"An Analysis on the Use of Document-Based Approach as an Effective Tool in Teaching and Learning Social Studies"

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Abstract
Document-based approach is characterized by the use of primary or secondary documents that includes an overarching investigative question that the student must answer through analysis of the documents included. The paper is an experimental study that aims to venture out a new way of teaching Social Studies by using a document-based approach to find out the effectiveness of this strategy for both students and teachers. Two outcomes were tested: student’s learning and effective teaching strategy. In obtaining the data, the researcher used One-Group Pre-Test-Post-Test-Design under pre-experimental design. One class of Grade 12 HUMSS students in STI College Novaliches were purposely selected for this research. The study was implemented over a three-day instructional period during a 60-minute block of Social Studies instruction. Two different instruments were designed to test the hypothesis and measure the effectivity of document-based approach for both students and teachers. For the students, the data were analyzed using their scores from a self-designed test under document-based approach. For the teachers, a self-designed Likert Scale was designed to evaluate the effectiveness and acceptability rate of document-based education in Senior High School students. The results of the study showed a significant difference in teaching and learning Social Studies. Thus, the use of document-based approach will be of great help to teachers and students for teaching and learning. This research will contribute in making Social Studies practical and memorable for all students.
I. Introduction

Social Studies is defined by the National Council for Social Studies as “the integrated study of the social sciences and humanities to promote civic competence”. It is included in the Basic Education Curriculum and Commission on Higher Education and being taught in schools as early as elementary, high school, up to the tertiary level. Typically, with the introduction of the new K+12 curriculum, an elementary student begins with the most basic elements of geography, civics, and Philippine history, and gradually progressing to Asian History, World History, Economics, and Contemporary Issues in Philippine History in the middle school. An even more in-depth discussion in the tertiary level includes the study of Philippine Constitution and Governance, the life and works of Rizal, and Advance Economics.

All of the topics mentioned should be geared towards the development of holistically developed citizens who is aware and knowledgeable of social issues and concerns in the local and global level. Teachers have a very big role in achieving this standard and competency expected to a student. Unfortunately, because of the highly objective and comprehensive nature of the subject, most of the students find it boring and disinteresting. Most of the teachers struggle to find out ways to make the subject lively and interesting to students. Traditionally, it is taught by using a lecture-based approach and requires the students to memorize facts and concepts. At present, because of the unlimited access of information due to the emerging technology, most of the students found the traditional approach irrelevant since they can just search whatever they want in the internet with just one click.

In this experimental study, the researcher aims to venture out a new way of teaching social studies by using a document-based approach to find out the effectiveness of this strategy for both students and teachers. Document-based approach is characterized by the use of primary resources and/or secondary documents that includes an overarching investigative question that the student must answer through analysis of the documents included.

In conducting this research, the researcher primarily sought to answer if document-based education would be an effective approach in teaching Social Studies. The primary question in this research was:

- Was the use of document-based approach have a significant effect to teaching and learning among Grade 12 HUMSS student at STI College Novaliches?

The specific questions addressed by the researcher were the following:

- Was there a significant effect on the retention of the learners in Social Studies when they were taught using document-based approach?
- Would the use of document-based approach be an effective tool in teaching Social Studies?

Based on these questions, the following hypotheses were tested using the variables below:

- **INDEPENDENT VARIABLE:** Use of Document-based Approach
- **DEPENDENT VARIABLE:**
1) Student’s Learning
2) Effective Teaching Strategy

**Ho:** The use of Document-based Approach has no significant effect in teaching and learning Social Studies.

**Ha:** The use of Document-based Approach has a significant effect in teaching and learning Social Studies.

The researcher attempted to show that the use of document-based approach have a significant effect in teaching and learning Social Studies. With this in line, the researcher made the following assumptions before the implementation of the study:
1. The learners in this study were academically capable of answering the questions truthfully.
2. The learners have prior knowledge to the subject since they are all Grade 12 students and already took the subject when they were in Junior High School.
3. The teachers who evaluated the experiment were capable of assessing the teacher’s performance, as they were all practitioners in the field of education.
4. All the materials used by the researcher were valid instruments.

The researcher delimited the study to the following criteria:
1) Students who were in any of the following days: pre-test, intervention/experiment, and/or post-test;
2) Students who dropped out of classes (non-attending) during the semester;
3) Students who transferred out to another school during the time when the experiment was conducted;
4) Students who were excused due to school activities.

