

Developing Passive Structure through Reinforcement

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Abstract - This paper analyses how passive structure could be developed in students through reinforcement. Passive structure is very important. When the doer is not known or not important passive construction is used. Therefore it is important to teach the passive structure. Identifying the passive sentences and constructing the passive sentences are two of the competencies which students should develop. When I taught the passive sentences to the students I found most of the students were finding it difficult to construct the passive sentences. Therefore I decided to develop the passive construction through activities.

Key Words: *Passive, competencies, reinforcement, activities.*

1.0 INTRODUCTION

The passive voice is a grammatical construction in which the subject of the sentence or clause denotes the recipient of the action rather than the performer. In the English language the English passive voice is formed with an auxiliary verb plus a past participle.

A sentence featuring the passive voice is sometimes called a passive sentence, and a verb phrase in the passive is sometimes called a passive verb.

Passive structure is very important when the doer of an action is not known. For an example in the sentence many people were killed in an accident we do not know the doer of the action.

Merriam Webster's dictionary of English usage (1994) recommends the passive voice when identifying the object (receiver) of the action is more important than the subject and when the doer is unknown, unimportant, or not worth mentioning.

Many instructors recommend the use of passive voice in scientific papers and lab reports. The rationale for using the passive voice in scientific writing is that it achieves "an objective tone" – for example, by avoiding the first person. Therefore students should know the passive structure. They should be able to identify a passive sentence and also they should be able to construct passive sentences. Therefore it is very important to teach the passive structure to the students.

1.1 Statement of the Problem.

Passive structure is very important when the doer is not known or not important. Therefore teaching the passive voice is very important. Identifying the passive sentences and constructing the passive sentences are two of the competencies included in the grade 09 textbook. When I taught the passive sentences to the students, I found most

of the students were finding it difficult to construct the passive sentences. Therefore I decided to develop the passive construction through activities.

1.2 Objectives

- To help the students to identify the passive structure in a sentence.
- To help the students to write passive sentences accurately.
- To help the students to fair well in assignment and in exams.
- To improve the knowledge of English language.
- To do an analysis on my methods used to teach passive sentence.

2.0 REVIEW OF LITERATURE

2.1 Theory of motivation – The Cognitive Approach to Motivation

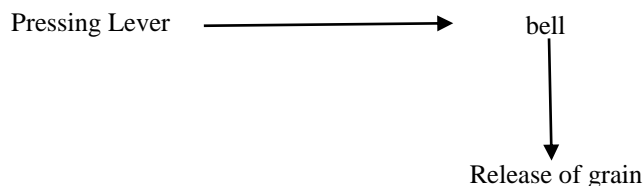
Cognitive psychologists believe that the individual is motivated by primary needs such as the desire to understand the environment, to compete and to engage in activity. As an example it is possible to site the individual's motivation to achieve mental equilibrium. Piaget explains that mental equilibrium is achieved by being motivated to understand new experience according to existing schema (mental structures) and assimilate them correctly. According to brunner (1966) students do not exhibit sustained motivation in learning because they are made to learn by using external motivators. He also points out that if their learning can be linked to their needs and goals, it is possible to create a situation where there will be self-motivation that would last a long time.

Werner (1979, 1984) explains how the manner in which students perceive their successes and failures influence their motivation; some perceive external factors beyond as cause of success or failure. As an example some students who fail at examinations site external causes as examination questions being outside the given syllabus, teacher's failure to complete the syllabus and lack of adequate time to answer questions as reason for failure while other stress internal factors such as inadequate application and study or misunderstanding questions as reasons for failure the latter also maintain that they will work hard (with motivation) to overcome the identified shortcomings on their part and achieve success at the attempt. If the student links his failure to conditions beyond his control he will face problems.

Application of the Cognitive approach to the Teaching – Learning Process.

By means of presenting new experiences to students, it is possible to arouse cognitive processes such as inadequateness, exploration and creativity. It is also possible for the teacher to utilize the mental disequilibrium brought about as a contact with new experiences as the basis for generating motivation. Linking learning with student's aims and expectations will provide the basis for maintaining motivation for a long period unlike in the case of using external motivators such as rewards, praise and marks.

It would lead to the emergence of a generation of self-motivated student. The cognitive theorists also point out the importance of perceiving the "whole" and maintain that it provides a basis for learning. The teacher is in a position to facilitate student "perception of the whole" by using audio-visual in the teaching situation.



