Effectiveness of Learner Friendly Classroom Management Package in Biology for Enhancing Achievement of Students at Secondary Level

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Abstract: Learner-friendly Classroom management not only means the organization of the physical classroom environment but also the emotional climate, atmosphere, and ambiance we wish to effectively establish. Major objective of the study is to prepare learner friendly classroom management package in biology for enhancing achievement of students at secondary level. Experimental method was adopted for this study. The investigator used a non-equivalent pre-test- post-test design for the experimental section. The experimental study was conducted on the sample of 120 secondary school students, 60 students were randomly selected as the experimental group and another 60 treated as a control group. This study concluded that the Learner Friendly classroom management package was more effective than the prevailing classroom management practices for enhancing achievement in biology of students at secondary level.

Key terms: Learner Friendly, Classroom Management, Achievement

1. Introduction
Learner-friendly Classroom management not only means the organization of the physical classroom environment but also the emotional climate, atmosphere, and ambiance we wish to effectively establish. A positive climate conducive to learning will set the tone for the way students interact among themselves and with teachers. A positive climate evokes in students’ sense of belongingness to the classroom community. Their sense of ownership and belonging will impact their level of collaboration in classroom procedures. Teachers’ positive attitude, fairness, and open communication with students will affect the classroom environment. A learning-friendly environment is an environment where children have the right to exploit to the fullest their potential within a safe and welcoming environment. It is an environment that is learner-friendly and teacher-friendly, and where learning is child-centered. In this environment, the learners are encouraged to learn actively while the teachers can teach more effectively and enjoy teaching (UNESCO, 2004). Child friendly classroom is child centered and inclusive in nature. This child friendly school provide protective safe and healthy environment for the learners. The environment for learning is a critical feature of child-friendly school. But it is also important from a child-centered perspective to consider what children bring to this environment and how this environment should cater to other aspects of a child’s well-being in order to support learning.

2. Need and Significance of the Study
Nowadays teachers face many challenges that threaten the educational system. Classroom management may be the most difficult challenge faced by the teachers during their teaching. Creating orderly, productive classroom environment is viewed as one of the essential element in the teaching learning process. Review of related literature also shows that students are attaining more academic achievement in well managed classroom environment (Griffith 2002; Wong & Watkins 1998). Teachers who use a set of classroom management strategies such as organization, teaching management, teacher-student relationship, teacher punishment-reward strategies become successful (Shower 2006). To be successful in the classroom, teachers also need to possess advanced skills for identifying students’ problems and deal judiciously with the multifaceted classroom set-up.

To be successful in the classroom, teachers also need to possess advanced skills for identifying students’ problems and deal sensibly with the endowed classroom set-up. But the prevailing Classroom Management practices of teachers are not equipped in such a way to meet all the problems occurred in the same classroom set-up. It is very important to integrate certain classroom management practices with more emphasis on classroom organization, Instructional management, Behavior Management and Evaluation.
Management. These dimensions of classroom management can translate research-based connections between teaching and learning into classroom-oriented, logical and coherent plans for actions. Each teacher is as unique as each student and orchestrates properly the diversified classroom environment. But beyond this individual uniqueness and pedagogic decisions some strands exist that pull the behavioral misappropriations among students; hence the need to develop certain new strategies for improving the achievement.

The insight gained from the literature review and from the personal experience of the investigator. Teachers are not practicing Learner Friendly Classroom Management strategies which give importance to teaching learning process and positive classroom environment.

From the above points, it can be concluded that building a future requires a package includes Learner Friendly Classroom organization designs, Learner Friendly Instructional Designs and Learner Friendly Lesson transcripts.

3. Hypothesis of the Study
H1. The Learner Friendly classroom management package is effective for enhancing achievement of students in Biology at secondary school level.

4. Objectives of the Study
1. To find out the effectiveness of learner friendly classroom management package for enhancing achievement of students in biology at secondary level

5. Methodology

Experimental method was adopted for this study. The investigator used a non-equivalent pre-test-post-test design for the experimental section. The investigator prepared a Learner Friendly classroom management Package for secondary school students. To find out the effectiveness of the package the investigator adopted Experimental method. The experimental study was conducted on the sample of 120 secondary school students, 60 students were randomly selected as the experimental group and another 60 treated as a control group. Activity oriented method of instruction is given to the control group. The experimental group exposed to Learner Friendly classroom management package in Biology. Post-test conducted to analyze the achievement of students.