**II. Methodologies**

The researcher utilized *One-Group Pre-Test-Post-Test-Design* under pre-experimental Design. According to Ariola (2006), Pre-Test-Post-test-Design, also called as one-group design, has “no control group or control variable. A pre-test is conducted before the treatment or intervention is introduced ($\theta^1$). After some time, a test is again repeated ($\theta^2$). Then the results of the pre-test (before survey) and the post-test (after survey) are compared to determine the change.” The experiment were utilized based on the illustration below:
The study was implemented over a three-day instructional period during a 60-minute block of Social Studies instruction. The series of experiments were conducted as follows:

- First day (October 10): Pre-testing
- Second day (October 12): Lecture proper / Intervention
- Third day (October 13): Post-testing

The research sample were selected using the Purposive Sampling. It is a type of non-probability sampling that is selected based on the characteristics of a population and the objective of the study. For this study, one class of Grade 12 HUMSS students were selected since they were specializing in the field of Social Sciences. There are 2 sections of Grade 12 HUMSS in STI College Novaliches – one in the morning and one in the afternoon. The researchers selected HUMSS201 due to the availability of the schedule and convenient time for the teachers. As mentioned in the previous part, the study delimited the participants to those students who were present during the pretest, intervention, and posttest. Out of 30 students in the class, 15 students were qualified as participants of the study (see Appendix D).

Two different instruments were designed to test the hypothesis and measure the effectivity of document-based education for both students and teachers. For the students, one class were instructed using the document-based education. The group were given the same coverage of achievement test during pre-test and and jumbled the items in the post-test to measure student’s learning (see Appendix B and C). Criteria for the test included the basic knowledge, comprehension of the content, and analysis of the content learned. The tests covered the topic that was discussed during the intervention. All those students who were present during the pretest and posttest took and completed the test, but the researcher only picked the test scores of those students included in the sample (see Appendix E for raw scores from pretest and posttest).

In order to test the second hypothesis pertaining to the teachers, a self-designed Likert scale was designed to evaluate the effectiveness and acceptability rate of document-based education in Senior High School Students (see Appendix F). The survey was designed for the teachers to evaluate the approach that was used if it was executed successfully and also to check the engagement of the student. The survey was administered on the actual time and date of the intervention.

The unit plan covered the factors of the Fall of Rome in different aspects. The lesson plan that was prepared followed the basic instructions provided in the teacher’s guide (see Appendix A). To control for teacher bias in scoring the results, a rubric was provided in the questionnaire. Moreover, the teacher also prepared an answer key on all evaluation material.

**III. Results**

The data in this part were analyzed, interpreted, and presented in a tabular and textual form.

In order to test the hypothesis, the following statistical treatment were used:
1) **Weighted Mean**: Each item being averaged is multiplied by a number (weight) based on the item's relative importance. The result is summed and the total is divided by the sum of the weights.

\[
\bar{x}_w = \frac{\sum w_i x_i}{\sum w_i}
\]

The researcher utilized this to measure the acceptability rate of document-based approach in teaching Social Studies. A set of self-designed questionnaire was used for the teachers to evaluate the effectiveness of this approach.

2) **Two-tailed t-test**: A two-tailed t-test divides a in half, placing half in the each tail. The null hypothesis in this case is a particular value, and there are two alternative hypotheses, one positive and one negative. The critical value of t, \( t_{\text{crit}} \), is written with both a plus and minus sign (±).

\[
t = \frac{\left( \bar{x}_1 - \bar{x}_2 \right) - (\mu_1 - \mu_2)}{\sqrt{\frac{s_1^2}{n_1} + \frac{s_2^2}{n_2}}}
\]

The t-test was utilized to determine whether there is a significant difference between the means of both pretest and posttest.

<table>
<thead>
<tr>
<th>Table 1.1 Profile of Students in Terms of Sex</th>
<th>Table 1.2 Profile of Teachers in Terms of Sex</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Sex</strong></td>
<td><strong>Frequency</strong></td>
</tr>
<tr>
<td>MALE</td>
<td>4</td>
</tr>
<tr>
<td>FEMALE</td>
<td>11</td>
</tr>
<tr>
<td>TOTAL</td>
<td>15</td>
</tr>
</tbody>
</table>

**Table 1. Profile of the Respondents in terms of Sex**

**On Sex.** The study presents a total of 15 students from HUMSS 101 as the experimental group and 10 teachers who will evaluate the demonstration. The profile of the students in Table 1.1 shows that most of the respondents are female with a percentage of 73% while the remaining are male with a total percentage of 27%. In table 2.2, most of the teachers who evaluated the study are female with a percentage of 60% and male with 40%.

**Table 2. Acceptability Rate of Document-based Education as an Approach in Teaching Social Studies**
<table>
<thead>
<tr>
<th>CRITERIA</th>
<th>5 Highly Observed</th>
<th>4 Moderately Observed</th>
<th>3 Observed</th>
<th>2 Rarely Observed</th>
<th>1 Not observed</th>
<th>Weighted Mean</th>
<th>Verbal Interpretation</th>
</tr>
</thead>
<tbody>
<tr>
<td>The instructor effectively presented information, concepts, and ideas of the field.</td>
<td>100%</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
<td>5.00</td>
<td>Highly observed</td>
</tr>
<tr>
<td>The students were actively engaged and participative during the entire period because of the approach that was used by the instructor.</td>
<td>70%</td>
<td>30%</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
<td>4.70</td>
<td>Highly observed</td>
</tr>
<tr>
<td>The documents provided by the instructor really helped the learners to understand the lesson.</td>
<td>90%</td>
<td>10%</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
<td>4.90</td>
<td>Highly observed</td>
</tr>
<tr>
<td>The students were able to answer the questions asked by their teacher using the documents provided to</td>
<td>90%</td>
<td>10%</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
<td>4.90</td>
<td>Highly observed</td>
</tr>
</tbody>
</table>
The following criteria were evaluated with the highest descriptive rating “Highly Observed” with the mean score of (x = 5.00):

- The instructor effectively presented information, concepts, and ideas of the field.
- The teacher was able to connect the answers of the students coming from the documents to discuss the lessons.
- The use of document-based education were used in the class effectively.

The criteria “The documents provided by the instructor really helped the learners to understand the lesson” and “The students were able to answer the questions asked by their teacher using the documents provided to them” were both evaluated with the mean score (x = 4.90), that equivalent to “Highly Observed” rating.

The lowest criteria in the table was the criteria “The students were actively engaged and participative during the entire period because of the approach that was used by the instructor” evaluated with the mean score (x = 4.70), still equivalent to “Highly Observed” rating.
**Average Weighted Mean.** Therefore, with the overall mean score of $\bar{x} = 4.88$ equivalent to a “Highly Observed” descriptive rating, the researcher concludes that the use of document-based approach is highly acceptable in teaching Social Studies.

**Table 3. Comparison of Pretest and Posttest Scores of the Sample Respondents**

<table>
<thead>
<tr>
<th>Test</th>
<th>Number</th>
<th>Mean</th>
<th>Standard Deviation</th>
<th>Computed $t$ Value</th>
<th>Tabular $t$ Value</th>
<th>Decision</th>
<th>Verbal Interpretation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pretest</td>
<td>15</td>
<td>5.6</td>
<td>0.84</td>
<td>6.68</td>
<td>2.145</td>
<td>Reject Ho</td>
<td>Significant</td>
</tr>
<tr>
<td>Posttest</td>
<td>15</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**On Two-tailed t-test.** With 14 degrees of freedom, it can be seen from Table 3 that the computed $t$ value of 6.68 is significant beyond the 0.05 level. Thus, the null hypothesis of pretest and posttest mean equivalence is rejected and infers that the use of document-based approach was effective on the performance of 15 students.

**IV. Discussion**

The results of the study indicated that there is a significant difference in teaching and learning Social Studies using the document-based approach. The results of pretest and posttest significantly increase with a $t$ value of 6.68, which shows that the document-based approach was effective in the performance of the students. Moreover, through the evaluation of teachers, it was shown that the use of document-based approach was highly acceptable with an average weighted mean of $\bar{x} = 4.88$ equivalent to a “Highly Observed” descriptive rating. Thus, the researcher accepts the alternative hypothesis (Ha) and rejects the null hypothesis (Ho).

The results justify the effectiveness of the document-based instructional strategy in teaching Social Studies. Astorian (2016) emphasizes that there is an evident need in using document analysis in the teaching of Social Studies since this will lead to the usage of primary sources that will make students improve their social studies-related skills. Clabough (2012) added that social studies teachers should come up with substantial and useful materials that will expose them and their students to the value of using primary sources as documents for studying history. Hence, multifarious suggestions on the practice of document-based teaching are provided. This practice has even extended to different media such as the new media. In the United States for example, there is a blog called The DBQ (Document-based Question) Project which is used to provide materials for teacher to guide students in learning history more effectively through examining documents. As this project uses document-based teaching strategy, it gives more “authentic assessment” since students are exposed to various sources which they are required to explain comprehensively, evaluate, relate to their prior knowledge and experiences, and come up with outputs that are completely based on critical analysis (DBQ Project, 2018).
This research concludes that the document-based strategy is an effective approach in teaching and learning Social Studies. The researcher believes that the use of this strategy is great of help in making Social Studies practical and memorable for all the students. However, the research is not extensive enough to represent the overall instruction of Social Studies in the country. More research must be done to test the practicality of this approach to other context.
Bibliography