Later when the process of providing grain was stopped it was found that the pigeon pressed the lever and waited for the sound of the bell. Skinner explains that the pigeon received a reinforce by associating the bell with the food. As a result the bell becomes a secondary reinforce. Skinner's Theory Operant Conditioning is based on two main principles.

1. Behavior shaping.
2. Reinforcement schedules.
- 3.

Behavior shaping.

Skinner used this principle to teach animals different behaviors. For example in the case of the pigeon, behavior shaping took the form of reinforcing all form of behavior that approximated to the final behavior expected. What is important here is achieving the expected behavior via a number of small steps and the reinforcement of each successful step in order to stabilize that behavior. This principle is called the principle of successive approximation by Skinner.

Schedules of Reinforcement

Before Skinner introduced the idea of schedules of reinforcement the accepted position was that reinforces have to be introduced every time a response is made in order to stamp that behavior. It is known as continuous schedules of reinforcement. Yet by means of intermittent reinforcement of selected responses Skinner showed that responses behaviors could be reinforced and stamped more

2.2 *Theory of Operant Conditioning – B.F Skinner*

According to Skinner's theory, the consequences of the response are equally important or more important than the stimulus. This is called reinforcement.

Skinner put a pigeon in an experimental box specially prepared (Skinner box). The box is a small enclosure-empty for a tray and lever. If the pigeon presses the lever gets pressed and a few grains get released. The pigeon which learns that grain (food) can be obtained by pressing the lever, repeatedly presses the lever. As this is done purposely, a positive response is obtained.

Skinner's pigeon pecks at the lever purposely, in order to obtain food. As a result of the active response of the pigeon it gets food (reinforce) as a result of getting food each time it presses the lever, it learns to press the lever. The food acts as a primary reinforce. In developing his experiment further, Skinner used secondary reinforces as well. Here Skinner sounded a bell as it pressed the lever.

successfully. Skinner explained two schedules of intermittent reinforcement as follows.

1. Interval schedules
2. Ratio schedules

Interval schedules

according to this system responses are reinforced after a given time interval, for example every 20 seconds or larger time intervals. examples of longer interval schedules of reinforcement are the marks given at the end of monthly examinations or term and examinations. interval schedules can be of two types.

1. Fixed interval schedules.

The time interval at the end of which reinforcement is given is fixed. eg. the reinforcement given at the end of the monthly examination given at the 30th of each month.

2. Variable interval schedule.

if the teacher says that the monthly test will be held on any day of the month, the time interval used in administering reinforcement is not fixed. It is a variable interval schedule.

Ratio schedule.

according to this schedule reinforcement will be after making a given number of correct responses. for example reinforcement by saying 'good' and praising the student at the end of working 10 sums correctly or at the end of learning by heart two verses is a ratio schedule of reinforcement ratio schedules also can be of two types.

1. Fixed ratio schedule

reinforcement is administered at the end of a fixed number of responses.

2. variable ratio schedule

the number of correct responses to be made before receiving reinforcement is indefinite. for example it may be at the end of working 5 sums correctly or at the end of working 10 sums.

Skinner showed that successful result can be achieved by means of variable ratio and variable interval schedules. The reason for this is the tendency on the part of the individual to act faster when he/she realizes that reinforcement can come any time when we think of daily situations when individuals receive payment for the amount of work done, he receives a monthly salary gets reinforced according to the fixed interval schedule. what we can conclude from this explanation is that, once a behavior is elicited, in order to assure that it is continued the best method is to use is the variable schedule of reinforcement.

skinner argued in 1968 that principles of operant conditioning can used in classroom management and instruction. Teaching machines programmed learning, teaching through computers were developed using the principles advanced by Skinner.

2.3 Krashen's The Monitor Model - $i + 1$ Hypothesis

this hypothesis related to acquisition, not to learning. Krashen (1985) claims that people acquire language best by understanding input that is a little beyond their present level of competence. Consequently, Krashen believes that 'comprehensible input' (that is, $i + 1$) should be provided. the 'input' should be relevant and 'not grammatically sequenced. the second language teacher should always send meaningful messages, which are roughly tuned, and must create opportunities for students to access $i+1$ structure to understand and express meaning. for instance, the teacher can lay more emphasis on listening and reading comprehension activities.

3.0 METHODOLOGY

Since the problem now has been identified; I decided to help the students to improve their passive structure. First I administered a pre Test (Annex 3) to find out the areas that should be improved. Almost all students did not fair well at the pre test (annex 8). I found out most of the students did not know the correct past participle form of the verbs. Therefore I wanted to improve this area too. I administered a test on past participle (Annex 5) and found out that most students have the problem in the irregular forms of the verbs (Annex 10).

