# Effectiveness of Structural Method of Teaching Vocabulary 

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#### Abstract

The study was conducted to find out the effectiveness of structural method of teaching vocabulary in English subject at secondary level. The population of the study was the students of secondary classes studying in Federal Government schools of Islamabad District. Purposive and random sampling techniques were applied to select the school, teachers and the subjects. Pretest-Posttest Control Group design was used for this study. The study revealed that there was significant difference between the performance of the students taught with the structural method of teaching vocabulary (SMTV) and taught with the definitional method of teaching vocabulary (DMTV). The high, average and low achievers of experimental group performed better as compared to the performance of the students who were taught with the DMTV vocabulary. The better performance in all the categories of the experimental group was due to the morphological analyses of a word, experimenting with the word, role of the students as the partner in the learning process, management of the learning by the students themselves, generation and active processing of vocabulary, provision of multiple exposure of different intensity for practice and personalization of word learning.


Keywords: Vocabulary, Structural method, Definitional method, Effectiveness

## 1. Introduction

Words are gateway to knowledge that unlocks the doors of sublime ideas, theories and principles to the readers. The competency and grip on the lexical items of language plays an important role in learning of new concepts. The students who have got command and greater hold on the use of vocabulary excel in the study of different subjects. Laufer (1997) states that vocabulary learning is one of the important aspect of language learning and language use. In fact, it is what makes the essence of a language. Without vocabulary, speakers cannot convey meaning and communicate with each other in a particular language. It is divided into two main categories: active and passive vocabulary. Passive vocabulary consist of those words that the students may recognize and understand when they occur in the context, but which he/she cannot produce or use correctly in different contexts. The active vocabulary consists of those words which the student understands, recall at a will, write with correct spellings, can pronounce correctly, and use constructively in speaking and writing. According to Allen (1983), teaching of vocabulary was neglected during 1940-1970 due to some reasons because some educationists believed that the focus of the language learning must be on grammar instead of vocabulary. One must know how the words work together in English sentence. Secondly, it was also believed by some of the linguists that the meanings of the words cannot be adequately taught, so, it is better to avoid teaching them. Third, some specialists were of the view that being exposed to too many words might lead the students to make mistakes in sentence construction. However, different studies revealed that lack of command on vocabulary frequently interfere with communication, and as a result become the cause of communication breakdown. It is, therefore, an increased interest in vocabulary learning as a component of every language. It is viewed as a significant component of standardized language tests; and attention is being given by methodologists and program planners to the most effective ways to promote the command of vocabulary among learners.

The teachers teaching second language follow varieties of techniques and methods for teaching vocabulary. They include rote rehearsal, the use of visual aids, role-playing, vocabulary learning in a specific cultural context etc. Different techniques and methods are effective in different contexts and situations. It is, therefore essential to find out the effectiveness of different methodologies used for teaching of vocabulary and help the students and teachers to accelerate the learning process. As result, the researcher decided to conduct the study to check the effectiveness of the structural method of vocabulary teaching at secondary level in the subject of English.

## 2. Objectives of the Study

The objectives of the study were:

1) To find out the comparative effectiveness of structural and definitional methods of vocabulary teaching at secondary level
2) To find out the effectiveness of structural and definitional methods of vocabulary teaching on the performance of high, average and low achievers
3) To find out the retention rate of high, average and low achievers taught with the structural and definitional methods of vocabulary teaching

### 2.1 Hypotheses of the Study

To achieve the objectives of the study following null hypotheses were tested:

1) There is no significant difference between the mean scores of the students taught with the structural and definitional method of vocabulary teaching
2) There is no significant difference between the mean scores of the high achievers taught with the structural and definitional method of vocabulary teaching.
3) There is no significant difference between the mean scores of the low achievers taught with the structural and definitional method of vocabulary teaching.
4) There is no significant difference between the mean scores of the average achievers taught with the structural and definitional method of vocabulary teaching.

