Learning social studies through mastery approach

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This study examined learning Social Studies by investigating the effectiveness of mastery approach on students’ performance in Social Studies of two groups of students drawn from Osun State College of Education, Ila-Orangun and University of Uyo, Ila-Orangun Study Centre which consisted of 200 level Social Studies students and 200 level degree Social Studies students. A unit of course peculiar to both NCE and Degree Students in Social Studies was taught. SOS 221 titled; Issues and Problems of National Development for NCE Students and SSE 225 titled; Issues and Problems of Modern Society was broken down and presented sequentially to learners at different levels; the difficulty of the learning task varied according to the level of learners involved. In all 60 students, 30 from each level were involved. The research design was the posttest only control group design, which allows research to be conducted without any pretest. Results showed a clear-cut conclusion on the effectiveness of mastery learning approach on students’ performance as students in the two categories performed better in Social Studies compared with conventional approach to learning. This result was found to be significant at the 0.05 level. Some deductions were made on the results and the need for further research work is advocated.

Key words: Learning, mastery approach, conventional approach, social studies.

INTRODUCTION

Teaching is a process of facilitating student learning through a proper management by the teacher of the interrelationships among the students’ interest, the content for learning and the methods and materials he or she intends to use in the teaching and learning of the content materials. It may involve giving instruction to somebody on knowledge, skills and attitudes with the intention that the person will be able to know the information or do something or act in a particular way that is compatible with the instruction. We know the person that gives the instruction may be a learner, a pupil, a student or a trainee. The means employed by the teacher to pass information to the learner would determine ultimately, if he or she is teaching, instructing, training, indoctrinating and so forth. It should be noted that knowledge impartation is never possible without a good technique to execute the impartation. It is only when knowledge is imparted through good technique and one makes sure that the learner has gained something useful which can make his/her experience relatively permanent that one can say that learning has taken place. There has been knowledge impartation without a method to do the same, whether the method is adequate or not is another factor. Right from time past, the conventional method of imparting knowledge has been in use. The relevance of this conventional method and its attendant criticism are what have been giving educators sleepless nights and making them to think of other better techniques of imparting knowledge. Many techniques have been propounded by many educators out of which are mastery learning approaches.

The Conceptual Framework

It was Carroll (1963) that first came out with the idea of mastery learning. Carroll studied individual differences in the learning of second languages and found that scores reflect differences in the amount of time needed for learning rather than difference in the amount that can be learnt. He concluded that virtually all students can achieve mastery of learning task if each is given enough time and if they all receive good instruction. His ideas were improved upon by Bloom (1968) when he came up with Learning for mastery (LFM) in the same year Keller also improved on the ideas of Bloom. Keller came up with Per-
sonalized System of Instruction (PSI).

Both Carroll’s and Bloom’s model are group based mastery learning technique while Keller’s model is personalized. Bloom’s model, therefore has been viewed as the partial mastery learning technique while that of Keller’s is seen as the full mastery learning model because there is little difference from that of Bloom’s in that it is totally individual based and advocate 100% performance. The concepts of both partial mastery learning technique and full mastery learning technique, therefore, are the same. It is only in the aspect of execution of their techniques that differences come to play.

The Concept of Mastery Learning

Mastery learning technique is a strategy of teaching and learning exercise expected to bring all or almost all students to a level of mastery in the learning of any particular subject of choice.

Adepoju (2002) looks at mastery learning as “an innovation which in its various forms is designed towards making learners perform beautifully well on an academic task. In mastery learning, a pre-specified criterion level of performance is established which students must master in order to complete the instruction and move on. It typically includes frequent assessment of students’ progress, provision of corrective instruction and emphasis on cues, participation, feedback and reinforcements.

Some Theoretical Studies on Mastery Learning

The challenges posed by mastery learning techniques and the expected high level result from the normal conventional method have motivated many scholars to make appreciable studies on the techniques.

All studies carried out on mastery learning techniques and reports recorded are result oriented. All the studies are indications that mastery learning technique will at any time yield better than conventional strategy as far as students’ performance and achievement are concerned in any subject.

Lee (1971) made use of forty and sixty grades with 12,504 students in Arithmetic and Science. At the end he found out that 42% attained mastery on Arithmetic while 39% attained on science.

Ezewu (1980) carried out an investigation on the effect of mastery learning achievement, making use of only girls. He concluded that the mastery taught group was better than the non mastery group.

Olobudun (1986) studied the effects of mastery learning strategies on the students’ cognitive and affective outcomes in mathematics, the result showed that mastery learning technique enhanced student learning better and they were able to retain more.

Abadom (2002) concerned her study with the success of work that other recorded in their studies on mastery learning techniques thereby, preferring the mastery techniques to the conventional method of teaching.

METHODOLOGY

Research Design

The study was a posttest only and control group experiment. The two independent variables are; Mastery learning strategy and conventional strategy and the dependent variable is performance in Social Studies. The study consisted of two levels of students; thirty (30) Colleges of Education students and thirty (30) University of Uyo undergraduate students.