Since two of the competencies expected to be taught in grade 9 were based on passive voice, I incorporated my action research with my teaching practice (Annex 2). One competency is identifying passive sentences and the other competency is constructs passive sentences.

I spent ten periods to teach these competencies. First I started with the past participle form and taught the past participle form of regular and irregular verbs. I used word cards, picture cards (annex 13), task sheets (annex 12) as my teaching aids.

Every other day I gave five verbs and asked the students to give the past participle form. Thus I reinforced the past

participle form. By reinforcements, we can establish new behavior in students. When the students got all the answers correct I praised them and I gave stars in their exercise books. I believed this would motivate others also to get all answers correct. During the course of the teaching practice I administered another test on past participle (annex 6). After marking the answer scripts I found a marked improvement in the students (annex 11).

For a term school based assignments should be given to the students. I decided to conduct one assignment on passive voice. I conducted it as the third assignment during the seventh week of my teaching practice (annex 7). Most of the students faired well in the assignment.

After completing my ten days of teaching on passive structure I administered the Post Test (annex 4). The result of the Post Test revealed that there was an improvement the students (annex 9).

3.1 Data Collection Methods

There are two types of data collection. One is primary Data. The other is secondary Data. Primary Data is collecting data through observations, from interviews and by conducting assignments and tests. Secondary Data means using the data which is available already and using that data to do an action research. I used only the Primary data for my action research.

Pre test was administered and the scripts were marked. Then the number of correct answers given by the students was tabulated. After that the number of correct answers was multiplied by 10 and the marks obtained by the students were calculated. The marks were tabulated according to the number of students. Then grading was given according to the range of marks. The grading was tabulated according to the number of students.

Similarly post test was administered and the scripts were marked. The number of correct answers given by the students was tabulated. After that the number of correct answers was multiplied by 10 and the marks obtained by the students were calculated. The marks were tabulated according to the number of students. Then grading was given according to the range of marks. The grading was tabulated according to the number of students.

During the course of teaching, test 1 was administered to assess the knowledge of the students in the past participle form. The scripts were marked. Then the number of correct answers given by the students was tabulated. After that the number of correct answers was multiplied by 10 and the marks obtained by the students were calculated. The marks were tabulated according to the number of students. Then grading was given according to the range of marks. The grading was tabulated according to the number of students.

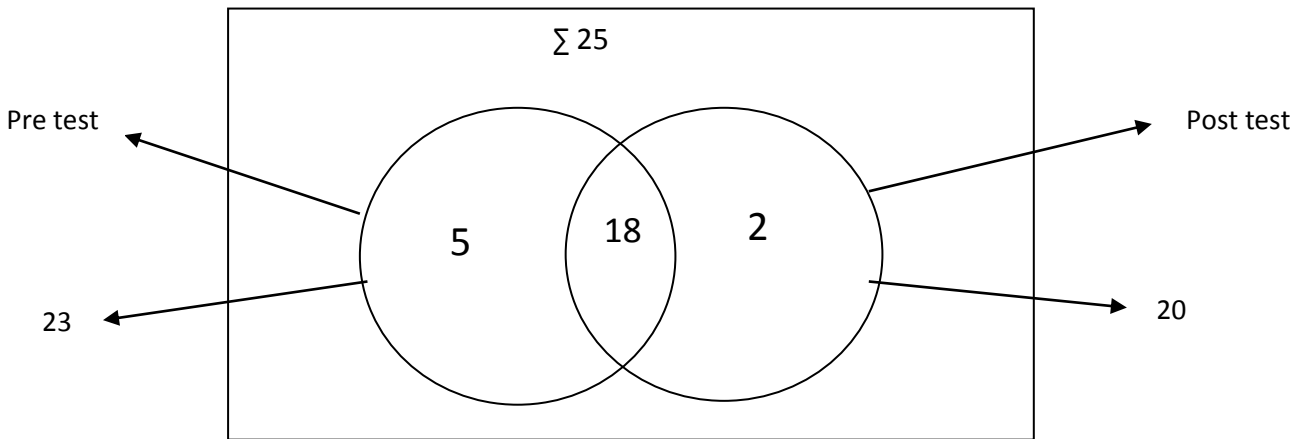
After teaching the past participle form of the verb test 2 was administered to check whether the students have learnt the past participle form. The scripts were marked and the number of correct answers given by the students was tabulated. After that the number of correct answers was multiplied by 10 and the marks obtained by the students were calculated. The marks were tabulated according to the number of students. Then grading was given according to

the range of marks. The grading was tabulated according to the number of students.
During the seventh week of the teaching practice I conducted an assignment on the passive structure and the scripts were marked. Then the numbers of correct responses given by the students were tabulated. After that the number of correct responses was multiplied by 10 and the marks obtained by the students were calculated. The 3.2 marks were tabulated according to the number of students. Then grading was given according to the range of marks.