## 3. Review of literature

Blachowicz and Fisher (2000) have identified four principles of vocabulary instruction. They say that the students should personalize word learning. This principle is related to active development of vocabulary that demands actual use of new words in different contexts to conduct personal matters. The students themselves decide what word to learn and how to learn. The second principle needs immersing of the students in the learning of vocabulary. It means ongoing commitment for the vocabulary learning through out the day in different forms. It is done when language is not only exposed but explained to students. The third principle is based on the view that word building needs multiple exposure of different intensity. A single exposure is not enough to develop rich understanding of vocabulary. It takes place in many steps over a period of time. Each exposure adds information how the word is used in different contexts. There is need of 12 exposures for getting mastery and proper utilization of new lexical items. The students must be provided opportunities to reflect on the learnt lexical item and to relate them with the previous knowledge. There is also need to limit in the presentation of vocabulary in a lesson or the whole academic year. The massive exposure of vocabulary may confuse the students in the use of words in spoken and written form. The last principle emphasizes that the students should be active in learning of word. They should not be passive recipient in word knowledge. They should be encouraged to make connection between their learnt and previous knowledge. It allows students to experiment with words in different ways.
According to Filmore and Snow (2000), structural approach of teaching vocabulary is based on the morphological analyses of the word. It is process of breaking the words into prefixes, root and suffixes to illustrate the meanings. It is considered easy and practical approach of vocabulary building. The morphological features of the language such as prefixes, suffixes, and root help the learner to identify the meanings. The students do not analyze the sentences to find out the meanings of the word but analyze the word to follow its meanings. Knowledge about the root form of the word helps them to build up their vocabulary in logical and in sequenced way. After getting command over the root form of the word, there is no more difficulty to modify it as different parts of speech and build up the vocabulary. The words that are generated by the learner can be recalled easily as compared to merely listened or read. It is, therefore, necessary that the students must be provided opportunities to generate new words from the given exercises. For example, the students might be asked to form adjectives and adverbs from nouns or verbs. These exercises will greatly improve the vocabulary of the students. In the same way punctuation marks also help the reader to understand the meanings of difficult words such as Full stop indicates the completion of the thought, comma indicates continuation of the thought and semi colon, colon indicate the reversal of the thought.
According to Scott and Nagy (1997), conceptual approach focuses on the learning of concepts instead of literal definitions of the words. The proponents of this approach believe that mere learning the meanings of word without conceptual clarity is not enough to integrate the new knowledge with the existing one. It does not make
the learner able to fully comprehend the meanings of word and get sufficient skill to use it. Conceptual approach explains the meanings of the word after passing through three stages. It starts with the information what students already know about the new word. The second step is connecting information with the previous information or schemata that already exist in the brain for identifying a concept. The conclusion is drawn by comparing and contrasting information to find out similarities and differences at third stage. It makes the learner able to add in the existing body of concepts or to revise it in the light of drawn conclusions.
According to Weatherford (1990), Context Based Approach of vocabulary learning is the most effective, and it saves lot of time of the learner that is wasted in going to dictionary again and again. Contextual evidence helps the learner to find out the meanings of the new words. It is based on teaching the meanings of new words by having them used in different contexts surrounding the words. There are two types of context: Pedagogical context/ Instructional context and natural context. The instructional context refers to sentences specifically written to introduce the meanings of the new words. The natural context refers to text sentences written to communicate ideas of the text. To understand the meanings of the new words, the students need to know the information related to the topic in which the words are embedded. Difficult words can also be explained by giving summary of it. For example, she speaks without break and do not give chance to anybody else to speak in the meeting. She is really a loquacious lady. In this respect, referent words, synonyms, antonyms, hyponyms, definitions, alternative and restatement help to reach at the meanings of the words. Context based approach not only helps the reader to know the meaning of the words but also help and facilitate in the use of them. It develops independent learning habits, inculcate problem solving approach and promote active learning process. The words that have got different meanings with the same spellings and pronunciation are very difficult to be learnt without context based approach. For example, the word pen is also used as a noun and verb, and at the same time it has also got the meanings a shed where poultry birds are kept. In the same way, the sentence such as his fur coat was coated with ice. He left her alone on the left bank of the river. There is no point in drying your clothes if they are already dry. She pointed at me and made a very pointed remark. She drew the curtains to make the room lighter, and then lighted her cigarette with a lighter. After he had drunk the whisky, the drunk was very drunk indeed. The referee who refereed the match matched the toughness of the player. It is very difficult to memorize the meanings of the words without any context. The contextual information helps the learner to understand the meanings of the words that have got different meanings.
According to Nagy \& Scot (1997), traditional practices of vocabulary leaning are based on the definitional approach. The focus of this approach is to learn the meanings of the words either looking up in dictionary or glossary or by drill. It is considered the easiest and less time consuming approach of vocabulary learning. It saves time of teacher and as well of the students and makes them able to study maximum words in minimum time. However, it is not a guarantee that this approach improves comprehension of the students and increases the active vocabulary of the learner. Sometimes, learning definition does not necessarily helpful in the integration of the knowledge. There is a need of background information for the integration of the knowledge. According to Herman \& Dole (1988), dictionaries are poor tool of learning the meanings of the new words. It does not develop the skill to personalize the word and use it in different context and the learner only knows the meanings with out knowing its use. According to Watt (1995), definitional instructions of teaching vocabulary based on description or statement of word-meaning not of its usage. The teacher provides a list of words and the students looks up in the dictionary to know their meanings. They are not taught to use the word in different contexts.
According to Chun (1996) and Wallace (1988), the learnt words must fulfill the following requirements. It can be recognized by the learner in spoken and written form. It can be recalled by the learner at will. The learner is able to relate and use it in different contexts, use it in correct grammatical form, spell it correctly, pronounce it in recognizable form and aware of its connotation and association. Grains \& Redman (1993) identified certain groupings criteria which will be helpful for the teacher and the students in learning of the vocabulary in the process of second language learning. They say that words can be grouped in different ways: relating to the topic, grouped as an activity or process, similar in meaning, items which form pairs, items on scale or cline which illustrate difference in degree, items with in word families, grouping on notational similarity, items which connect discourse, items forming set of idioms or multi-word verbs, grouping by spelling difficulty, grouping on the basis of phonological patterns, grouping on the basis of stylistics, etc. Mezyenski (1983) has identified some factors relating to the success of vocabulary instruction methods in improving reading comprehension. They were (a) the amount of practice given in the learning of words (b) the breadth of training in the use of words and (c) the degree to which active processing is encouraged.