Sample and Sampling Technique

The subjects for this study were purposively selected from Osun State College of Education, Ila Orangun and University of Uyo, Ila Centre undergraduates. A total of 60 students, 30 from each category of the two levels were used for the study. The groups have gone through SOS 221 (Issues and Problems of National Development) and SSE 225 (Issues and Problems of Modern Society) in their respective courses.

Data Gathering Procedure

The researcher obtained the course contents in Social Studies for NCE SOS 221 (Issues and Problems of National Development) and Degree Students SSE 225 (Issues and Problems of Modern Society) and from the two courses, a unit of the course content peculiar to the two courses was chosen titled National Development and Planning. This unit was further broken down to teachable units for reflective teaching and learning.

Students in each institution were randomly assigned into two groups making two groups of 15 students in the university and two groups of 15 students in the College of Education. The experimental groups were presented with mastery learning strategy while the control groups were presented with the conventional strategy.

Instrumentation

Instrumental guide on mastery learning strategy developed from Social Studies concept were presented to the students in Experimental group based on the procedure for learning the task. Students were equally presented with essay test that required a comprehensive description of the task presented to them. Four experts in Social Studies and Educational Evaluation from Faculty of Education, University of Ibadan validated the content and instructional guide. Their opinions and observations were used for necessary modifications. The instruments were trial tested and the Crobanch Alpha of 0.76 and 0.81 were obtained respectively.

RESULT OF EXPERIMENTS

Experiment I

The first experiment started with the 200 level students offering Social Studies course. Thirty (30) students randomly grouped into 2 groups of fifteen (15) were presented with mastery learning strategy while the control group was exposed to conventional strategy. Each group was separated from each other in order to eliminate research contaminations. Subjects were presented with the learn-
Table 1. T-test analysis on the post test scores in Social Studies unit, descriptive test control and experimental groups among 30 students from the College of Education.

<table>
<thead>
<tr>
<th>Variable</th>
<th>No</th>
<th>Mean</th>
<th>Df</th>
<th>Calculated t-value</th>
<th>Critical t-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Control (Conventional)</td>
<td>15</td>
<td>42.5</td>
<td>28</td>
<td>-1.2</td>
<td>1.7</td>
</tr>
<tr>
<td>Experimental (Mastery Learning)</td>
<td>15</td>
<td>44.3</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Significant at 0.05

Table 2. T-test analysis on the post test scores in Social Studies unit test for experimental and control groups among 30 university undergraduate students of University of Uyo.

<table>
<thead>
<tr>
<th>Variable</th>
<th>No</th>
<th>Mean</th>
<th>Df</th>
<th>Calculated t-value</th>
<th>Critical t-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Control (Conventional)</td>
<td>15</td>
<td>39.7</td>
<td>28</td>
<td>-4.6</td>
<td>1.7</td>
</tr>
<tr>
<td>Experimental (Mastery Learning)</td>
<td>15</td>
<td>50.7</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Significant at 0.05.

ning task based on the unit of the course content and a written descriptive test simultaneously. The students responded to the test and the test was scored and analysed using the t-test.

Table 1 shows that the t-test analysis of the post-test scores of 30 College of Education students were subjected to mastery learning strategy and conventional strategy in learning of a task in Social Studies. The result in Table 1 indicated that the experimental group performed better than control strategy group.

Experiment II

The second experiment was carried out with students that were randomly selected from 200 level Social Studies student of University of Uyo. The thirty (30) students were randomly assigned to mastery learning strategy and conventional strategy of the learning task in Social Studies unit for the two groups experimental conditions were held constant for the groups. The students were asked to respond to the descriptive written test as posttest. T-test analysis was used to compare the post-test mean performance scores of the two groups.

Table 2 shows the t-test analysis comparing the post-test scores of experimental and control groups when they are subjected to descriptive analysis test in Social Studies unit instructions. The result showed that the experimental group had a marginal but non-significant gain over the control group.

DISCUSSIONS

The results in the two tables of this study showed that teaching strategies are effective tools in presenting facts and ideas in Social Studies. The university students that responded to descriptive analysis tasks in mastery learning strategy had a marginal advantage over the conventional strategy group.

The results had a clear-cut conclusion on teaching strategies effectiveness in instruction using mastery learning approach. Thus teaching strategies could have a positive and effective impact on learning. The findings show that the conventional method is no longer an effective approach to teaching and learning. It is also possible that other variables not examined could affect teaching effectiveness in learning. Such variables may include difficulty level, students’ specialization and course requirements, learning contents and students’ communication skill. All these points and host of others may lead to findings based on empirical condition within the framework of teaching strategies effectiveness.

RECOMMENDATIONS

Teachers should be creative enough to produce relevant instructional teaching strategy that can be used to enhance their instructional delivery so that behavioural objectives set for instructions can be achieved.

Opportunities should be made available by the government in ensuring that teachers are well trained through conferences and seminars in order to abreast on the effective operation of the strategy.

The curriculum should be so designed in such a way that sufficient time is allocated for the individual student in order to attain mastery of the learning task.

REFERENCES

