
Effectiveness of Web -Based Teaching and Learning Approach to The Performance of Grade 9 Learners in Araling Panlipunan: Basis for Instructional Supervisory Plan

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ABSTRACT

This study aimed to determine the Effectiveness of Web-based Teaching and Learning Approach to the Performance of Grade 9 learners in Araling Panlipunan. The findings of the study served as a basis of a proposed Instructional Supervision Plan. This study used the quasi-experimental method of research to evaluate the effectiveness of Web-based Teaching and Learning Approach to the academic performance of Grade 9 learners in Araling Panlipunan. The results were the basis for an Intervention Plan. The researcher utilized Universal Sampling in identifying the respondents of the study. Table 3 presents the test of difference between the scores in the pre-test and post-test of Grade 9 in Araling Panlipunan. In this table, it reveals how the respondents or the grade 9 learners responded the different learning competencies in second grading period of the aforementioned subject. Table 3 presents the test of difference between the scores in the pre-test and post-test of Grade 9 in Araling Panlipunan. In this table, it reveals how the grade 9 learners reacted and responded the learning intervention given by the teacher in the delivery of the t different learning competencies in second grading period of the aforementioned subject based on the web-based teaching and learning approach. Based on the results in table 3, it was revealed that the results of the test measuring the variation between the Grade 9 students' pre- and post-test scores in Araling Panlipunan showing that in the pre-test which was equal to 16.05 is lesser than the posttest performance which is equal to 36.08. This baseline assessment shows how well the students initially understood the material. The pre-test results offer a critical reference point for evaluating the intervention's efficacy and identifying any areas that might need more attention. The post-test results significantly improved after web-based teaching and learning were incorporated; the mean score. This impressive improvement shows that the use of interactive materials, internet resources, and group work tools improved students' understanding and recall of Araling Panlipunan concepts. which was resulted to the computed t-value of 2.122 and found to be higher in value compared to the critical t value of 0.822. This statistical significance suggests that the integration of web-based teaching and learning is responsible for the observed changes in scores rather than random variation. The choice to reject the null hypothesis highlights the intervention's real effects.

The results in the table 3 implies that there was this significant improvement in test results which indicates that the web-based teaching and learning approach being used by the teacher in the delivery of the most essential learning competency is significantly effective considering that the performance the Araling Panlipunan proficiency of students in Grade 9 learners were being improved. The notable increase in post-test scores suggests that web-based instruction is an effective addition to traditional teaching methods in Araling Panlipunan. A more dynamic and individualized learning experience for students appears to have been provided by the interactive and multimedia components of online resources,

which appear to have catered to a variety of learning styles. This means that the overall test performance was significantly impacted by the intervention. Furthermore, in order to maximize student learning outcomes in the subject, teacher should grasp and maintain the idea of integrating the aforesaid intervention in order to improve more the learning performance of the learners in Araling panlipunan.

Keywords — Effectiveness Web-based Teaching Performance Grade 9 Learners Araling Panlipunan

I. INTRODUCTION

Teaching involves much more than expert knowledge; an effective teacher must teach in such a way as to engage the students' interest, challenge them, and spark their imagination. To meet these pedagogical challenges, teachers must have an awareness of the diverse abilities and backgrounds of students, including those with learning and behavior problems. With the increasing demands of our learners to attain quality teaching, in line with the K to 12 program and the goal of making every child should be a reader (DepEd Order No. 18 s. 2017).

They say that Araling Panlipunan is a boring subject. This is the most common reason why learners lack interest in learning the subject especially when it comes to Economics. This lack of interest to learn leads to low performance. Low Performance of learners in Araling Panlipunan subject is a problem because it can affect a student's academic performance and limit their understanding of important topics related to society where economics is perceived to be important. Teachers and educators should find ways to make the subject more engaging and relevant to students to improve their performance and understanding.

Low performance of learners in Araling Panlipunan subject is a problem because Araling Panlipunan is a core subject in the Philippine basic education curriculum, which means that it is a required subject for all students. Poor performance in this subject can affect a student's overall academic performance and may lead to lower grades or even failure to pass the grade level.

Araling Panlipunan covers various topics such as history, economics, politics, and constitution, which are essential for students to understand the society they live in. Poor performance in this subject may lead to a lack of knowledge and understanding of these topics, which can affect a student's ability to participate in discussions and make informed decisions in the future.

For this, teachers should have a lot of teaching strategies in order to help learners achieve academic achievement. The use of appropriate teaching strategies can enhance the comprehension of social studies.

Lack of interest among learners is the most common problem I encountered in teaching Araling Panlipunan. They may not be interested in the subject which may lead to their inattentiveness during class discussions and failure to complete assigned tasks. Another is some learners have poor study habits, comprehension ability, and difficulty in memorizing concepts which may also affect their academic performance.

Another is most of the Grade 9 Learners have negative attitude towards mathematics, which is a significant component of economics. Negative attitude towards a subject can lead to disinterest and poor performance.

To address the aforementioned findings, the researcher is prompt to conduct a study which focus on achieving certain level of performance that is acceptable to all, thus web page instruction is one of the basis of creating those challenges in a positive way. This study will provide intellectually challenging and stimulating activities to encourage pupil's constructive classroom interactions in Araling Panlipunan gearing towards modernization of today's classroom for it has placed a great impact on the attainment of educational goals and targets towards a quality teaching and better learning experience.