According to Rivers (1981), "vocabulary cannot be taught directly to students but can be presented, explained, included in all kinds of activities in an indirect way". He emphasizes on the contextual and conceptual
approaches of vocabulary learning that demands hard work and greater competency on the part of teacher. It also needs command on the spoken form of the language. It consumes more time of the teacher and required greater practice on the part of the students. The teacher does not translate directly the meanings of the words but explains the meanings with the help of examples, illustrations, definitions, comparison, and contrast. For example the meanings of the word grumble will be explained in this way: They grumble about the weather; if it is sunny, oh, dear, it is much too hot today; if it is cool, they say, oh, it is too cold- they are never satisfied. However, Doff (1989) does not agree to this view. He says that vocabulary can be taught in a direct way by explaining the meanings of the words. The teacher pronounces the word before the students and directly translates the meanings of the word in the mother tongue of the student. It is more convenient and less time consuming technique for the teacher. As language teachers, we must arouse interest in words and a certain excitement in personal development in this area. He suggests that language teachers must help their students by giving those ideas on how to learn vocabulary and some guidance on what to learn.
According to Rosenfield (1988), emotions play an important role in recalling the new lexical items. The new learnt vocabulary can be easily recalled when they are linked to positive and negative emotions. These emotions are considered as happy and sad events in life. However, it does not mean any threatening, frightening or intimidating environment in which the brain starts "down shifting" and the brain cells cannot obtain sufficient blood. This condition does not help to recall the new vocabulary items. Semantics is the study about the meanings of the words. The common notion about the meanings, according to the linguists that words refer to things such as ball, earth, apple, room, boy etc. There are some words that do not fall into this category. They are such as abstract nouns and verbs, for example: honesty, beautiful, fantastic, difficult, easy etc. The second view according to linguists about the explanation of the meanings that some words does not directly linked to things rather they are connected to ideas and then things. In this process, the relationship is only made through mind. They believe for every word there is some concept.
Brett \& Rothlein (1996) conducted study on "Vocabulary Acquisition from Listening to Stories and Explanations of Target Words". The purpose of this study was to compare the effects of three conditions on fourth graders for vocabulary acquisition: listening to stories with a brief explanation of the meaning of unfamiliar target words as they were encountered in the stories, listening to stories with no explanation of the words, and having no systematic exposure to the stories or vocabulary (the control condition). The subjects of the study were one hundred and seventy-five fourth- grade students from six classrooms. The years of teaching experience of the six teachers of these classes ranged from 7 to 27 . The day prior to the reading of the book, a pretest of the 10 target vocabulary words from the book was administered to all three groups. The posttest of the 10 vocabulary words was administered to all three groups the day after the story had been read. Students' scores on the pretest, post- test, and delayed posttest for each of the two stories were entered into a $3 \times 3$ ANOVA with time as the repeated measurement. Results of this study indicate that fourth graders can acquire new vocabulary from listening to stories if there is a brief explanation of new words as students encounter them in the stories. Our findings indicate that repeated readings of the same story are not necessary for vocabulary acquisition if new words are explained as they are encountered in the story. Our study provides further evidence of the value of reading and listening stories to children.
Scott, Noel \& Asselin (2003) conducted descriptive observational study on the topic: vocabulary instruction through out the day in twenty-three upper Elementary classrooms. They examined when, where, how often and how effectively vocabulary instruction occurs in 23 ethnically diverse upper elementary schools in three districts of Canada. The observations were made consuming 308 hours in 68 days of instruction. The data revealed that only $65 \%$ time is devoted for the development of vocabulary knowledge in language subjects, and with only $1.4 \%$ devoted for the development of vocabulary other than language subjects. Learning how to use words is completely ignored. The focus of the learning is on the semantic aspects of vocabulary. Only to focus on the semantic areas ignoring all other areas such as socio-linguistics variation, psycho-linguistics techniques and syntax etc is not a guarantee to learn a language.
Brown and Perry (1991) conducted comparative study of three learning strategies for ESL vocabulary acquisition. The purpose of this study was to compare the effectiveness of three strategies. They are keyword method, a semantic processing method and combined semantic- keyword method. All three methods were administered to group of students in actual classroom situation. Measure of recognition as well as recall was used to look at whether any differences existed in the retention of information and ability to retrieve the information. Pretest, posttest and delayed test were the instrument of the study. Six intact classes participated in this study. They were taught for 15 days for half an hour. The teachers were trained according to methods to teach students. The study revealed that semantic processing method is more effective as compared to the other
methods of the study. The performance of the students taught with the semantic processing method was significantly better than all other groups taught with other methods.