6. Analysis and Interpretation of the Data

To examine the effectiveness of Learner Friendly classroom management package in the achievement of participants, the investigator compared pre-test and post-test scores of the Experimental and Control groups using ANCOVA. Before proceeding to ANCOVA, the scores were subjected to ANOVA. The data and results are given in Table 1

<table>
<thead>
<tr>
<th>Source of variation</th>
<th>Df</th>
<th>SSx</th>
<th>SSy</th>
<th>MSx</th>
<th>MSy</th>
</tr>
</thead>
<tbody>
<tr>
<td>Among groups</td>
<td>1</td>
<td>4.033</td>
<td>9520.33</td>
<td>4.033</td>
<td>952.033</td>
</tr>
<tr>
<td>Within groups</td>
<td>118</td>
<td>883.933</td>
<td>1283.133</td>
<td>7.491</td>
<td>10.874</td>
</tr>
<tr>
<td>Total</td>
<td>119</td>
<td>887.967</td>
<td>2235.167</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Fx = 0.538 F at 0.01 level = 6.84
Fy = 87.551 F at 0.05 level = 3.92

Table shows that the F-ratio for the two sets of scores was tested for significance. Since the table value of F for df 1/118 was at 0.05 level and at 0.01 level, the obtained value was not significant (Fx = 0.538). The Fy obtained (Fy = 87.551) was significant at 0.01 level. The analysis of variance of the ‘y’ means indicates that there exist significant difference between experimental group and control group.

For correcting the final ‘y’ scores for difference in the pre-test scores, the adjusted sum of squares and adjusted mean square variance for post-test scores were computed and the F ratio was calculated as shown in Table 2
Table 2: Results of Summary of Analysis of Covariance of the Pre-test and Post-test Scores from Experimental and Control Groups

<table>
<thead>
<tr>
<th>Source of Variation</th>
<th>df</th>
<th>SSx</th>
<th>SSy</th>
<th>SSxy</th>
<th>SSyx</th>
<th>MSyx</th>
<th>SDyx</th>
</tr>
</thead>
<tbody>
<tr>
<td>Among means</td>
<td>1</td>
<td>4.033</td>
<td>952.033</td>
<td>953.331</td>
<td>942.99</td>
<td>942.99</td>
<td>3.29</td>
</tr>
<tr>
<td>Within groups</td>
<td>117</td>
<td>883.933</td>
<td>1283.133</td>
<td>4882.912</td>
<td>1281.836</td>
<td>10.96</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>118</td>
<td>887.967</td>
<td>2235.167</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Fy.x = 86.04

From Table F for df 1/117

F at 0.05 level = 3.92
F at 0.01 level = 6.84

Since the obtained F ratio was higher than the Table value at 0.01 level, it was significant at 0.01 level (Fy.x = 86.04) this significant F-ratio for the adjusted post-test scores shows that the two final mean scores of the experimental and control groups differ significantly.

The adjusted means for the post-test scores of the participants in the experimental and control groups were computed using correlation and regression and the results are given in Table 3.

Table 3: Adjusted Means for the Post-test Scores of Participants in the Experimental and Control Groups

<table>
<thead>
<tr>
<th>Groups</th>
<th>N</th>
<th>Mx</th>
<th>My</th>
<th>My.x (adjusted)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Experimental Group</td>
<td>60</td>
<td>6.5</td>
<td>18.73</td>
<td>17.68</td>
</tr>
<tr>
<td>Control Group</td>
<td>60</td>
<td>6.13</td>
<td>13.10</td>
<td>13.89</td>
</tr>
<tr>
<td>General Means</td>
<td></td>
<td>6.32</td>
<td>15.81</td>
<td>15.80</td>
</tr>
</tbody>
</table>

t=9.28

t value at 0.01 level= 2.62

t value at 0.05 level= 1.66

The adjusted means for the post-test scores were tested for significance. The ‘t’ value obtained was 9.28, it was found significant (t = 9.28; p < 0.01) since it is greater than the table value at 0.01 level.

The high ‘t’ value shows that the two means differed significantly. That is, the experimental group and the control group differ significantly. As the adjusted mean score for the experimental group was higher than that of the control group, achievement of the experimental group was better than that of the control group. Thus, it can be concluded that the Learner Friendly classroom management package was more effective than the prevailing classroom management practices for enhancing achievement in biology of students at secondary level.

7. Conclusion

Through this study the investigator proved that the Learner Friendly Classroom Management Package in Biology is more effective for enhancing Achievement of students at secondary level. It hoped that the findings of the present study would improve the learning process. It also supports the curriculum designers to design new curricula, create favorable attitude towards the method of teaching which reduce the disciplinary problems of the classroom. It can be used to bring about good learning outcomes.

References:


