Study Techniques As A Strategy For Enhancing Academic Performance Among School Students

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ABSTRACT
This study is quasi-experimental, which comprises two groups: the experimental group and the control group. The experimental group was exposed to the use of study techniques while the control group was not. The sample school for the study was boys St. Joseph Secondary, Umuaturu in Etche Local Government Area of Rivers State comprising 100 sample students. Two hypotheses were formulated for the study, using two-way ANOVA for the data analysis. The study revealed that, there is a significant difference in the academic performance of students exposed to study techniques after treatment compared to those who were not. It is recommended that teachers should always present students’ scores to them after marking, for this will help them fill the gap in their professionals.

Keywords: Study Techniques, Academic Performance, Student, Secondary Schools

INTRODUCTION
Teaching and learning go on in educational institutions from the nursery school to the university. Whatever is the system of education, the learning outcome is determined with a view to assessing performance. The essence of certification in our daily life is not only of its usage to enter labour market but also for vertical and horizontal mobility. It is strongly attached to examination process in the school system. However, the most important fact tied to examination process is the need for study techniques, which act as a tool to examination success.

Assessment of the learning outcome is done for the obvious reason of determining what has been learned and for decision-making with respect to selection of candidates for higher studies or job placement. It is a great joy to achieve what one aims at. If we define achievement as having good results in anything we put in efforts so that we can be happy and receive commendation, then it becomes necessary to learn how to succeed, putting in place various ways from those who have used similar ways successfully.

Undiyaundeye (2006) noted that education and study are inseparable. Study assists in acquiring education, therefore development and adopting effective study skills cannot be ignored in the whole process of an individual’s development. It has however been observed by Maiwada (2006) that many students who are willing to improve their academic performance and obtain high grades in examinations have problems with their study techniques or habits.

A students’ study pattern and attitude to study determine to a large extent academic performance or failure in learning (Undiyaundeye, 2006). Unfortunately, appropriate studying ways are seldom taught in schools and the information on the right and wrong ways to study have equally been ignored. This has resulted in poor academic performance of students. Passing important tests and examinations creditably, requires self discipline and commitment to study methods. The following methods act as meaningful tools in attaining high academic performance (Maiwada, 2006).

- Study environment
- Studying methodology
- Personal time table
- Group study techniques
- Regular class attendance
- Tackling examination question

**Study Environment**

Study environment means the surrounding conditions which influence growth, concentration and development of a student’s schooling objectives. Oluborode, (2005) feels that students that are studying to pass creditably or distinctively in their subjects should take note of these in their study environment and act on them positively:

- The study room must be kept clean always for untidiness causes sneezing, distraction and disturbs concentration. The eyes recognize bad things easily and signal the mind immediately.
- The study room must be well ventilated and well lit. This allows for fresh air and also if one needs to study late at night.
- The study environment should not harbour sleeping bed, mattress, mat or anything that would encourage sleep. It should also be devoid of noise and away from home. Every student who is serious to achieve success in examination must forgo today’s pleasure to achieve greater joy in future.

**Studying Methodology**

The studying method in learning has the following properties to high performance level:

**Ponder:** This means to spend considerable time in considering the means and ways of finding out the facts of resolving a problem.

**Study:** This is a thorough inquiry into the subject’s content to be studied. This aspect requires the student to be determined to note every detail in the particular subject to be studied. The student can create his or her own clues that would aid remembrance.

**Recall:** This comes after pondering and a well studied time. At this point, the book is closed, a biro and paper are used to jot down points as possible on the just studied aspect of the subjects. If the student is convinced to have grasped the subject studied, there could be a procession to the next step.

**Revise:** Open your textbook and check if you have left out any point or process needed to arrive at the correct answers; In case there is any point left out, you can note carefully (Oyinloye, 2006).

**Personal Time Table**

Whatever activity an individual engages in, a time table becomes paramount as it is a guide in life. The personal time table provides a good track of activities for the learner. To this end, a learner requires a reading time table to lead towards academic attainment and general activities. Ipaye, (1983) and Undiyaundeye, (2006) are of the opinion that students should allocate time frame daily for reading and adhere to it. While there is a personal time table as a guide to study, the following should form the activities in studying:

- Attempt past questions
- Undertake group discussion with classmates
- Read in order to see how assimilation can take place
- Work out assignment given in the classroom
- Practice writing down what has been comprehended during the reading session
- Rest when concentration is lost.