## 4. Methodology and Design of Study

Pretest Posttest Control Group Design was considered most suitable for this study. This design involved at least two groups, both of which were formed by random assignment. Methods of teaching vocabulary and the academic achievement were two variables of this study. Methods of teaching were independent variable and academic achievement was dependent variable of the study. The experimental group was taught with the structural method of vocabulary teaching whereas the control group was taught with the definitional method of vocabulary teaching. The researcher developed 40 lessons plan for definitional and structural methods of vocabulary teaching ( 20 for each). The lesson plans were validated getting the opinions of the experts. Posttest scores were compared to determine the effectiveness of the structural and definitional methods of vocabulary teaching. According to Gay (2000), the combination of random assignment and the presence of pretest and control group serve to control for all sources of internal and external invalidity such as history, maturation, testing, differential regression, mortality, statistical regression and testing. Instrumentation effects were controlled by using the same pretest as a postest and retention test to the control and experimental groups. Testing effects were controlled by administering the same test to control and experimental groups. The threat of differential of subjects was controlled equalizing the experimental and control groups on pretest.

### 4.1 Population and sampling

Students studying in Federal Govt. Urdu medium schools in the ambit of Federal Directorate of Education, Islamabad were the population of this study. The curriculum, assessment system and facilities available for the students were also the same. Therefore, the population was entirely homogenous. The study was delimited to only first three chapters of the Textbook of $9^{\text {th }}$ class. The selected lessons consisted of both Prose and Poetry that were also in accordance with the academic schedule of the institution. Two sections A and B with 48 students of the $9^{\text {th }}$ class from Federal Government Boys Model School I-8/4, Islamabad were taken as a sample of the study. The researcher applied purposive sampling technique to select the school. The reasons for the selection of the school were: the principal of the school allowed conducting the experiment, he also allowed changing the sections of the students for the study, availability of conducive environment for experiments of study and three English teachers were also willing to participate in the study. The students were randomly selected and equated on pretest scores applying matching technique. The experiment was conducted in 20 days and it consumed 20 hours of the students. Three days spent in the administration of pretest, posttest and retention test were not included in the 20 days period.

### 4.2 Formulation of groups

Two groups were formulated to conduct this study. They were equated on the basis of pretest scores. Matching technique was used to equalize the groups. To find out the effectiveness of the methods of teaching on different ability groups: the students of the two groups were further split into high, low and average categories. The students who obtained 60 or above marks were put in the category of high achievers, 45 to 59 were put in the category average and less than 45 were considered low achievers.

### 4.3 Research instrument

A test was constructed by the researcher and it was used as a pretest, posttest and retention test at different times according to the objectives of the study. The test was pilot tested in three schools on 103 students of the $9^{\text {th }}$ class. As a result of pilot testing, a few of the items were modified and deleted. The opinions of the 05 experts were also obtained to validate the test. The test was used as a pretest to equalize the groups and it was also used as a posttest to find out the effectiveness of the three teaching methods. The test carried completion items, multiple choice items, true false items, short questions, matching items. These items of the test were focused on the listening skill, semantic aspects of vocabulary, forming words from the given alphabets, stylistics, syntax and use of verbal phrases. Grammatical area included Nouns, Verbs, Adjectives, Spellings, Rearranging the sentence, Preposition, Changing sentences from Present into Past and Future tenses and Descriptive writing with the help of given information. To cover the interaction of time of measurement and treatment effects, the delayed/retention test was used to control this external threat to validity of the study. The purpose of this test was to know whether the result remained significant in comparison of posttest at a later date.

