EFFECTIVENESS OF DRAMATIC LEARNING PACKAGE IN ENHANCING ENVIRONMENTAL AWARENESS AMONG SECONDARY SCHOOL STUDENTS

Abstract

Dramatic learning Package is a collection of drama script using various drama techniques like, creative drama, role play, mime, freeze frames etc. This is possible when education is linked to the development of environmental awareness which will help them to adapt to the changing situations in a positive way and care and protect environment. When education is related to the development of environmental awareness, it will help in developing generic skills in the learner, which are related to the social needs of the learner for the sustainable development. Drama can be used as one of the important technique for developing environmental awareness among adolescence. The result of the study proved that drama is effective for enhancing environmental awareness among secondary school students.

Keywords: Dramatic Learning Package, Environmental Awareness

Introduction

The physical environment is delicate and crucial for every human being. Environmental awareness is to understand the fragility of our environment and the importance of its protection. Environmentalism is an dogma that induces the obligation and responsibility of humans to respect, protect, and preserve the natural world from its afflictions caused by humans. UNESCO suggests that
environmental education should be part of the core curriculum from 2025. This shows the need for creating environmental awareness among school students for sustainable development.

Need and Significance of the Study

Drama, which is an elaborate art form, has the ability to transform the children into individuals of their own expression. Apart from the disciplines that give reasoning and knowledge for life; Drama gives an understanding, a warming to the social life ahead to be experienced by the children. The National Curriculum Framework (2005) has suggested that an ideal education system must prepare learners to face the challenges of their life. One of the challenges before today’s generation is sustainable development, which is possible through the protection of our environment. Dramatic learning Package is a collection of drama script using various drama techniques like, creative drama, role play, mime, freeze frames, etc. This is possible when education is linked to the development of environmental awareness which will help them to adapt to the changing situations in a positive way and care and protect the environment. Bergmann (1999) discusses that the arts can assist the learner to better understand the complexities, interrelatedness and interdependencies of environmental issues, as well as concept formation, value clarification, emotional recognition, self-positioning, embodiment, and moving from despair to positive guiding visions.

Statement of the Problem

Drama can be used as one of the important techniques for developing environmental awareness among adolescence. So the study can be entitled as “Effectiveness of Dramatic Learning Package in Enhancing Environmental Awareness among Secondary School Students”.

Definition of Key Terms

Effectiveness: According to the Dictionary of Education (2008), it means the effect of an experimental factor under controlled conditions, i.e., with other factors held constant. It is the changed result or outcome produced by an action (Good, 1973).

Operational Definition: In this study, effectiveness refers to the desired change in the learner behaviour as a result of the experimental intervention i.e., effectiveness of the DRAMATIC LEARNING PACKAGE.

Drama: Drama is a collaborative group art form, where people transform, act and reflect upon human conditions’ (Taylor, 2000).

Operational Definition: In the present study it is a composition in prose, dialogue, pantomime a story or a freeze frame involving conflict or contrast of character, especially one intended to be acted on the stage or a classroom situation.

Dramatic Learning Package: Learning Packages are systematized ways of delivering content and processes to learners (Kapfer & Kapfer, 1972). Dramatic Learning Package is a collection of Drama scripts to effect specialized learning outcome. A Dramatic Learning Package includes material to read, look at, to act out and to undertake.
Operational Definition: In the present study Dramatic Learning Package is a collection of Drama scripts to effect specialized learning outcome.

Environmental Awareness: Environmental awareness is the level of how much people are interested in or care about environmental issues.


In the present study, Secondary School Students refer to the students of Standard IX following Kerala State Syllabus.

Objective of the Study

To find out the effectiveness of Dramatic Learning Package in enhancing Environmental Awareness among secondary school students.

Hypothesis of the Study

Dramatic Learning Package is effective in enhancing Environmental Awareness among secondary school students.

Methodology

Method used for the Study

Experimental method was used in the present study. The research design used to carry out the experimental was “The Pre-test-Post-test Non- Equivalent Groups Design”. The experimental group was taught through Dramatics Learning Package and the control group was taught through the Activity oriented method in secondary schools which follow the curriculum designed by the Kerala State.

Population and Sample of the Study

The population of the study was comprised of all the IX\textsuperscript{th} standard students studying in various schools following the curriculum designed by the Board of Secondary Education, Kerala State. A sample consisting of 150 students, 75 each in experimental and control groups from a school, in Ernakulam district was selected to conduct experimental part of the study.

Variables

Following are the variables selected for the present study.

Independent Variable

In the present study Independent variables are

- Dramatic Learning Package and
- Activity Oriented Method
Dependent Variables

In the present study the dependent variables are:

- Environmental Awareness.

Tools used for the Study

Tool used for the study was Environmental awareness test developed by the researchers. Tool consist of 30 statements related to various components of environmental awareness. Maximum Score for the test was 30.

1.9.7 Statistical Techniques used in the Study

The collected data was analyzed by using the following statistical techniques.

- Test of Significance of Difference between the Means
- Gain Score
- ANCOVA (Analysis of Co Variance)

Analysis and Interpretation of the Study

In order to establish this hypothesis researcher have done following analysis.

Comparison of pre-test scores of Environmental Awareness Test for using test of significance of difference between Means

The pre-test scores of Environmental Awareness Test of experimental and control group was compared using t-test. The result of the analysis is summarized in Table 1.

Table 1

<table>
<thead>
<tr>
<th>Group</th>
<th>Mean</th>
<th>Standard Deviation</th>
<th>t-value</th>
<th>Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Experimental</td>
<td>12.35</td>
<td>1.43</td>
<td>1.37</td>
<td>Not significant at p &gt; 0.05.</td>
</tr>
<tr>
<td>Control</td>
<td>11.98</td>
<td>1.13</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

From the above table it can be seen that the mean of experimental group is 12.35 and that of control group is 11.98. The standard deviation of the experimental group is 1.43 and that of control group is 1.13. The standard deviation shows that the spread of scores of pre-test was more or less same in the experimental and control group. The result of test of significance of difference between means of pre-test scores of Environmental Awareness Test of experimental and control group revealed that the experimental and control group do not differ significantly in their Environmental Awareness Test. The obtained t-value 1.37 is less than the table value of 1.96, p = 0.05 levels. The students in experimental
and control group have same level of Environmental Awareness Test before experiment and the two groups were homogeneous with respect to the Environmental Awareness.

**Comparison of Pre-Test Post-Test Score of Environmental Awareness Test using Test of Significance of difference between Means**

The pre-test post-test scores of Environmental Awareness Test of experimental and control group were compared using test of significance of difference between means. Table 2 displays the results of the analysis.

Table 2

**Results of Test of significance of difference between means of Pre –Test Post-Test Scores of Environmental Awareness Test of Experimental and Control Group**

<table>
<thead>
<tr>
<th>Group</th>
<th>Test Score</th>
<th>Mean</th>
<th>SD</th>
<th>t-Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Experimental</td>
<td>Pre-test</td>
<td>12.35</td>
<td>1.43</td>
<td>20.49</td>
</tr>
<tr>
<td></td>
<td>Post-test</td>
<td>22.02</td>
<td>2.86</td>
<td></td>
</tr>
<tr>
<td>Control</td>
<td>Pre-test</td>
<td>11.98</td>
<td>1.13</td>
<td>7.98</td>
</tr>
<tr>
<td></td>
<td>Post-test</td>
<td>14.11</td>
<td>1.42</td>
<td></td>
</tr>
</tbody>
</table>

**Significant at 0.01 level of significance**

Table 2 shows that, for the experimental group mean value of post-test, 22.02 and standard deviation 2.86 are higher than the mean value 12.35 and standard deviation 1.13 of the pre-test scores. The calculated t-value of pre-test post-test scores of Environmental Awareness Test 20.49 is higher than the table value 2.58 at 0.01 levels. This shows that there exist significance of differences between the means of pre-test post-test scores of the pupil in the experimental group. Therefore it can clearly prove that the experimental treatment, Dramatic Learning Package is effective on enhancing Environmental Awareness among secondary school students.
Comparison of post-test scores of Environmental Awareness Test using test of significance of difference

The post test scores of Environmental Awareness Test of experimental and control group were compared using t- test. Table 3 displays the results of the analysis.

Table 3

Test of significance of difference between means of Post-Test scores of Environmental Awareness Test of Experimental and Control Group

<table>
<thead>
<tr>
<th>Group</th>
<th>N</th>
<th>df</th>
<th>Mean</th>
<th>Standard Deviation</th>
<th>SEM</th>
<th>t-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Experimental</td>
<td>46</td>
<td>45</td>
<td>22.02</td>
<td>2.86</td>
<td>0.42</td>
<td>16.17**</td>
</tr>
<tr>
<td>Control</td>
<td>46</td>
<td>45</td>
<td>14.11</td>
<td>1.42</td>
<td>0.21</td>
<td></td>
</tr>
</tbody>
</table>

**Significant at 0.01 level of significance

From the above table it can be seen that the mean score for post-test in Environmental Awareness of experimental group was 22.02 and that of control group was 14.11. The mean score of post-test of experimental group is higher than that of control group. The result of test of significance of difference between means of post-test scores of Environmental Awareness Test of experimental and control group revealed that the experimental and control group differ significantly in their Environmental Awareness. The obtained t-value 16.17 is greater than the table value 2.58, p = 0.01 levels. The students in experimental and control group differ significantly in level of Environmental Awareness after experiment.

4.4.4 Comparison of Gain Scores of Environmental Awareness Test for the Total Sample

The gain scores of both experimental and control groups based on the awareness test were found were compared by testing the significance of difference between means of the gain scores of the two groups by finding its t-value. This is shown in Table 4.

Table 4

Results of the Test of Significance of Difference between the Means of Gain Scores on Environmental Awareness Test

<table>
<thead>
<tr>
<th>Variables</th>
<th>Groups</th>
<th>N</th>
<th>Mean</th>
<th>SD</th>
<th>t</th>
<th>Sig</th>
</tr>
</thead>
<tbody>
<tr>
<td>Environmental</td>
<td>Experimental</td>
<td>46</td>
<td>9.67</td>
<td>2.26</td>
<td>19.57</td>
<td>.00</td>
</tr>
<tr>
<td></td>
<td>Control</td>
<td>46</td>
<td>2.13</td>
<td>1.31</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Significant at 0.01 level of significance
From table 4 it is clear that the mean gain scores of the experimental group (9.67) is more than that of control group (2.13). The obtained t-value for gain scores of experimental and control group is 19.57 which is higher than the table value at 0.01 levels. Hence calculated t-value is significant at 0.01 levels.

From the analysis it is clear that the students exposed to Dramatic Learning Package achieved significantly higher on Environmental Awareness Test when compared with students exposed to Activity Oriented Method. The graphical representation of the comparison of gain scores of Experimental and Control groups with respect to Environmental Awareness Test is given in Figure 1.

![Fig. 1 Graphical representation of the comparison of gain scores of Experimental and Control groups with respect to Environmental Awareness Test](image)

**Analysis of the Test of Effectiveness of Dramatic Learning Package on Environmental Awareness Test by Using ANCOVA**

The details of the analysis of the effectiveness of Dramatic Learning Package on enhancing Environmental Awareness Test among Secondary School Students by considering pre-test scores of achievement as covariates using ANCOVA is given in the Table 5.
Table 5

Summary of ANCOVA of the Pre-test and Post-test Scores on Environmental Awareness Test of Secondary School Students

<table>
<thead>
<tr>
<th>Source</th>
<th>Type III Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intercept</td>
<td>33.519</td>
<td>1</td>
<td>33.519</td>
<td>9.70</td>
<td>.002</td>
</tr>
<tr>
<td>Pretest Scores of Environmental Awareness Test</td>
<td>152.12</td>
<td>1</td>
<td>152.12</td>
<td>44.05</td>
<td>.000</td>
</tr>
<tr>
<td>Between experimental and control group</td>
<td>1280.71</td>
<td>1</td>
<td>1280.71</td>
<td>370.90**</td>
<td>.000</td>
</tr>
<tr>
<td>Within group</td>
<td>307.31</td>
<td>149</td>
<td>3.45</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Corrected Total</td>
<td>1899.61</td>
<td>149</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

** Significant at 0.01 level of significance

The table 5 indicates the result of summary of ANCOVA of the pre-test and post test scores on Environmental Awareness Test of Secondary School Students. The sum of squares between group variance was 1280.711 and within group variance were 307.31 for the degrees of freedom 1 and 149. The mean square value between groups was 152.12 and 3.45 for within group. The F (1, 149) =370.90, p < 0.01 was significant at 0.01 level. Hence it can be interpret that the Dramatic Learning Package in is effective on Environmental Awareness among Secondary School Students.

Adjusted means of post-test scores of Environmental Awareness Test of the experimental and control group and t-value were also analysed and was represented in Table 6.

Table 4.6

Comparison of Adjusted Means of Environmental Awareness Test of Experimental and Control groups

<table>
<thead>
<tr>
<th>Group</th>
<th>Mean</th>
<th>SD</th>
<th>Adjusted Mean</th>
<th>t-value</th>
<th>Sig.</th>
<th>Confidence interval for difference</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Lower bound</td>
</tr>
<tr>
<td>Experimental</td>
<td>22.02</td>
<td>2.86</td>
<td>21.84</td>
<td>19.33</td>
<td>.000</td>
<td>21.29</td>
</tr>
<tr>
<td>Control</td>
<td>14.11</td>
<td>1.42</td>
<td>14.29</td>
<td></td>
<td></td>
<td>13.75</td>
</tr>
</tbody>
</table>
Table 6 shows the adjusted means of post-tests score of Environmental Awareness Test. The adjusted means of post-tests score of Environmental Awareness Test for the experimental group is 21.84 and for the control group is 14.29. The obtained t-value of the adjusted means 19.33 is significant at 0.01 levels. This shows that there is a significant difference in the adjusted mean score of posttest of Environmental Awareness in the experimental and control group.

Therefore the investigator concluded that the Dramatic Learning Package was effective for enhancing Environmental Awareness when compared with Activity Oriented Method.

Findings of the Study

From the analysis it can inferred that Learning Package was effective for enhancing Environmental Awareness among secondary school students.

Conclusion

The present study utilised various Drama techniques and strategies that can be utilised by any teacher in the classroom for content transaction. These Drama techniques found to be effective for enhancing environmental awareness among secondary school students. The experimental treatment proved the effectiveness of Dramatic Learning Package in Social Science for enhancing environmental awareness among Secondary School Students. When implemented systematically in real classroom set-ups, it can enhance students’ environmental awareness and aptitude. Drama methods and techniques used in this package can be utilised for other subjects also. Drama can incorporate in any subject for enhancing environmental awareness; the classroom can turned into a joyful place of learning. Students become more participative, interactive and creative. It is observed that students have started developing healthy relation between environment and individual as well as they were able to control their emotions and stress.

Bibliography


