Difference of Pretest and Post Test in Philippine History of CAS Freshmen Students

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Abstract—This research centers on the difference of pretest and post test in Philippine history of CAS freshmen students. Specifically, it determines the appropriate instructional materials suited to the student’s level to maximize learning have to be provided. The study utilized the descriptive method of research. Pretest and Post test were made and it was found out that film viewing in teaching History of the respondents were assessed effective and that the overall mean scores of the students in the pretest and posttest had increased. Results of the study show that the null hypothesis that there is no significant difference between the mean scores of the respondent was rejected.

I. INTRODUCTION

In this age of science and technology, countless sources of information can be utilized to enrich classroom instruction. Nonetheless, substitutes for textbook have yet to be offered as a major frame of reference in any discipline. Hence, the use of textbook still proves to be a necessity in teaching. What is deplorable, however, is the sole dependence on one textbook still proves in the teaching of the subject. By far no single textbook can adequately cover an updated subject to be taught and to be learned. Besides, textbook teaching which is basically characterized as verbatim reproduction of what is contained in the book can be boring to a bright student who, even without the assistance of the teacher can study his lessons by himself. On the other hand, a dull student finds a lesson that is purely based in the textbook without meaning, for he sees no relation of what he learns to his actual life experiences.

Printed materials other than books, like newspapers, magazines, brochures, bulletins, journals, monthly and annual reports have much to offer for meaningful learning. There are instructional materials, too, that have yet to be written. They only await the initiative and resourcefulness of an enterprising teacher who can tap them for classroom use. Utilizing the community resources in teaching is recommendable. In general, it is in the local community where the students were born and have grown age and experience without realizing the priceless contributions of the resources, people, and institutions around them which directly affect their lives. Bring the community to the schools and vice-versa. Let the students appreciate what their community has and devise ways and means of making up or substituting for what it lacks.

As a subject, Philippine History is faced with the task of understanding the causes and consequences of human behavior, the problems of group relationships and man’s use and misuse of his natural environment. But the appreciation of all these things will depend on the understanding of man about his relationships not only with himself but also with his immediate environs. The school then has an enormous responsibility toward this end thru quality education, particularly in the field of teaching Philippine History. Quality education is measured in terms of what the students learn. Quality learning can take place only if who quality instruction is provided. The ultimate result is translated in terms of grades the students obtained.

II. LITERATURE REVIEW

According to Ausubel’s Theory on Meaningful Reception Learning, information can be made more meaningful by using various techniques so that it can be better understood. Also, Presidential Decree No. 6-4 Section 5, paragraph 1 provides for designing, utilization, and improvement of textbooks and other instructional materials.

Schools are seen as the great equalizer in the technological enabled society. Until every name is wired, the school can provide access to the benefits associated with the evolving electronic age. The connection of schools to the ubiquitous networks enables retrieval of an exponential body of resources with virtual libraries. Moreover, all types of curricular are available, both in subject matter as well as educational medium. Similarly, the use of network discovery tools serve to equalize the exposure of students to a wide range of resources and extents that many would otherwise be able to experience, such as virtual museums that can be assessed through multimedia systems. The advantages for teacher and for the curriculum development are realized through the ability to access information resources from classroom and communicate with other educators throughout the nation and the world via the internet (Wayne, 2003).

Singh (2004) said that many times teacher uses complicated and expensive material aid in the classes which arouse interest in the students but if not able to maintain it longer less than is better to ask students to prepare easy and small models based on the subject. He further stressed that methods are the way or mode to understand practice the art. So, it is essential that every teacher should be acquainted with different methods of teaching mathematics. Suneetha (2005) stated, a teacher should present the subject matter skillfully making interaction with the students, introducing well methods and applying various aids. Every problem should be introduced to the students logically and in a systematic manner. He should first judge value of the students then he should apply different methods to make his teaching more effective and comprehensive. According to Sharma (2004),
teachers must set a stage for such education. If they are to influence young people, they must be persons not only of superior character themselves but intelligent, gifted, capable and creative.

The Department of Education (DepEd) launched several programs and projects, series of seminars and trainings for teachers with its ultimate goal, improving quality of education in the Philippines. The Department of Education focused its objectives, mission, and vision in improving three tool subjects namely: English, Science and Mathematics. A series of national achievement and assessment examinations results revealed poor performance of graduates both elementary and secondary levels. Both public and private schools continuously upgrade their facilities to cope with fast changing track of technology in order to prepare young people globally competitive. Indeed, a lot of interventions have been undertaken to solve problem of poor performance in basic education. Such interventions include integration of computers in delivering and presenting lessons. While the Commission on Higher Education likewise proceeded to form the Technical Panel for Information Technology Education (TPITE) and tasked this body to address need for relevant curricula that would cope with pressing requirements of business and industry and globally competitive world.

In the Philippines, the use of computers as a tool in teaching is still in its maiden stage. The most common practice is computer-aided instruction or CAI. Several studies have been conducted to determine the effectiveness of CAI being used in different subject areas. A study conducted by Computer Science students of STI College Cubao (2003) on the effectiveness of CAI in Science for Grade III Pupils of Stella Maris College showed that there is an improvement in achievement test results of pupils who were taught with the aid of computer. Another study conducted by Balando (2009) on the development of instructional materials in teaching Business Mathematics yielded the following findings: performance level of students in Business Mathematics in fraction and percentage during school year 2007 – 2008 was low; the developed interactive instructional materials with the qualities that will develop and enhance interests, challenge analytical and logical thinking and help one to become better problem solvers; the interactive instructional materials are acceptable to the faculty respondents; the students who subjected to interactive instructional material were performed poorly in their pretest but performed satisfactorily in their posttest; and there is significant difference in the result of the pretest and posttest of the students subjected to interactive instructional material.

The researchers concluded that the review of related literature and studies revealed more about the use and importance of multimedia in education. He believes that education and training are under pressure to provide instruction, to maintain competitiveness in the industrial world and prepare students for emerging information society. There are factors that must be preserved for successful innovators; at first, knowledge and application technology, secondly, supporting infrastructures, and then lastly, empowering workers through professional development. Most likely as to reveals much more on the changes that technology provides to people, and then understanding the importance of multimedia programs in education, most especially in History.

III. METHODOLOGY

3.1 Method

The study utilized the descriptive method of research. It established the development of a set of interactive multimedia devices teaching Philippine History materials for students. As stated by John Best (Pineda cited, 2002) descriptive method of research is the description, recording analysis, and interpretations of the present nature, composition or process of phenomena.

3.2 Respondents of the Study

The 234 freshmen of College of Arts & Sciences are the primary sources from which the researchers sought useful information to achieve their objectives in the study.

3.3 Instrument

This syllabus provided the list of topics to be studied in the subject of Philippine History for one semester. This is a teacher-made test consisting of twenty (20) items taken from the Philippine History topic. The test was utilized and administered to two hundred thirty four (234) students in the pretest and posttest. The questionnaire used in this study was patterned after the questionnaire used by Salazar, 2009 and Francisco, 2009. This is a 5 - item questionnaire with sets of criteria per item. It was used to assess the difference of pretest and post test in Philippine History.

3.4 Research Procedure

The researcher prepared the film as device in teaching Philippine History. Then the researcher administered the pretest to the freshmen students. After using the film viewing, posttest was administered to the freshmen students. A letter of permission to the Office of the Dean was also done to use the Reading Center for viewing purposes. Another letter of permission to the Office of the Dean was also done to use the Reading Center for viewing purposes. Another letter of permission was granted, the researcher personally distributed and administered the instrument to the respondents. Informal interviews were conducted with the instructor – respondents regarding the veracity of their responses to the questionnaire. The researchers collected the instruments immediately after they have accomplished them to ensure a hundred percent retrieval. The data gathered from the questionnaire were tallied, tabulated, analyzed, and interpreted.

3.5 Data Analysis

The data and information were classified, tallied and tabulated. The tabulated data constituted were analyzed and interpreted using the following statistical tools. Frequency count was used to the actual response to a specific item / question in the questionnaire where the respondents tick choices. Weighted mean were utilized to get the average frequency of the response in each weighted item while the Mean Performance Score was used to determine the performance level of the students in the pretest and posttest. Also, the Likert Scale was used to determine the level of effectiveness of film viewing as teaching strategy. Furthermore, the t-test for independent samples was used to determine whether there is probably a significant sample.
IV. RESULTS AND DISCUSSIONS

4.1 Effectiveness of Film Viewing

TABLE 1
Effectiveness of Film Viewing in Teaching History

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Weighted Mean</th>
<th>Verbal Interpretation</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. The film serves as instrument in developing concepts and skills</td>
<td>3.13</td>
<td>Moderately Effective</td>
</tr>
<tr>
<td>2. The film gives an idea to students on what the particular lesson in all about</td>
<td>4.13</td>
<td>Effective</td>
</tr>
<tr>
<td>3. The film realizes the important of history as a subject.</td>
<td>3.71</td>
<td>Effective</td>
</tr>
<tr>
<td>4. The film serves as bridge of discovering knowledge.</td>
<td>4.31</td>
<td>Very Effective</td>
</tr>
<tr>
<td>5. The film explains the values of nationalism and patriotism of our heroes</td>
<td>4.46</td>
<td>Very effective</td>
</tr>
<tr>
<td>6. The film enhances participation of the students.</td>
<td>4.58</td>
<td>Very Effective</td>
</tr>
<tr>
<td>7. OVERALL MEAN</td>
<td>4.05</td>
<td>Effective</td>
</tr>
</tbody>
</table>

Legend:

<table>
<thead>
<tr>
<th>SCALE</th>
<th>EQUIVALENT</th>
<th>VERBAL DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td>4.20 – 5.00</td>
<td>Very Effective</td>
</tr>
<tr>
<td>4</td>
<td>3.40 – 4.19</td>
<td>Effective</td>
</tr>
<tr>
<td>3</td>
<td>2.60 – 3.39</td>
<td>Moderately Effective</td>
</tr>
<tr>
<td>2</td>
<td>1.80 – 2.59</td>
<td>Some Inadequately Effective</td>
</tr>
<tr>
<td>1</td>
<td>1.00 – 1.79</td>
<td>Not Effective</td>
</tr>
</tbody>
</table>

As reflected in Table 1, the respondents assessment in the effectiveness of film viewing in teaching Philippine History. The respondents assessed the effectiveness of film viewing in teaching Philippine History with a verbal interpretation of “Very Effective”; Film explain the values of nationalism and patriotism of our heroes. The students (WM=4.58), and film serves as bridge of discovering knowledge (WM=4.46).

4.2 Performance Level of the Students

TABLE 2
Performance Level of the Students in the Pretest and Posttest

<table>
<thead>
<tr>
<th>COURSES (234)</th>
<th>PRETEST</th>
<th>POSTTEST</th>
<th>Mean</th>
<th>MPS</th>
<th>Mean</th>
<th>MPS</th>
<th>Mean Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Political Science (69)</td>
<td>11</td>
<td>77.50</td>
<td>18</td>
<td>95.00</td>
<td>7</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bio (26)</td>
<td>9</td>
<td>72.50</td>
<td>16</td>
<td>90.00</td>
<td>7</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Stat (38)</td>
<td>12</td>
<td>80.00</td>
<td>16</td>
<td>90.00</td>
<td>4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Psychology (101)</td>
<td>11</td>
<td>77.50</td>
<td>17</td>
<td>92.50</td>
<td>6</td>
<td></td>
<td></td>
</tr>
<tr>
<td>OVERALL MEAN</td>
<td>10.75</td>
<td>76.88</td>
<td>16.75</td>
<td>91.88</td>
<td>6</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Legend: MPS: Mean Performance Score

Table 2 present the performance of the students in the pretest and posttest after the use of film viewing in Philippine History History. Looking at the results of the pretest and posttest subjected to use the film viewing strategy in Philippine History, It is noted that the mean scores in the pretest to posttest of the students had increased are: Political Science (11 to 18); Biology (9 to 16); Statistics (12 to 16); and Psychology (11 to 17), with a performance level of 77.50 to 95.00 for Political Science students, 72.50 to 90 for Biology, 80 to 90 for Statistics students and 77.50 to 92.50 for Psychology students.

4.3 Mean and Verbal Interpretation of the Students

TABLE 3
Mean and Verbal Interpretation of the Students in the Pretest and Posttest Mean Scores

<table>
<thead>
<tr>
<th>Courses</th>
<th>Pretest</th>
<th>Posttest</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean</td>
<td>Verbal Interpretation</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Political Science</td>
<td>11</td>
<td>Moderately Performed</td>
</tr>
<tr>
<td>Bio</td>
<td>9</td>
<td>Moderately Performed</td>
</tr>
<tr>
<td>Stat</td>
<td>12</td>
<td>Moderately Performed</td>
</tr>
<tr>
<td>Psychology</td>
<td>11</td>
<td>Moderately Performed</td>
</tr>
<tr>
<td>OVERALL Mean</td>
<td>10.75</td>
<td>Moderately Performed</td>
</tr>
</tbody>
</table>

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As shown in the table the overall mean scores in the pretest is 10.75 with a verbal interpretation of moderately performed and increased in the posttest of 16.75 mean scores with a verbal interpretation of performed.

4.4 Significant Difference Between the Pretest and Posttest

<table>
<thead>
<tr>
<th>Students</th>
<th>PRETEST T</th>
<th>POSTTEST T</th>
<th>Comput ed T-value</th>
<th>Interpretati on</th>
<th>Decision</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>W  M  S  D</td>
<td>W  M  SD</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>234</td>
<td>10.  75  0  9</td>
<td>16.  75 0 3</td>
<td>66.99</td>
<td>Very Significant At 0.05</td>
<td>Reject Ho</td>
</tr>
</tbody>
</table>

Table 4 presents the significant difference in the pretest and posttest of students. The result show that the computed T-value of 66.99 with the degrees of freedom of 233 critical value of 1.645 at 0.05 level of significance which means there is significant difference between the pretest and posttest mean scores of the student. The null hypothesis was rejected. This indicates that the film viewing as teaching strategy in Philippine History had helped improve the performance of the students.

V. CONCLUSION

This research concludes that if film viewing used as teaching strategy - it could develop an interest and enhance the analytical thinking that could help students develop an interest in Philippine History. This research proves that those students who undergone film viewing has performed effectively in their posttest.

There is a significant difference in the results of the pretest and posttest of the students who undergone film viewing as teaching strategy in Philippines History.

VI. RECOMMENDATIONS

Film viewing as teaching strategy must be used for college level. It should also be adopted as teaching strategy in all courses because it can enrich activities to students for further skills development. The school administration should support the faculty in their exerted efforts in enhancing their teaching skills and strategies. The results of this study can be published and disseminated to all concerned for information purpose and continuous validation of the learning materials that can be conducted to determine its usefulness in instruction.

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