### 4.4 Selection and training of teachers

The factors taken into considerations for the selection of two English teachers were educational qualifications, teaching experience at secondary level, results at the SSC level examination conducted by the Federal Board of

Intermediate and Secondary Education, Islamabad (result of the sessions 2006 to 2009), teaching in classroom, interaction patterns in the classroom with the students, communication skills, rapport with the students. The teachers were voluntarily assigned to teach the two groups after conducting training sessions with them. The researcher got training from internationally trained trainer, Mr. Hamid Haasan, Assistant Professor in the English department of IIUI. The teacher who was asked to teach with the Definitional Method was briefed about the basic principles of this method such as teaching meanings by consulting dictionary or glossary or through drills, literal meanings of the words with out its use. He was also advised to tell the meaning of the word in English or in mother tongue. The focus of this method is on direct translation of the word. The teacher who was asked to teach vocabulary by following Structural Method was trained to analyze the word morphologically. He was trained how to break the words into prefixes, root and suffixes to illustrate the meanings. It is a process of analyzing word not the sentence to find out its meanings. The focus of this method is on the generation of vocabulary with the help of root word by the learners themselves. The students might be asked to form adjectives and adverbs from nouns or verbs.

### 4.5. Collection and analysis of data

The raw scores obtained from pretest, posttest and retention test were the data of this study. Time allotted for the test was one hour and 20 minutes, and total score of the test was 100 . Scoring key was developed to mark the test. The raw scores obtained from the pretest, posttest and retention test were analyzed through SPSS. The means, standard deviations and differences of means were computed for each group. Significance of difference between the mean scores of both the experimental and control groups were tested at 0.05 level by applying in dependent sample $t$ test.

