Effect of PQ4R Strategy on Slow Learners' Level of Attention in English Subject at Secondary Level

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PQ4R is an acronym which stands for Preview, Question, Read, Reflect, Recite and Review. This is a student's centered learning strategy. The main objective of the study was to investigate the effect of PQ4R strategy on slow learners' level of attention. To achieve the mentioned objective null hypothesis was tested. Govt. High School No:1 for boys Tordher Swabi was selected for the experiment through convenient sampling. A sample of 20 slow learners was selected from 9th class students of the sampled school. An observational sheet was used to observe sampled students' level of attention during experiment. The duration of experiment was six weeks. Descriptive statistics and chi-Square were used for analysis of data. Thus PQ4R strategy proved to be effective in increasing slow learners' level of attention. On the basis of findings, it was recommended that English teachers should use PQ4R strategy for enhancing students' attention which will help in their achievement in English subject.

Key words: *PQ4R, attention, English language , slow learners*

Introduction

English language

English language has got the status of global and international language. It is the lingua franca-a language used by the non-native speakers for communication- of millions of people across the globe (Warschaur, 2000).

As English language has gained its importance and it is increasing day by day in the context of Pakistan. Students get admission in high secondary schools and in universities with the help of command over English language. Further, to win a competition in exams or higher position at any office, competencies in English language is considered very important.

English is the language of international communities, higher learning and better career options. It should therefore reach the masses so that there is no discrimination amongst rich and poor in Pakistan in terms of opportunities for personal, professional and economic development (Govt. of Pakistan, 2006).

By keeping in mind the national and international importance of English language the government of Pakistan has included English as a compulsory subject from grade I to graduate level. Beside that the course of almost all academic disciplines other than Urdu at university level are in English. English subject is taught as major subject at secondary level.

The students of secondary level have to read extensively to get high achievement. But board

result shows that students' achievement in English subjects is lower than other subjects. Achievement in any subject and especially in English subject is mostly based on good teaching strategies (Anmarkrud and Braten, 2009).But majority of English teachers use teacher centered strategies which are not effective for weak and slow learners. Mostly weak and slow learners are mostly ignored in the class and they failed to show satisfactory performance.

Slow Learners

Over the years, slow learners have been labelled with different names like dull, poor achievers, underperformer, borderline, mentally handicapped, gray-area children, at-risk, and struggling learners (Kaznowski, 2004). Slow learners try to work up to their potential but fail to do so and perform below their colleagues. They have considerable problems in learning. They do not fulfil the criteria to be considered as special students. Slow learners are the students having below average mental abilities that are not handicapped but fail to cope with the normal required academic demands of regular classes. However, slow learners differ from learning disability students (Okey, 2007).

Attention Deficient

Attention is precursor to learning. Researches revealed that students having poor attention or lack of attention always perform poorly. Attention deficit is very common among the slow learners' specially. The reason can be minimum involvement of students and teacher centred approaches to teaching. Attention is the behavioural and cognitive process of selectively focusing on different aspect of information while ignoring other perceivable information.

According Reddy and Ramar (2006) the attention span of the slow learners is relatively short. They cannot concentrate on the instruction of the teacher which is mostly verbal exposition for more than thirty minutes at a stretch. They need short and frequent lessons for better perceptions.

Research studies (Soundraraja Rao and Rajaguru, (1995) reveal that when the learning materials are presented through concrete situations, the slow learners attention and concentration do not differ to concentrate on enjoyable and successful work for a considerable time. The degree to which the work is suited to the slow learners' capacity and interest is important. Slow learners' physical condition and their expectations of success or failure are also influential. In addition, the ability to concentrate seems to be, to some extent, a product of experience and training. Creative and practical activities seem to promote the development of good attention and of work habits.

PQ4R Strategy

PQ4R strategy was proposed by Thomas E. L. & Robinson H. A. in 1972 in their book "Improving reading in every class" A sourcebook for teachers. PQ4R stands for Preview, Question, Read, Reflect, Recite and Review. This strategy is a student centered strategy which involves students in every step during teaching learning process.

According to Slavin (1997) PQ4R is one of the popular strategies for enabling the students to comprehend and retain what they read. It is a strategy that facilitates students to emphasize on organizing knowledge and making it effective. Besides, Pehofer and Roy (2003) state that PQ4R strategy is an efficient strategy which facilitates and involves students during teaching learning process.PQ4R method asks readers to give answer and reflect on questions during the course of their reading and students in this way students are attentive throughout the teaching (Dunn, 2006).

PQ4R goes like preview, question, read, reflect, recite and review.

Step 1: Preview

The first step of PQ4R strategy is Preview. It consists of skimming and scanning a text to get an idea of what the writing is all about and how it is organized. Students conduct this by studying all the main ideas and sub-ideas in the project as well as the review, if there is one. They also look at all, charts, tables, maps, and graphs and read their captions.

This step involves a quick overview which helps to establish intellectual aspects in which readers adjust the text. It requires utilizing time to go through the whole unit before starting to study it in detail (Butcher, 2002).

Step 2: Question

Sobkowiaka (2001) says that the second step question assists the reader to concentrate on the text

or paragraph and make questions about the text. This step consists of making questions (Wh questions) in which the main headings and sub-headings are converted into questions. It keeps the students focused, motivated and curious. It makes the reader think and gives purpose to his/her reading. The technique of making question and answering lies at the heart of concept formation and comprehension (Squires, 2003).

Step 3: Read

According to Rynolds, (1996) the third step of PQ4R strategy is reading which is central and involves thinking process. When questions are framed in PQ4R strategy then the whole material should be read to answer the questions. Boud (1999) is of the view that one of the essential skills of effective learning is the skill to read. Johri (2007) suggests that the teacher must teach the students to understand and integrate what they read to the previous knowledge.

During reading step reader can read the passage extensively and frequently for understanding, remembering and getting an idea of the lesson or chapter. Concentration should be given to the key points, main and sub headings, new vocabulary, unusual terms and concepts or idea to understand and clear the concept. The process of rereading, silent, loud, intensive and extensive reading should be repeated both by the teacher and the students (Reynolds, 1996).

Step 4: Reflect

Reflection is the third step of pq4r strategy which is essential and effective to be used during the process of reading. Reflection is the process of thinking about the material just read. It involves processing new information and linking it with already existing knowledge for proper understanding. According to Sobkowiaka (2001) during reading the reader should ponder on the text by involving his personal experiences and past knowledge for the understanding of new knowledge. Because the main purpose of reflecting is to understand what is reflecting on.

Step 5: Recite

According to Kiewra (2002) the fourth in pq4r stands for "Recite" which means repetition of

information. Repetition is, actually, a reliable method of getting mastery over the text to be taught (Butcher, 2002). In this process, reader check and control their own understanding by re-examining and reading aloud what they read from the text (Reynolds, 1996).

When the readers read the heading and sub-heading and thoroughly go through the text silently then they should read the text aloud in their own words and try to answer the questions. The text is read time and again because repetition keeps the information alive. If students failed to answer the question already formulated then they should reread. The important information is retained by using recitation and recalling both in writings and orally reading (Mangal, 2005).

Step 6: Review

The students mostly forget the learning materials within 24 hours, the students should review the content what they studied (Reynolds, 1996). During review the answer of all the questions are given. Review consists of scanning the main and sub headings again reading loudly answer the questions. If questions are not answered the material should be read again. Frequently reviewing the material performs better on tests. Review is a crucial element during reading, as it focuses to enhance cognitive awareness of the procedures, the material and the response of the readers.

Statement of the Problem

The achievement of students in English subject at secondary level is mostly poor. The reason of poor achievement may be low attention of students. Most of the English teachers use traditional and teacher centered methods to teach English at secondary level which do not involve students as a result students' performance is low. Therefore PQ4R strategy was used to investigate its effect on slow learners' level of attention.

Objective of the Study

The main objective of the study was to investigate the effect of PQ4R strategy on slow learners' level of attention.

Hypothesis

To achieve the above objective null hypothesis "PQ4R strategy does not increase slow learners' level of attention" was tested.

Significance of the Study

The results of the study will have significant effects on the teaching strategies being adopted by the classroom teachers and curriculum planners. This may also help the English subject teachers to plan individualized learning techniques to improve the academic performance of slow learners in English subject by increasing their attention and involvement.

Methodology
Research Design

The study was experimental in nature. The pre-experimental one group pre-test and post-test research design was used in this study.

Population

The population of the study was all the 3,98,124 male students of government secondary schools in KPK, working under the provincial directorate of education KPK (EMIS,2014-15).

Sample

In this study Government High School No:1 Tordher for boys in district Swabi was selected through convenient sample. Sample of the study was composed of 20 male slow learner students of 9th class selected from the four sections (A,B,C,D). The sampled students were selected on the basis of their academic achievement of their last three years score in English subject and their teachers report. For this purpose result gazette of their class 6th, 7th and 8th were studied. The list of the students who performed the lowest percentage marks was made of the three years each. And finally a list of 20 students who scored the lowest in the last three years annual examinations was made. The sampled students were considered as slow learners because of their consistent below average scores as compared to their other class fellows. More over their teachers reports and observation were also considered for identifying the final sampled students.

As the experimental designed used in this study was the pre-experimental one group pre-test and post-test design all the twenty sampled students were assigned to experimental group.

Research Instrument and procedure

The researcher thoroughly studied literature, books and visited different websites for the development of research instrument. In order to explore improvement in level of attention of the sampled students through the application of PQ4R strategy, a structured and direct observation checklist was developed by the researcher. The purpose of using this observational sheet was to find out the effect of PQ4R in enhancing student's level of attention. The dimensions of Concentration, alertness, task-relevant attention and distractibility were considered during observing the overall attention of the students.

Students' degree of levels of attention in the above mentioned aspects was measured through three points scale including Low, Moderate and High. For this purpose observational sheet was maintained on daily basis throughout the treatment. Further, valuable consultation was taken from honorable supervisor and supervisory committee constructing observational sheet.

Procedure

After the selection of sample all the twenty sampled slow learners were placed in experimental group. The experimental group was exposed to treatment and was taught through PQ4R strategy. The details of the procedures adopted by the researcher are given below.

Selection of the Content

The first and second lessons from English textbook class 9th were selected as the content which was taught through PQ4R during experiment. The title of the first lesson was The Life of the Holy Prophet (P.B.U.H) and the second lesson was "Three days to see. Both the lessons consisted of twelve paragraphs each which made the total paragraphs twenty four.

Lesson Planning

Proper lesson plans were made for each class according the steps of PQ4R strategy. Separate lesson plans were made for each chapter.

Training in PQ4R

The experimental group and the teacher who were to teach them were given four days training

before the experiment. The purpose of the training was to make the students and teacher familiar with this new strategy and prepare them for the experiment. During training the students were given an introduction to PQ4R strategy and its six steps. The nature, activities and purpose of each step were properly explained to them.

Duration of the Treatment

The total duration of the treatment was six weeks. The treatment was started on 5th January 2015 and ended on 13th February 2015. Classes were arranged four days a week from Monday to Thursday. The duration of the class was 50 minutes. The total time duration of the treatment was 20 hours.

Procedure of Treatment

A separate classroom was arranged in which the class was held each day during experiment. For group activities during experiment all the 20 sampled students were divided into five groups, each group consisted of four students. The groups and

their members were changed after each week. Each and every group was assigned new tasks/ activities as required in different steps during experiment. Activities were arranged according to the nature and steps of PQ4R strategy. During all the steps and activities the dimensions of Concentration, alertness, task-relevant attention and distractibility of overall attention were considered. The teacher observed the students in different activities and then maintained the observational sheet by marking the each sampled student level of attention as low, moderate or high. Observational sheet was maintained when sampled students were busy in activities and teacher was just observing them.

Data Analysis

Descriptive statistics and chi-square were used for data analysis and data was also shown in graphical form.

Analysis and Interpretation of Data

Detail of analysis is hereby given.

Descriptive statistics and graphical representation of students' level of attention

Table 1

Daily observation of students Attention level.

Observation	Attention			Percentage		
	Low	Moderate	High	Low	Moderate	High
Day1	17	02	01	85%	10%	05%
Day2	13	05	02	65%	25%	10%
Day3	11	06	03	55%	30%	15%
Day4	12	04	04	60%	20%	20%
Day5	12	03	05	60%	15%	25%
Day6	11	03	06	55%	15%	30%
Day7	09	07	04	45%	35%	20%
Day8	10	05	05	50%	25%	25%
Day9	09	06	05	45%	30%	25%
Day10	07	08	05	35%	40%	25%
Day11	08	06	06	40%	30%	30%
Day12	07	07	06	35%	35%	30%
Day13	07	05	07	35%	25%	25%
Day14	05	08	07	25%	40%	35%
Day15	04	08	08	20%	40%	40%
Day16	04	08	08	20%	40%	40%
Day17	03	09	08	15%	45%	40%
Day18	03	07	10	15%	35%	50%
Day19	04	05	10	20%	25%	50%

Day20	03	06	11	15%	30%	55%
Day21	03	05	12	15%	25%	60%
Day22	02	05	13	10%	25%	65%
Day23	01	04	15	05%	20%	75%
Day24	02	02	16	10%	10%	80%
Total	167	134	177	34.93%	28.03%	37.02%

The above table shows the overall Attention levels of the sampled students throughout the experiment. The total numbers of students were twenty and total numbers of observation maintained on daily basis were twenty four. The sampled students' levels attention was observed on three levels that were Low, Moderate and high.

The total numbers of observation on low level were 167 which made 34.93% of the total observation. The total numbers of observation on moderate level were 134 which made 28.03% of the whole observations. While the numbers of observation on high level were 177 which made 37.02% o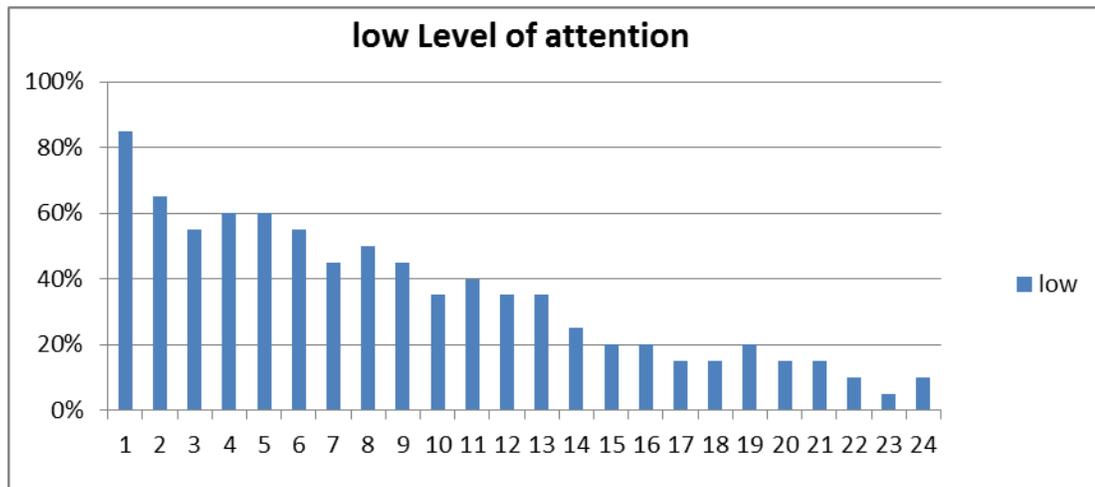f the whole observation. So, the percentage (37.02) of high level of attention was higher than the percentage (34.93) of low level of attention which shows that Pq4r improved students' level of attention.

Graph:1: Graphical representation of students' level of attention
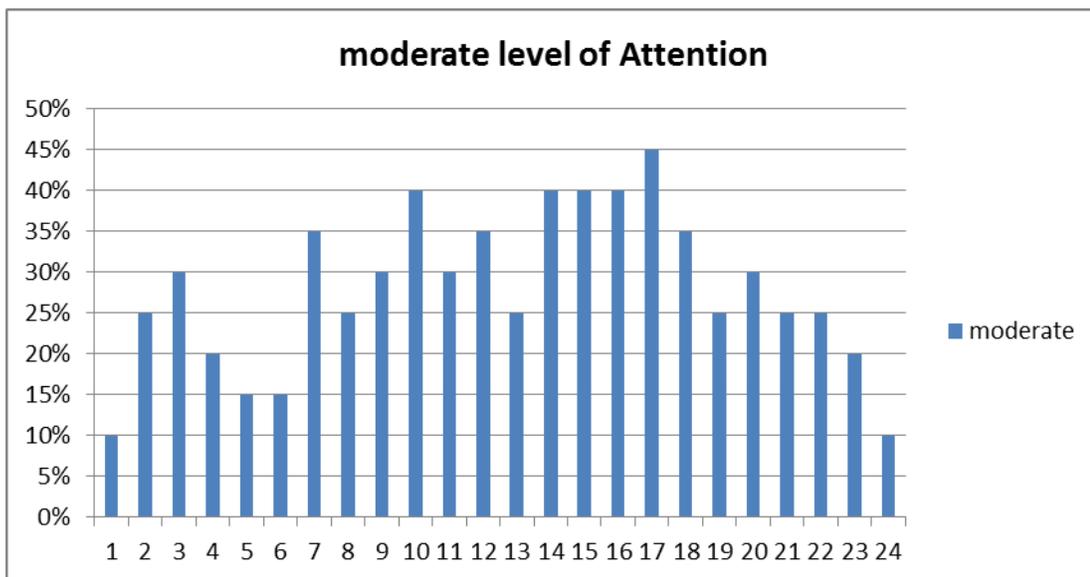
Criteria

In the following tables x axis shows the number of days of the experiment which are 24 and Y axis shows the percentage of daily observation of all the students regarding level of attention. The students' level of observation was observed through three levels that were low, moderate and high.

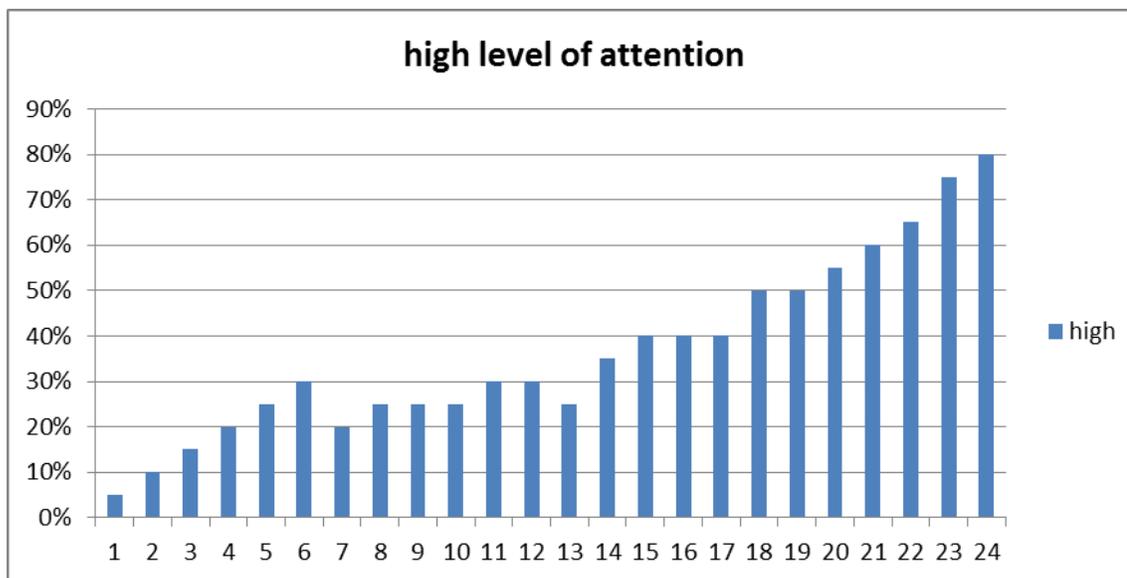**Graph:1 Graph of the students' overall Low level of attention**

Graph No**:1** shows downward trend from upward. There is a continuous downwards trend though some fluctuation is there from downward to upward. This shows that the student's level of attention was low at the start but day by day it was decreasing.

Graph:2 Graph of the students' overall   moderate level of attention

`   Graph**: 2** Shows mix trend form downwards to upward and upward to downward. There is continuous fluctuation. Though mostly the trend is upward from downward as can be seen from 1 to3, 5 to7, then 8 to 10 and 14 to 17 days, which shows that there is fluctuation in student's moderate level of attention throughout.

Graph:3 Graph of the students' overall high level of attention

Graph:3 shows upward trend from downward from day one to the last day, Which shows that students' level of attention was low at the start but then increased day by day. So, it proved that PQ4R enhanced students' level of attention.

Table

Chi square for Students level of Attention

Respondents	Low	Moderate	High	Total	df	Table value	χ^2
Slow Learners	167	134	177	478	2	5.991	6.355
Percentage	34.93%	28.03%	37.02%	100%			

Ho: PQ4R does not increase slow learners level of attention

As the above tables show greater percentage of high level of attention than the low level of attention and the graph also shows the upward trend from low to high. Similarly

Table 3.2 shows the result of chi square of students' level of attention which confirmed that calculated value (6.355) is greater than tabulated value (5.991) on the basis of which null hypothesis "PQ4R strategy does not increase slow learners' level of attention" is rejected and alternative is accepted.

Discussion

When the experimental group was analyzed with respect to students' level of attention, a significant increase was observed in their level of attention from low to high. As the PQ4R strategy is students centered and students are required to participate in each and every step. The whole lesson is divided into six steps and students play active role in every step. The results confirmed the views of Pehofer and Roy (2003),(Dunn, 2006) and Reddy and Ramar (2006) who considered involvement, concentration and short time activities as essential for increasing attention and effective learning. That's why the null hypothesis PQ4R strategy does not increase slow learners' level of attention was rejected. PQ4R strategy was found to be effective in improving and increasing sampled students' level of attention

Conclusions

On the basis of statistical analysis and findings of this study, it was concluded that slow learners taught through PQ4R strategy showed an increased level of attention from low to high which proved PQ4R strategy effective in increasing slow learners attention.

Recommendations

The below recommendations have been made on the basis of conclusions and discussion: The results of the study proved PQ4R strategy to be effective in improving slow learners' level of attention. It is therefore recommended for the English teachers to use this strategy for increasing students' achievement in English subjects. Keeping in view the effectiveness of PQ4R strategy it is recommended to curriculum Developers consider this strategy while designing the curriculum for English subject at secondary level. PQ4R strategy should be recommended for the English teachers and in-service training should be given to English teachers in PQ4R through the institutions like DCTE, PITE and RITE.

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