**Group Study Techniques**

Any serious student must make a right choice of friends as they sojourn in the course of learning. Two good heads are better than one, Falayajo, (1997). If one fails, the other will lift up his companion. In a group study, members should range from two to four. These conditions should be strictly followed:

- The group members must be in the same class, same course of study and preparing for the same tests or examinations.
- Each group member should be mandated to master the topic to be discussed before the meeting
The group should appoint a leader and it can be rotational
- The group members should follow the time table strictly
- Subject teachers should be contacted if there is need for assistance
- There should be a time frame per subject
- Group members who are absent except on health ground should be penalized.

Regular Class Attendance
A student’s regular attendance in class is a serious ingredient for high performance in examination. It breeds:
- Active participation by both students and the teachers
- It helps the student to get familiar with the teachers style of teaching and mode of asking questions
- It helps the student to identify some classmates he or she can relate with and a study group can emerge
- Scholastic ability can be developed through exchange of views
- It promotes friendship among students and lecturers.

Tackling Examination Question
Students must avoid excessive anxiety during examinations. Anxiety usually comes as a result of inadequate preparation, lack of confidence and high expectation by parents. Relaxation is antidote to stressful examination conditions. While in the examination hall, the student should allow the following to come into play:
- Close your eyes and pray, then take breathe in and out and swallow saliva to reduce the rate of your heart beat.
- Try to sit freely with your mind in an attempt to recall what you have learnt as this will increase the height of anxiety level. This may disorganize you or lead to forgetfulness of facts.
- Read all questions before you make your choice of questions to answer
- Read instructions carefully and do not start until you are asked to do so.
- Jot down points you have remembered in each of your chosen questions to answer.
- Start with question that you are familiar with and avoid ambiguities
- Read through your work and make corrections before final submission of script.
- Read after each paper to be refreshed for the next one.

Hypotheses
1. There is no significant difference between the students who are exposed to personal time table allocation and those who are not.
2. There is no significant difference in the academic performances of the students exposed to revision and those who are not.

METHODOLOGY
The research is a quasi-experimental study involving the manipulation of treatment variables followed by observing effects of this manipulation on one or more dependent variables. For the purpose of this study, the experimental variables comprised pre—test scores representing the differences in academic performance of students exposed to revision and those without revision before examination using questionnaire tagged “student’s performance check list” before the treatment package on study techniques skills training was administered. The post test scores comprised measures of student academic performance differences from acquisition of study techniques after treatment package had been administered.
Design
The study adopted a two by two (2x2) factorial design. This consists of one treatment group 1 and control group 2 in the rows. The columns represents gender (male and female).

Participation/Setting
A total of 100 students participated in the study. The participants were drawn from different secondary schools within Etche Local Government Area of Rivers State. The students came voluntarily in response to an advertisement to join the group. The first meeting with the intended participants took place at Boys St. Joseph Secondary School, Umuaturu. The main purpose of the meeting was:

- To administer the students’ performance check list questionnaire to ascertain the level of the study skills they require
- To intimate the students with the plan and objectives of the students’ performance enrichment programme.
- To ask for volunteers to attend the programme.

One hundred (100) students among the one hundred and fifty (150) identified volunteered to participate in the programme. They also signed Undiyaundeyes (2008) Students Consent Form (SCF) to further show their commitment to participate in the programme. The mean age of the participants was between 10 years. The students who could read and write were randomly assigned to two groups (i.e. 50 students in each group) to conform to ideal number of participants in a class group of maximum of 50 as suggested by (Lipsey and Derzon (1998) & Falayajo, 1997).

Instrument
The main instrument used for data collection was Undiyaundeye’s (2008) Students Performance Inventory (SPI). The inventory consists of 3 sub-scales, each measuring specific areas of problems among school children. It contains 30 items based on the rating of 4,3,2,1 with a test retest reliability of 0.82. For the 30 items, the highest possible score a respondent could get was 120 (4x30) while the lowest score was 30 (1x30). For the purpose of this study, the higher the total score, the higher the level of students’ academic performance. Score differences after acquisition of study techniques and the more successful their performance level. The lower the total score, the lower the level of student’s academic performance after exposition to study techniques.

Research Procedure
The students that received the treatment were those in the experimental group. The group was exposed to study methods enrichment programme tagged “Study Skills Training” which entailed acquiring coaching on different study techniques and exposing the students to the methodology of imbibing the skills.