## 5. Analyses and Interpretation of Data

The data of the study is analyzed under the following tables:
Insert Table 1 Here
The table reveals the means, standard deviations and standard error of the means and difference of the means of two groups. The mean of the experimental group was found 48.75 and that of control group was 48.54 . The standard deviations were 11.91 and 11.93 respectively. The standard errors of the means were found 2.43 and 2.43 respectively. It revealed that as far as the mean, SD and SEM of both the groups were concerned, they were very close to each other. The difference between the mean scores of the experimental and control groups on pretest is insignificant. The degree of freedom was 46 and mean difference was .061 on 0.05 level. The $p$ value was found .952 on 0.05 level which was insignificant. Hence, it was discovered that there was no significant difference between the mean scores of experimental and control groups, and it was established that the significant difference was not found between the performance of the control and experimental groups on pretest.
The means, standard deviations and standard errors of the means of the high achievers of the experimental group was found 64.33 and of the control group was 63.83 . Their standard deviations were 3.50 and 4.35 respectively. The standard errors of the means were 1.43 and 1.77 respectively. The difference between the means of the high achievers of the experimental and control groups on $t$ test was found insignificant. The degree of freedom was 10 and mean difference was .219 on 0.05 level. The p value was found .831 on 0.05 level which was insignificant. Hence, it was discovered that there was no significant difference between the mean scores of the high achievers of the experimental and control groups, and it was established that there was no significant difference found between the performances of the high achievers of both the groups on pretest.
The means, standard deviations and standard errors of the means of the average achievers of the experimental and control groups on pretest was calculated. The mean of the experimental group was found 51.63 and of the control group was 51.50 . The standard errors of the means were 1.41 and 1.42 respectively. The standard deviation of the experimental group was found 3.99 and of the control group was 4.03 . It was discovered that as far as the mean, SD and SEM of both the groups were concerned, they were very close to each other. The difference between the means of the average achievers of the experimental and control groups on pretest was found insignificant. The degree of freedom on 0.05 level was 14 and difference between the means was found .062 . The p value was found .951 on 0.05 level which was highly insignificant. Hence, it was discovered that there was no significant difference between the mean scores of the average achievers of the experimental and control groups, and it was established that the performance of the average achievers of experimental and control groups were not found significantly different.
The means, standard deviations and standard errors of the means of the low achievers of the experimental and control groups on pretest was calculated. The mean of the experimental group was found 37.10 and of the
control group was 37.00 . The standard errors of the means were 1.52 and 1.71 respectively. The standard deviation of the experimental group was found 4.81 and of the control group was 5.41. It was discovered that as far as the mean, SD and SEM of both the groups were concerned, they were very close to each other. The difference between the means of the low achievers of the experimental and control groups on pretest was found insignificant. The degree of freedom on 0.05 level was 18 and difference between the means was found .044 . The p value was found .966 on 0.05 level which was highly insignificant. Hence, it was discovered that there was no significant difference between the mean scores of the average achievers of the experimental and control groups, and it was established that the performance of the average achievers of experimental and control groups were not found significantly different.
Insert Table 2 Here
The table reveals the means, standard deviations, standard error of the means and difference of the means of two groups. The mean of the experimental group was found 66.83 and that of control group was 55.33. The standard deviations were 11.09 and 9.86 respectively. The standard errors of the means were found 2.26 and 2.01 respectively. The difference between the mean scores of the experimental and control groups was found significant on posttest. The degree of freedom was 46 and mean difference was 3.79 on 0.05 level. The $p$ value was found .000 on 0.05 level which was significant. Hence, it was discovered that there was significant difference between the mean scores of experimental and control groups, and the null hypothesis on the posttest "there is no significant difference between the performance of the students taught with the structural method of vocabulary teaching and definitional method of vocabulary teaching was" rejected. These results also supported the studies conducted by Fillmor \& Snow (2000). They discovered that the structural method of teaching vocabulary promoted interest in learning because it focuses the root form of the word and breaks it into prefixes and suffixes. It also helps the student to build up their vocabulary not through rote learning method but real understanding of the base form of the word.
The means, standard deviations and standard errors of the means of the high achievers of the experimental group was found 80.83 and of the control group was 67.17 . Their standard deviations were 4.44 and 7.19 respectively. The standard errors of the means were 1.81 and 2.93 respectively. The difference between the means of the high achievers of the experimental and control groups on $t$ test was found significant. The degree of freedom was 10 and mean difference was .3 .95 on 0.05 level. The p value was found .003 on 0.05 level which was significant. Hence, it was discovered that there was significant difference between the mean scores of the high achievers of the experimental and control groups on posttest, and the null hypotheses that " there is no significant difference between the performance of the high achievers taught with the structural method of teaching and taught with the definitional method of teaching vocabulary" was rejected. These results also supported the studies conducted by Fillmor \& Snow (2000) and they concluded that the structural method of teaching vocabulary is more effective as far as recalling of the words are concerened. It was reported that structural method enhance the learning of high achievers as compared to the performance of the students taught by the traditional method of teaching vocabulary.
The means, standard deviations and standard errors of the means of the average achievers of the experimental and control groups on posttest was calculated. The mean of the experimental group was found 68.00 and of the control group was 56.00 . The standard errors of the means were 2.77 and 2.19 respectively. The standard deviation of the experimental group was found 7.85 and of the control group was 6.21 . The difference between the means of the average achievers of the experimental and control groups on posttest was found insignificant. The degree of freedom on 0.05 level was 14 and difference between the means was found .3 .38 . The $p$ value was found .004 on 0.05 level. Hence, it was discovered that there was significant difference between the mean scores of the average achievers of the experimental and control groups, and the null hypotheses that " there is no significant difference between the performance of the average achievers taught with the structural method of teaching vocabulary and taught with the definitional method of teaching vocabulary" was rejected. The results of the study were also verified by the studies conducted by Ali (2005). He has concluded that the average ability students learn more through the structural method of teaching vocabulary because they themselves actively participate in the learning process and build up their vocabulary.

The means, standard deviations and standard errors of the means of the low achievers of the experimental and control groups on pretest was calculated. The mean of the experimental group was found 57.50 and of the control group was 47.70 . The standard errors of the means were 1.63 and 1.77 respectively. The standard deviation of the experimental group was found 5.16 and of the control group was 5.59 . The difference between the means of the low achievers of the experimental and control groups on prosttest was found significant. The degree of freedom on 0.05 level was 18 and difference between the means was found 4.06 . The p value was
found .001 on 0.05 level which was highly significant. Hence, it was discovered that there was significant difference between the mean scores of the low achievers of the experimental and control groups, and the null hypotheses that "there is no significant difference between the performance of the low achievers taught with the structural method of teaching vocabulary and taught with the definitional method of teaching" was rejected. These results also supported the studies conducted by Fillmor \& Snow (2000) and Weatherford (1990). They found that the low ability students were highly motivated and performed better by studying through the structural method of teaching vocabulary.