The grading was tabulated according to the number of students.
The marks obtained by the students in the pretest and in the post test and the marks obtained by the students in the test 1 and in the test 2 were analyzed to see the development of the students.

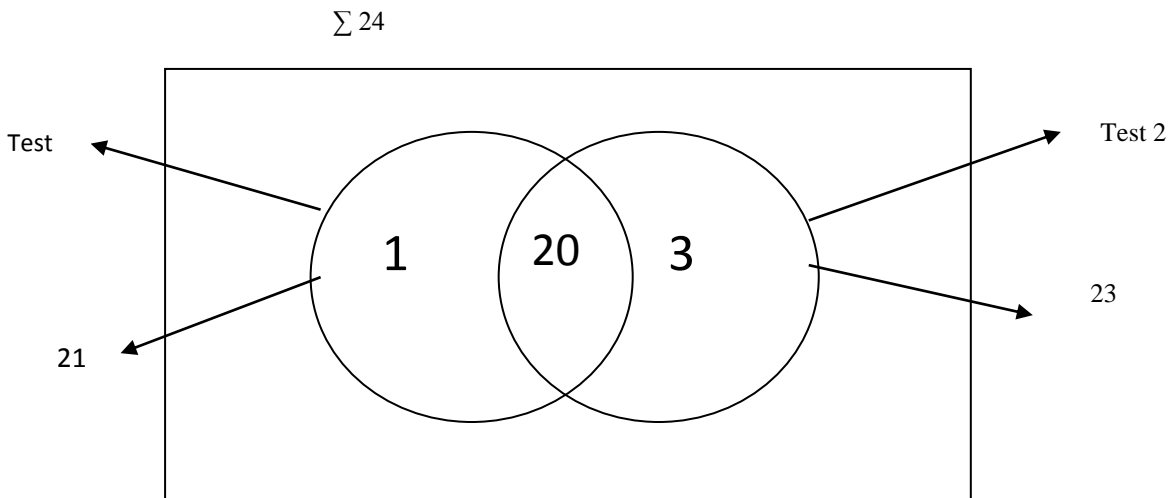
Sample

Marks of eighteen students were taken for comparative study because those eighteen students attended both the pre test and the post test. (see venn diagram 3.1)



Venn diagram 3.1

Similarly marks of twenty students were taken for comparative study because those twenty students only attended both test 1 and test 2. (see venn diagram 3.2)



4.0 DATA ANALYSIS AND PRESENTATION

4.1 Pre Test & Post Test – Correct Answers

No of Correct Answers	Pre Test	Post Test
0	-	-
1	10	-
2	04	-
3	02	-
4	02	02
5	-	-
6	-	01
7	-	-
8	-	01
9	-	05
10	-	09

Table 4.1

4.2 Test 1 and Test 2 – Correct Answers

No of Correct Answers	Pre Test	Post Test
0	-	-
1	10	-
2	04	-
3	02	-
4	02	02
5	-	-
6	-	01
7	-	-
8	-	01
9	-	05
10	-	09

4.3 Assignment 3 – Correct Answers

No Of Correct Answers	No of Students
0	-
1	-
2	-
3	-
4	3
5	2
6	1
7	1
8	3
9	4
10	8