The treatment programme lasted for eight weeks. It was executed through a series of lectures focus group discussion, role play, student’s interaction session, simulation, case study analysis and take home assignments. The study skills training was participatory and assignments given were always related to the subsequent lectures. The lectures were arranged such that one builds into the other. The opening remarks gave a kind of orientation to the entire programme for participants. The topics comprised:

- What study techniques depict
- The objectives of the study skills
- Obstacles to non application of study skills in school
- Guidelines for building and maintaining study skills
- Reading habit/examination preparation and revision
- Use of the library/internet knowledge.

The control group was not exposed to any treatment but they were given lessons on the dangers of examination malpractice and career talk after the study had been concluded. However, those who participated in the control group were involved in the pre-treatment meetings, being assigned into groups and response to the pre-test questionnaire.

Hypothesis 1
This is significant differences between students who are exposed to personal time allocation and those who are not.
Table 1: unadjusted x means and adjusted y means showing the effect of study techniques on students academic performance after exposing to study techniques level by rows (experimental levels) and columns (gender levels)

<table>
<thead>
<tr>
<th>Experimental Levels</th>
<th>Male</th>
<th>Female</th>
</tr>
</thead>
<tbody>
<tr>
<td>SST (1)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>N</td>
<td>50</td>
<td>50</td>
</tr>
<tr>
<td>x-x</td>
<td>42.02</td>
<td>40.82</td>
</tr>
<tr>
<td>y-x</td>
<td>92.22</td>
<td>97.63</td>
</tr>
<tr>
<td>Control (2)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>N</td>
<td>50</td>
<td>50</td>
</tr>
<tr>
<td>x-x</td>
<td>43.06</td>
<td>42.12</td>
</tr>
<tr>
<td>y-x</td>
<td>44.11</td>
<td>43.06</td>
</tr>
</tbody>
</table>

Table 1 shows the unadjusted and adjusted means of the study skills training group and the control group significant differences can be observed between the x-means and the y-means and the y means of treatment group while no such differences are recorded for the control. From this observation of pre-test and post-test means, it can be deduced that the study skills training (SST) package had a reasonable impact in improving the students academic performance after exposition to study techniques. The analyses of variance that follows succinctly puts the level of significant difference between the experimental group (1&2) in terms of student’s performance after acquisition of study techniques.

Table 2: Summary of ANOVA for adjusted (y-means) on student’s performance after acquisition of study techniques base on row (experimental conditions) and columns (gender)

<table>
<thead>
<tr>
<th>Source of Variation</th>
<th>SS</th>
<th>Df</th>
<th>MS</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rows</td>
<td>1211.22</td>
<td>1</td>
<td>1211.22</td>
<td>134.43</td>
</tr>
<tr>
<td>Columns</td>
<td>3.43</td>
<td>1</td>
<td>3.43</td>
<td>.31</td>
</tr>
<tr>
<td>Interactions</td>
<td>4.82</td>
<td>1</td>
<td>4.82</td>
<td>.34</td>
</tr>
<tr>
<td>Within</td>
<td>14242.44</td>
<td>21712.07</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 2 shows that there is significant difference in students’ performance after acquisition of study techniques treated with study skills training and those without treatment. The students in the treatment group are likely to score high grades in school after acquisition of study techniques that those in the control group.

Base on the findings, the hypothesis is rejected. To further determine the efficacy of the treatment programme, a cell by cell t-test analysis (using standard error computed from the least mean square was conducted). The results are as presented in tables 3 and 4.

**Hypothesis 2:**
There is no significant difference in the academic performance of the students expected to revision and time who are not

Table 3: Table of Rows and Columns of Adjusted y-x means Compared

<table>
<thead>
<tr>
<th>Rows</th>
<th>Males Columns</th>
<th>Females</th>
</tr>
</thead>
<tbody>
<tr>
<td>SST Group</td>
<td>98.20(a)</td>
<td>9.61(a)</td>
</tr>
<tr>
<td>Control Group</td>
<td>42.11(b)</td>
<td>43.11(b)</td>
</tr>
</tbody>
</table>

Table 4: Distribution showing Comparison of Rows and Columns Adjusted y-xs, pooled SE computed from least mean square (LMS) and t-values