## Insert Table 3 Here

The table reveals the means, standard deviations and standard error of the means and difference of the means of two groups. The mean of the experimental group was found 61.00 and that of control group was 52.13 . The standard deviations were 9.33 and 9.73 respectively. The standard errors of the means were found 1.90 and 1.98 respectively. There was significant difference between the mean scores of the experimental and control groups on retention test. The degree of freedom was 46 and mean difference was 3.22 on 0.05 level. The $p$ value was found .002 on 0.05 level which was significant. Hence, it was discovered that there was significant difference between the mean scores of experimental and control groups, and the null hypothesis on the retention test "there is no significant difference between the performance of the students taught with the structural method of vocabulary teaching and definitional method of teaching vocabulary was" rejected.
The means, standard deviations and standard errors of the means of the high achievers of the experimental group was found 72.33 and of the control group was 64.67 on retention test. Their standard deviations were 2.50 and 8.28 respectively. The standard experimental errors of the means were 1.02 and 3.38 respectively. The difference between the means of the high achievers of the experimental and control groups on $t$ test was found significant. The degree of freedom was 10 and mean difference was .2 .16 on 0.05 level. The p value was found .055 on 0.05 level which was significant. Hence, it was discovered that there was significant difference between the mean scores of the high achievers of the experimental and control groups on retention test, and the null hypotheses that "there is no significant difference between the performance of the high achievers taught with the structural method of teaching and taught with the definitional method of teaching vocabulary on retention test" was rejected.
The means, standard deviations and standard errors of the means of the average achievers of the experimental and control groups on retention test was calculated. The mean of the experimental group was found 61.38 and of the control group was 51.38. The standard errors of the means were 3.01 and 1.61 respectively. The standard deviation of the experimental group was found 8.51 and of the control group was 4.56 . The difference between the means of the average achievers of the experimental and control groups on retention test was found significant. The degree of freedom on 0.05 level was 14 and difference between the means was found .2 .92 . The $p$ value was found .011 on 0.05 level which was highly significant. Hence, it was discovered that there was significant difference between the mean scores of the average achievers of the experimental and control groups, and the null hypotheses that "there is no significant difference between the performance of the average achievers taught with the structural method of teaching vocabulary and taught with the definitional method of teaching on retention test" was rejected.

The means, standard deviations and standard errors of the means of the low achievers of the experimental and control groups on retention test was found 53.90 and of the control group was 45.20 . The standard errors of the means were 1.44 and 1.70 respectively. The standard deviation of the experimental group was found 4.55 and of the control group was 5.39 . The difference between the means of the low achievers of the experimental and control groups on retention test was found significant. The degree of freedom on 0.05 level was 18 and difference between the means was found 3.89 . The p value was found .001 on 0.05 level which was highly significant. Hence, it was discovered that there was significant difference between the mean scores of the low achievers of the experimental and control groups, and the null hypotheses that "there is no significant difference between the performances of the low achievers taught with the structural method of teaching vocabulary and taught with the definitional method of teaching on retention test" was rejected.

## 6. Conclusions

Following were the conclusions of the study:

1) The study reveals significant difference between the performance of the students taught with the structural method of teaching vocabulary (SMTV) in the experimental group and the students taught with the definitional method of teaching vocabulary (DMTV) in the control group.
2) The high achievers who were taught with the SMTV performed better as compared to the performance of the high achievers who were taught with the DMTV vocabulary. The better performance of the high achievers was due to the morphological analyses of the word taught with the SMTV. It has promoted and encouraged the students to experiment with the words for its comprehension and understanding. They are found confident in tackling the linguistic problems presented to them in the learning activities and performed significantly better on posttest.
3) The low achievers who were taught with the SMTV performed better on posttest as compared to the low achievers who were taught with the DMTV. The better performance of the low achievers may be attributed to the breaking of the word into root, prefixes and suffixes. The students were better able to obtain conceptual clarity of the root form of the word and add into the vocabulary bank by the use of prefixes and suffixes.
4) The average achievers taught with the SMTV performed better as compared to the performance of the students taught with the DMTV because the role of the students in the experimental group was partner in the learning process. They were themselves the manager of their own learning. The teacher role in this method was as a facilitator of learning activity. They not only learn the passive knowledge of the words but also the different usage of the word also.
5) The students in the experimental group outscored the students in the control group because they were exposed to multiple exposure of different intensity. A single exposure is not enough to develop rich understanding of vocabulary. It takes place in many steps over a period of time. Each exposure adds information how the word is used in different contexts. Whereas in the control group taught with the DMTV the role of student was passive listener in the process of learning vocabulary
6) The retention rate of the students taught with the SMTV vocabulary was better as compared to the performance of the students who were taught with DMTV. It is reflected from the better performance of the students that the SMTV has greater interests and involvement for the learner. The students through this method personalize word learning. They are engaged in active, independent process of vocabulary learning.
7) The performance of the students in the overall experimental group was found significantly better on posttest and retention test as compared to the performance of the overall control group. The difference in the performance may occur due to the fact that the SMTV vocabulary is based on active processing of the words and the students have not to sit idle and only spoon fed by the teacher but he/she himself/herself takes part in the construction and the formulation of the words.
8) The students who were taught with the SMTV performed better on retention test as compared to the performance of the students who were taught with DMTV. It is reflected from the better performance of the students that the learnt words were recognized by the learner in spoken and written form and also recalled by the learner at will. The learner is able to relate and use it in different contexts, use it in correct grammatical form, spell it correctly, pronounce it in recognizable form and aware of its connotation and association.