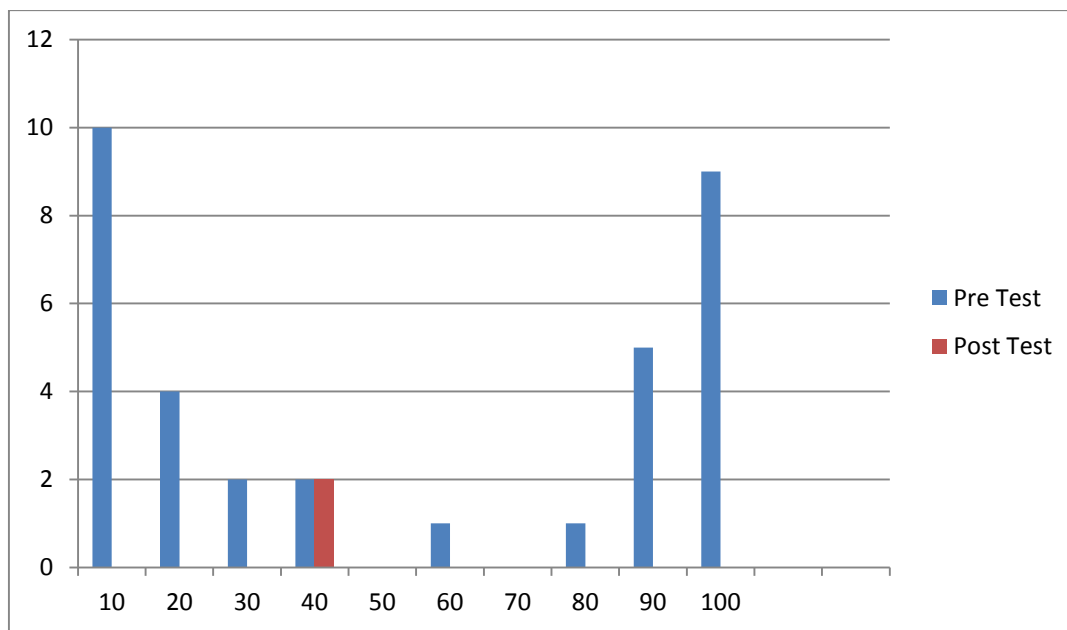
Table 4.3

4.4 Pre Test & Post Test Marks – Table & Graph

Marks	Pre Test	Post Test
00	-	-
10	10	-
20	04	-
30	02	-
40	02	02
50	-	-
60	-	01
70	-	-
80	-	01
90	-	05
100	-	09

Table 4.4

No of Students

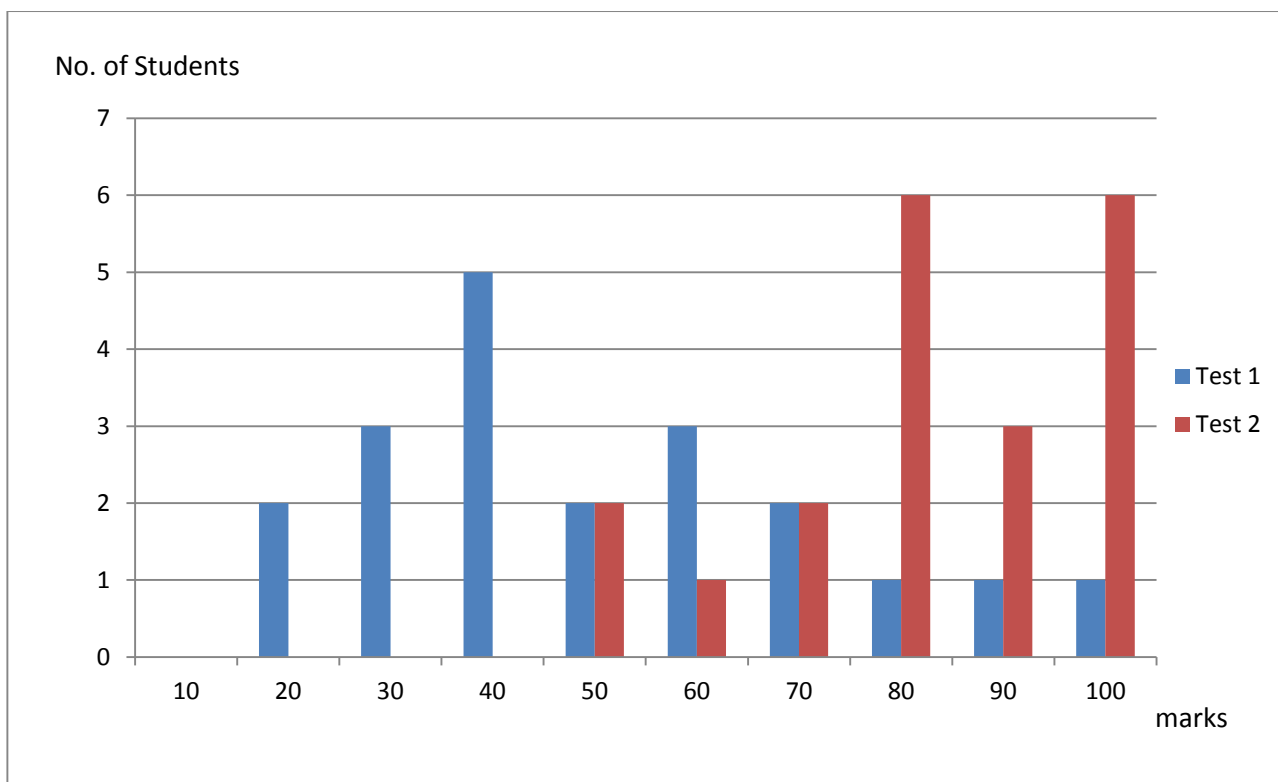


Graph 4.1

4.5 Test 1 & Test 2 Marks – Table & Graph

Marks	Test 1	Test 2
00	-	-
10	-	-
20	2	-
30	3	-
40	5	-
50	2	2
60	3	1
70	2	2
80	1	6
90	1	3
100	1	6

Table 4.5



Graph 4.2

4.6 Assignment Marks

Mark	No of Students
00	-
10	-
20	-
30	-
40	3
50	2
60	1
70	1
80	3
90	4
100	8

Table 4.6

4.7 Pre Test & Post Test – Grading

0-39	Fail	F
40-54	Fair	S
55-64	Good	C
65-74	Very Good	B
75-100	Excellent	A

Grade	Pre Test	Post Test
0-39	16	-
40-54	02	02
55-64	-	01
65-74	-	-
75-100	-	15

4.8 Test 1 & Test 2 - Grading

0-39	Fail	F
40-54	Fair	S
55-64	Good	C
65-74	Very Good	B
75-100	Excellent	A

Grade	Test 1	Test 2
0-39	05	-
40-54	07	02
55-64	03	01
65-74	02	02
75-100	03	15

4.9 Assignment 3 – Grading

0-39	Fail	F
40-54	Fair	S
55-64	Good	C
65-74	Very Good	B
75-100	Excellent	A

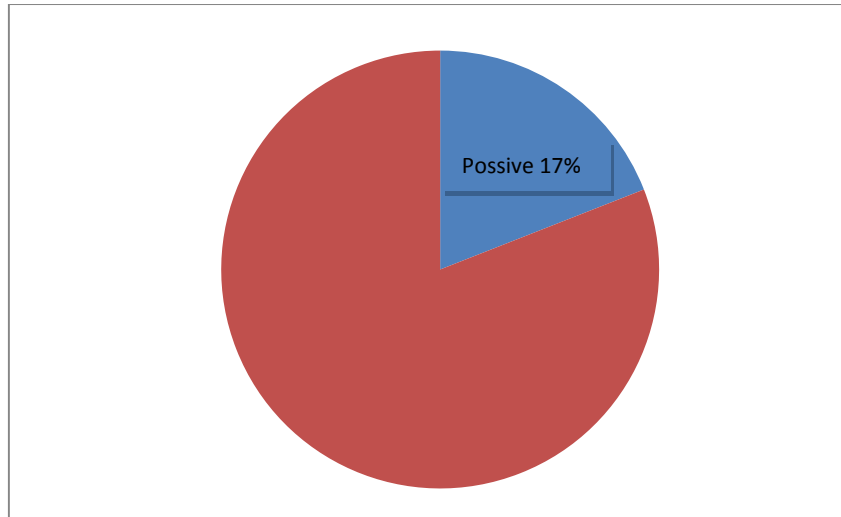
Grade	No of Students
0-39	-
40-54	05
55-64	01
65-74	01
75-100	15

Table 4.9

4.10 Hours Spent on Teaching – Table & Graph

Weeks	Period per week	Total Periods	Periods taught	Total Hours	Periods spent on teaching passive	Hours spent on teaching passive
10	5	50	44	1760mts	9	360mts

Table 4.10



4.11 Presentation of Data

Table 4.1 shows the data of the number of correct answers given by the students in the Pre Test and the Post Test. In the Pre Test the number of students who has given at least 01 correct answer is 10. The number of students who has given 02 correct answers is 04. The number of students who has given 03 answers correct is 02. The number of students who has given 04 correct answers is 02. No one has given more than four answers correct.

In the post Test minimum number of correct answers given by students is 04. The number of students who has given 04 answers correct 02. No one has got 05 answers correct. The number of students who has got 06 answers correct is 01. No one has got 07 answers correct. The number of students who has got 08 answers correct is 01. Number of students who has got 09 answers correct is 05. The number of students who has got all the 10 answers correct is 09.

Table 4.2 shows the data of the number of correct answers given by the students in the Test 1 and in the Test 2 which tested the knowledge of past participle. In the Test 1 the number of students who has given 01 correct response is zero. The number of students who has given 02 correct answers is 02. The number of students who has given 03 correct answers is 03. The number of students who has given 04 correct answers is 05. The number of students who has given 05 correct answers is 02. The number of students who has given 06 correct answers is 03. The number of students who has given 07 correct answers is 02. The number of students who has given 08 correct answers is 01. The number of students who has given 09 correct answers is 01. The number of students who has given 10 correct answers is 01.

In the Test 2 the minimum number of correct answers given by the students is 05. 02 students have given 05 answers correct. The number of students who has given 06 answers correct is 01. The number of students who has given 07 correct answers is 02. The number of students who has given 08 correct answers is 06. The number of

students who has given 09 correct answers is 03. The number of students who has given 10 correct answers is 06.

Table 4.3 shows the data of the number of correct answers given by the students in the assignment. The minimum number of correct answers given by the students is 04. 03 students have got 04 answers correct. The number of students who has given 05 correct answers is 02. The number of students who has given 06 correct answers is 01. The number of students who has given 07 correct answers is 01. The number of students who has given 08 correct answers is 03. The number of students who has given 09 correct answers is 04. The number of students who has given 10 correct answers is 08.

Table 4.4 shows the data of the marks scored by the students in the pre Test and in the Post Test. In the Pre Test minimum mark scored by the students is 10. The number of students who has scored 10 marks is 10. The number of students who has scored 20 marks is 04. The number of students who has scored 30 marks is 02. The number of students who has scored 40 marks is 02. No one has scored more than 40 marks.

In the Pre Test minimum mark scored by the students is 40. The number of students who has scored 40 marks is 02. No one has scored 50 marks. The number of students who has scored 60 marks is 01. No one has scored 70 marks. The number of students who has scored 80 marks is 01. The number of students who has scored 90 marks is 05. The number of students who has scored 100 marks is 09.

Table 4.5 shows the data of the marks scored by the students in Test 1 and Test 2 which tested the knowledge of the Past participle of the students. The minimum mark scored by the student is 20. 02 students have scored 20. The number of students who has scored 30 marks is 03. The number of students who has scored 40 marks is 05. The number of students who has scored 50 marks is 02. The number of students who has scored 60 marks is 03. The number of students who has scored 70 marks is 02. The number of students who has scored 80 marks is 01. The number of students who has scored 90 marks is 01. The number of students who has scored 100 marks is 01.

In the Test 2 the minimum marks scored by the students is 50. 02 students have scored 50 marks. The number of students who has scored 60 marks is 01. The number of students who has scored 70 marks is 02. The number of students who has scored 80 marks is 06. The number of students who has scored 90 marks is 03. The number of students who has scored 100 marks is 06.

Table 4.6 shows the marks scored by the students in the Assignment. The minimum marks scored by the students is 40. 03 students have scored 40 marks. The number of students who has scored 50 marks is 02. The number of students who has scored 60 marks is 01. The number of students who has scored 70 marks is 01. The number of students who has scored 80 marks is 03. The number of students who has scored 90 marks is 04. The number of students who has scored 100 marks is 08.

Table 4.7 shows the grading obtained by the students in the Pre Test and in the Post Test. 16 students have failed in the Pre Test. Only 02 students have obtained S pass in the Pre Test. In the Post Test 02 students have attained S grade. 01 student has obtained C grade and 15 students have obtained A grade.

Table 4.8 shows the grading obtained by the students in test 1 and the Test 2. 05 students have failed in the Test 1. 07 students have got S grade. 03 students have got C grade. 02 students have got B grade and 03 students have got A grade. In Test 2 no one has failed. 02 students have got S grade. 01 student has got C grade. 02 students have got B grade. 15 students have got A grade.

Table 4.9 shows the grades obtained by the student in the Assignment. No one has failed in the Assignment. 05 students have obtained S grade. 01 student has obtained C grade. 01 student has obtained B grade and 15 students have obtained A grade.

Table 4.10 shows the total hours spent on teaching in grade 9B and the hours spent on teaching the passive structure. Nearly 1760 minutes were spent on teaching in grade 9B class. Out of that 360 minutes were spent on teaching the passive structure.

The pie chart 4.1 shows the percentage of the total hours spent on teaching in grade 9B class and the spent on teaching the passive structure.

4.12 Data Analysis

The data collected from the sample clearly indicates the development that has taken place in the student after teaching the passive structure.