<table>
<thead>
<tr>
<th>Cells</th>
<th>M</th>
<th>DF</th>
<th>LMS</th>
<th>Pooled SE</th>
<th>T-value</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>Avsb</td>
<td>14</td>
<td>11</td>
<td>3.22</td>
<td>0.58</td>
<td>4.23</td>
<td>0.001</td>
</tr>
<tr>
<td>Avsb</td>
<td>14</td>
<td>11</td>
<td>3.33</td>
<td>0.53</td>
<td>0.52</td>
<td>NS</td>
</tr>
<tr>
<td>Avsb</td>
<td>14</td>
<td>11</td>
<td>3.22</td>
<td>0.53</td>
<td>8.02</td>
<td>0.001</td>
</tr>
<tr>
<td>Avsb</td>
<td>14</td>
<td>11</td>
<td>3.33</td>
<td>0.58</td>
<td>5.31</td>
<td>0.001</td>
</tr>
<tr>
<td>Avsb</td>
<td>14</td>
<td>11</td>
<td>3.22</td>
<td>0.58</td>
<td>0.93</td>
<td>NS</td>
</tr>
<tr>
<td>Avsb</td>
<td>14</td>
<td>11</td>
<td>3.33</td>
<td>0.58</td>
<td>7.67</td>
<td>0.001</td>
</tr>
</tbody>
</table>
Table 4 further shows that significant differences existed between the treatment group and the control group. The comparison of the cells confirms the hypotheses rejection in 3 and of 4 cells from the results. The only situation where no significant difference was noticed was between male and female students exposed to the same experimental condition.

**DISCUSSION**

The study has demonstrated the effectiveness of study skills training in improving student’s academic performance. Participation in the intervention condition proved their superiority over the control participants measure of student’s academic performance (using students’ performance inventory). This finding agreed with the works of Kuchi (2006), Salawu (2000), Bagudo (2000) and Undiyaundeye (2006) that student’s, academic performance could be improved.

The perfect explanation for effectiveness of the SPI could be linked to the contents of the treatment package which make up a period of didactic teaching on how to make studying in class comes alive using objectives of study skills, obstacles to non application of study skills in school, guidelines for building and maintaining study skills, reading habit/examination preparation and revision and use of library and internet knowledge were accessed. Under a conducive amenity there were taken on excursion to some tourists attraction: places like the Port Tourist Beach in Rivers State. The students in the treatment group were also exposed to group discussion, practical demonstration of positive testimonies, students corner activity and regular take home assignments for proper change of performance in class. These processes could have helped in student’s performance. This may be portrayed in the fact that the students interest were arouse in the training towards achieving high grades in class. The control group did not receive skill training. This may have been responsible for student’s low performance in class when compared with those in the SPI treatment group.

The findings of this study also showed that the treatment have no bias against gender in terms of academic performance after exposition of study techniques. This may be seen in the fact that both male and female students were exposed to the treatment exercise equally. This therefore gives rise to conjoint study therapy for good results in students achieving high grades in internal and external examination.

The procedure for treatment and significant improvement in students results after exposition to study skills training shows that the treatment techniques could easily be taught to students in general. This means that the students in the experimental group could become their classmates’ models as they work together in a team during class interaction or project work. As noted by Musa, (2002), Kuchi, (2006) and Sotonade, (1997) this could have some positive multiplier effect on the society as students who have gone through SST training programme would be in a better chance to teach others with studying problems as the need arises.

**CONCLUSION**

The study techniques identify how students confront difficulties in the process of learning and the value inherent in acquiring the necessary methods to enhance their examination competitiveness towards high grades. For any good student in a learning environment, he or she must review the whole topics taught by the teachers, questions and answers must be in focus to offset the rate of forgetting of the materials learnt. The student must read with the sole aim of finding answers to problems and recite these answers not for memorization but to impress them firmly on their minds for future use.

**RECOMMENDATIONS**

The following recommendations are put forward to conclude this study:

- Parents/guardians must see it as preference to provide working materials for their wards and children in schools.
- Functional libraries and internet cafés should be a priority for all existing schools.
- Teachers should always present students’ scores to them after assessment for this will help them fill the gap in their performances.
- Examination time table should be released on time for proper revision of class work.
New skills should be regularly integrated for proper innovation in the learning outcome.
Qualified and skilled teachers/counsellors should be employed by government and proprietors of schools.
Students should be sensitized to seek for assistance from teachers and counsellors in the school to clear areas of doubt as they learn.
The subject contents should be practicalized where necessary.
The students should be encouraged to pick non curricular highlights from patronizing radio and television programmes for wholistic update of knowledge.
Teachers should encourage students to develop interest in their subjects by creating a warm and serene environment for learning devoid of threats.

REFERENCES