### 6.1 Recommendations

Following are the recommendations of the study:

1) Teacher Training Institutions may conduct workshops for the training of the teachers to apply Structural Method of Teaching Vocabulary in the classroom. The focus of the training programme may be on the morphological analyses of the words for teaching vocabulary.
2) The English teachers working at secondary level may be trained to design learning activities to provide oral practice of English language on the Structural Method of Teaching Vocabulary. The learning activities may be graded in the way that fulfill the needs of high and low achievers.
3) Textbook Board may take steps for writing of the English textbooks on the basis of Structural Method of Teaching Vocabulary. These books may have balance stress on the four basic skills of English language learning.
4) Libraries may be strengthened and enriched with sufficient books on the Structural Method of Teaching Vocabulary. The Heads of the educational institutions may be provided special funds to perform this responsibility.
5) There is a need of further research studies in the topic controlling some other variables such as attitude, background status of the student, level of intelligence and gender variation.

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Table 1. Significance of difference between the mean scores of all the categories of experimental and control groups on pretest

| Group | Achiever's Level | N | M | SD | $\mathrm{SE}_{\mathrm{m}}$ | $t$ test |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  | t | df | p. value |
| Experimental Group | Whole group | 24 | 48.75 | 11.91 | 2.43 |  |  |  |
| Control Group | Whole group | 24 | 48.54 | 11.93 | 2.43 | . 061 | 46 | . 95 |
| Experimental Group | High Achievers | 6 | 64.33 | 3.50 | 1.43 |  |  |  |
| Control Group | High Achievers | 6 | 63.83 | 4.35 | 1.77 | . 219 | 10 | . 831 |
| Experimental Group | Average Achievers | 8 | 51.63 | 3.99 | 1.41 |  |  |  |
| Control Group | Average Achievers | 8 | 51.50 | 4.03 | 1.42 |  |  |  |
| Experimental Group | Low Achievers | 10 | 37.10 | 4.81 | 1.52 | . 044 | 18 | . 966 |
| Control Group | Low Achievers | 10 | 37.00 | 5.41 | 1.71 |  |  |  |

Table 2. Significance of difference between the mean scores of all the categories of experimental and control groups on posttest

| Group | Achiever's Level | N | M | SD | $\mathrm{SE}_{\mathrm{m}}$ | t test |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  | t | df | p value |
| Experimental Group <br> Control Group | Whole group | 24 | 66.83 | 11.09 | 2.26 | 3.79 | 46 | . 000 |
|  | Whole group | 24 | 55.33 | 9.86 | 2.01 |  |  |  |
| Experimental Group | High Achievers | 66 | 80.83 | 4.44 | 1.81 | 3.95 | 10 | . 003 |
| Control Group | High Achievers |  | 67.17 | 7.19 | 2.93 |  |  |  |
| Experimental Group | Average Achievers | 8 | 68.00 | 7.85 | 2.77 | 3.38 | 14 | . 004 |
| Control Group | Average Achievers | 8 | 56.00 | 6.21 | 2.19 |  |  |  |
| Experimental Group | Low Achievers | 10 | 57.50 | 5.16 | 1.63 | 4.06 | 18 |  |
| Control Group | Low Achievers |  |  |  |  |  |  | . 001 |
|  |  | 10 | 47.70 | 5.59 | 1.77 |  |  |  |

Table 3. Significance of difference between the mean scores of all the categories of experimental and control groups on retention test

| Group |  |  |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |

