving command to the students, the teacher was able to understand how much help the first step provided in making the students comprehend the concept.

### **(3) Asking yes/no questions**

In the next step of the process, the teacher asked the students simple questions like, 'is the monkey going up the ladder?' or 'is the monkey not going up the hill?' This further provides insight about the conception of the students.

### **(4) Saying the word**

In the final step of the strategy, the teacher expected the students to repeat the word, which was not done during any of the above stages, where the students were only familiarized with the concept. The asked them, where was the monkey? To which they had to answer by saying the word 'up' which they had been learning up till now. The control group, however, was treated in the traditional manner of lecture delivery method.

## **Data Collection**

Both the experimental and control groups were given a self-developed post-tests (O2, O4, O6, O8) after the treatment was finished, to measure the attainment of subject under like environmental circumstances to those used for the pre-tests (O1, O3, O5, O7).

## **Analysis of Data**

The collected data from the respondents in this research was tabulated and analyzed by applying paired t-test. Results obtained by statistical analysis were tested on 0.05 level of significance.

## **Results and Discussion**

In the light of the objective of the study, the collected data were examined and interpreted by using t-test.

**H<sub>0</sub>1.** There is no significant effect of four-step strategy on the spatial vocabulary enhancement of students.

**Table 1 Significant effect of four step strategy on the spatial vocabulary enhancement of students in first week**

Group	N	Mean	SD	V	df	t-value	Significance (2-tailed)	Effect	
Experimental	O1	20	2.35	1.78	3.18	19	7.31	0.0000058	Significant
	O2	20	5.35	0.93	0.87				

Significance level = 0.05,

df= N-1

Table Value of t at 0.05 = 2. 093

Table 1 illustrate that the calculated t-values 7.31 was greater than 2.093 and the difference between the mean O<sub>1</sub> (Pre-test) and O<sub>2</sub> (Post-test) of Experimental group is larger, which was significant at significance

level (0.05); hence the null hypothesis is rejected. It means that four-step strategy has significant effect on spatial vocabulary enhancement on students in first week.

**Table 2 Significant effect of traditional methods on the spatial vocabulary enhancement of students in second week**

Group	N	Mean	SD	V	df	t-value	Significance (2-tailed)	Effect	
Control	O3	20	4.35	1.46	2.13	19	0.72	0.480	Not Significant
	O4	20	4.6	0.75	0.56				

Significance level = 0.05,

df= N-1

Table Value of t at 0.05 = 2. 093

Table 2 showed that the calculated t-values 0.480 was lesser than 2.093 and the difference between the mean O<sub>3</sub> (Pre-test) and O<sub>4</sub> (Post-test) of Control group is negligible, which was not significant at

significance level (0.05); hence the null hypothesis is accepted. It means that traditional method shows no significant effect on spatial vocabulary enhancement on students in second week.

**Table 3 Significant effect of four step strategy on the spatial vocabulary enhancement of students for the first two weeks**

Group	N	Mean	SD	V	df	t-value	Significance (2-tailed)	Effect	
Experimental	O1	20	2.35	1.78	3.18	19	7.31	0.0000058	Significant

	O2	20	5.35	0.93	0.87				
Control	O3	20	4.35	1.46	2.13				
						19	0.72	0.480	Not Significant
	O4	20	4.6	0.75	0.56				
<b>Significance level = 0.05,</b>		<b>df= N-1</b>		<b>Table Value of t at 0.05 = 2. 093</b>					

Table 3 revealed that the calculated t-values 7.31 was greater than 2.093 and 0.72 was lesser than table value 2.093 and the difference between O<sub>1</sub> (Pre-test) and O<sub>2</sub> (Post-test) of Experimental group is much larger and significant at significance level (0.05) than the difference between O<sub>3</sub> (Pre-test) and O<sub>4</sub> (Post-test) of Control group which were not significant at significance level (0.05); hence the null hypothesis is rejected. It means that four-step strategy has significant effect on spatial vocabulary enhancement on students for the first two weeks.

### Discussion

This study was carried out to explore the usefulness of four step strategies in study of spatial vocabulary teaching in subject of English through four-step strategy at primary level. The objectives of the study were (i) to explore the effect of four steps strategy on the spatial vocabulary enhancement of students. Students of Grade-III from Army Public Schools and Colleges of Province Khyber Pakhtunkhwa were the population of this study. This study was delimited to students of Grade-III students of Army Public Schools and Colleges to analyze the effect of four step strategy. 10 girl's and 10 boy's students of Grade-III from Army Public Schools and College (Iqra) Risalpur Cantt District Nowshera constitute the sample of the study by using purposive sampling technique.

### Conclusions

- It was established from the results that four-step strategy had significance effect on spatial vocabulary enhancement at primary level.
- After the treatment with four-step strategy the vocabulary of the students was improved.
- It was found that four-step strategy were more effective than traditional teaching approach in teaching of English.

### Recommendations

- Teachers may apply four-step strategy to enhance the academic performance of the students at primary level.
- In-service teachers training organizations may include four-step strategy as a major part in their syllabus.
- The study was kept only to 20 students. Additional researches may work with a bigger sample to investigate new confirmations on the impacts and advantages of four-step strategy.
- The current experimental report was carried out to assess the impacts of four step strategy in teaching of English subject primary level. Such findings would be needed to conduct in further disciplines as social study,

mathematics, physics and the social sciences etc.

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