If I compare the marks if scored by the student in the Pre Test and in the Post Test (Table 4.4) the improvement could be seen clearly. In the Pre Test only 02 students have got at least 40 marks. Other 16 students have got below 40 marks. Whereas in the Post Test all students have got 40 marks and above. Furthermore 15 students have scored more than 80 marks.

Therefore if I analyze the marks obtained by the student I could find a marked progress and development in them.

If I compare the grades obtained by the students in both the Pre Test and in the Post Test (Table 4.7) it is very clear that most number of students have passed in the Post Test. In the Pre Test 16 students have failed while only 02 students have obtained the minimum pass grade S. one student has obtained C grade and 15 students have obtained A grade.

Therefore it is clear that a development has taken place in the students after teaching the passive structure.

If I analyze the marks obtained by the students in the Test 1 and Test 2 (Table 4.5) a marked development could be seen. In Test 1 05 students have got marks below 40 whereas in the Post Test all students have got more than 40 marks. In Test 1 only 03 students have got more than 80 marks while 15 students have got more than 80 marks in Test 2. Therefore it is evident that a development has taken place.

If I analyze the grades obtained by the students in the Test 1 and in the Test 2, 05 students have failed in the Test 1 whereas all students have passed in the Test 1. In the Test 1 03 students have got A grade whereas in the Test 2 15 students have got A grade. Therefore a marked development could be seen in the students.

If I analyze the assignment marks obtained by the students all students have obtained more than 40 marks. 15 students have got 80 or more than 80 marks. Assignment was conducted during the seventh week of my teaching practice. Therefore it is evident that is a development in the student to teach the passive structure.

5.0 SUMMARY

The results of the action research reveal that the students have developed their passive structure. Therefore it could be assumed that the activities I used in the classroom and the theories I based on to do my research were useful and effective.

The praise I gave to the students when they gave correct responses and stars which I gave to the students who got all the answers correct may have motivated other students also to work hard to get all answers correct. Similarly the word cards, picture cards and task sheets may have motivated the students. Therefore I believe that motivation given to the students has facilitated them to develop the passive structure.

According to the Theories Based on Information Processing Model mind also attends to the tasks of changing the form and quantum of information obtained from the environment. Memory is of two kinds. Short term memory and Long term memory. Short term memory decays gradually. Long term memory is recoverable. Through elaboration we can make the students to remember what they learnt. Therefore elaboration which

done on each passive lesson may have paved the way for the students to remember the passive structure.

Reinforcements which were given after teaching the passive structure and teaching the past participle forms may also have contributed to the development of the passive structure. According to skinner through reinforcements successful results can be achieved. Making the students to learn five irregular past participle forms and conducting assignment may have facilitated the students to develop the passive structure.

According to Krashen's The Input Hypothesis people acquire language best by understanding input that is a little beyond their present level of competence. Krashan believes that 'comprehensible input' (that is $i+1$) should be provided. The pre test and the test 1 revealed the areas to be improved. The pre test revealed that most of the students were weak in the irregular verbs. Therefore with the existing knowledge the students possessed I was able to design my action research.

Therefore I believe the theories I based my research on and the activities I designed have enabled the students to develop the passive structure.

5.1 Conclusion and Recommendations

The action research done on developing the passive structure indicates that there is a significant in the progress of the students after the series of activities done in the classroom. Therefore it is evident that the activities used in the classroom were effective and the techniques used were also effective. I also believe the theories which I based my research on were useful. The reinforcements that I implemented to teach the structure have proved useful. The motivation given to the students by me also quite effective. Therefore according to the results of the action research I could say that I have helped the students to develop the passive structure by using effective activities.

However during the course of my action research I faced some hindrances. Therefore I would give my recommendations to overcome them.

1. I faced some hindrances such as noise from the adjoining classes. If there were no such hindrances it would have been better. Therefore I recommend that such should be removed.
2. I used some methods and techniques in my action research. However I could not use audio visual techniques. In that classroom set up it was not possible. Therefore an audio visual room should be set up in that school.
3. Though all students have improved and most of them have got good marks there are quite number of students have got total 50 marks therefore I recommend some other effective teaching methods to be tried out to develop those students.

5.2 Limitations

1. Duration of the action research is short.
2. Time duration to teach the passive structure is not enough. Only 360 minutes were spent.
3. It is assumed that external features did not affect teaching learning process.
4. It is assumed that students learnt the passive structure in the school only. They may have also started learning outside school after I started teaching in school.

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