This study aimed to determine the Effectiveness of Web-based Teaching and Learning Approach to the Performance of Grade 9 learners in Araling Panlipunan. The findings of the study served as a basis of a proposed Instructional Supervision Plan.

Specifically, this study sought to answer the following questions.

1. What is the pretest performance of the Grade 9 learners before the integration of Web-based Teaching and Learning Approach?
2. What is the posttest performance of the Grade 9 learners after the integration of Web-based Teaching and Learning Approach?
3. Is there a significant difference on the performances of the Grade 9 learners before and after the integration of Web-based Teaching and Learning Approach?
4. What instructional supervision plan can be proposed based on the findings of the study?

Statement of Null Hypotheses

Ho1.: There is significant difference on the pretest and posttest performance of the Grade 9 learners before and after the integration of Web-based Teaching and Learning Approach.

II. METHODOLOGY

Design. This study used the quasi-experimental method of research to evaluate the effectiveness of Web-based Teaching and Learning Approach to the academic performance of Grade 9 learners in Araling Panlipunan. The results were the basis for an Intervention Plan. Gabas Integrated School was the main research locale of the study. The researcher utilized Universal Sampling in identifying the respondents of the study. The findings of the study were the basis for the proposed instructional supervisory Plan. The researcher utilized Universal Sampling in identifying the respondents of the study. Quantitative analysis was used to determine the significant difference between the pre-test and post-test mean scores of the Grade 9 learners which were the respondents of the study. The main locale of the study is in Gabas Integrated School in the Division of Baybay City. Based from the aforementioned locale, the main respondents that were chosen by the teacher-researcher were the Grade 9 learners which were identified based on their test performances prior to the integration of web-based teaching and learning approach in the delivery of the different learning competencies in Araling Panlipunan. The assessment given to the respondents was carefully validated by the teacher-researcher herself which are the pretest and posttest test performances of the Grade 9 learners, the different steps in conducting the identified approach were undertaken in order to validate their performances before and after the implementation of web-based teaching and learning approach to the respondents. This study is mainly focus on the results of the different test validation to gather data: The pretest scores performance of the Grade 9 learners before the integration of web-based teaching and learning approach in identifying the performance of the respondents, The Posttest scores performance of the Grade 9 learners after the implementation of the web-based teaching and learning approach as well as the significant difference of the pretest and posttest performances before and after the implementation of the web-based teaching and

learning approach in the delivery of the most essential learning competencies in teaching Araling Panlipunan for the 2nd grading Period. In the Quasi- experimental research design, the researcher prepared the different materials which integrating web-based teaching and learning approach. The focus of this study was the Grade 9 learners to gather necessary data that will be significant in the study; The proposed instructional supervisory Plan was taken based on the findings of the study.

Sampling. There are 37 total number respondents who are included in the study. There are 17 Male and 20 Females with a 37 total number of respondents. The respondents or the grade 9 learners were being identified based on the performance of learners, and the primary means of reach is during the actual conduct of the study as well as during the gathering of data in the school where the study was conducted. Another way of contacting them are through cell phones of their respective parents.

Research Procedure. The researcher formulated the following procedures as guide in gathering of data:

The researcher asked permission from the Schools Division Superintendent as well as to the Public School District Supervisor (PSDS) to conduct a research study in the school.

The researcher immediately conducted an orientation to the teachers who will conduct the test. The research instrument were administered to the two groups as a pretest. Then the teacher used the web-based Teaching and Learning Approach within 30 days in teaching Araling Panlipunan. There are observations and interactions between the teacher and learners. After conducting the pretest, the researcher immediately starts the 30-day activity, using the web-based Teaching and Learning Approach.

The results were analyzed and interpreted in order to find out if there were increased on the performance level from the pretest to the posttest. Then after the posttest and pretest were analyzed, the posttest result was treated statistically using the test for mean difference. The Approval and recommendation from the Office of the Schools Division Superintendent, as well as to the Assistant Schools Division Superintendent in Baybay Division being the Chairman of the Schools Division Research Committee through the Senior Education Program Specialist in Planning and Research. After the Approval of the Schools Division Research Committee, the Approved or endorsement letter from the body together with the approved letter of intent were forwarded to the Office of the Public School District Supervisor as well as to the office of the School principal in order to get full support on the conduct of the study as well as to get also approval from their end. The proposed title and design was submitted to the School Division Office for approval. Upon approval, the Division released endorsement to the District Office where the school is located. When the research was approved by the Schools Division Office and District Office, the researcher began the process of data gathering. Validation of the instruments through Experts such as the Master Teacher in Araling Panlipunan and in coordination with the school head and lastly to the Education Program Supervisor in Learning Resource was sought. Orientation of the participants was done. Answering and retrieval of the research tool followed. Tallying of results and treatment of data. Analysis and Interpretation of Data. Making of Proposed Instructional Supervisory Plan.

Ethical Issues. The right to conduct the study was strictly adhered through the approval of the principal, approval of the Superintendent of the Division. Orientation of the respondents both the learners and the teachers including the School Principal was done.

Treatment of Data. The following statistical formulas were used in this study:

The quantitative responses will be tallied and tabulated. The data was treated statistically using the following statistical tool.

Weighted Mean. This was utilized to assess the numeracy performance of the Grade 9 learners.

T-Test for Mean Difference- This tool was used to calculate the significant difference of the test performance of the Grade 9 learners in Araling Panlipunan

III. RESULTS AND DISCUSSION

TABLE 1

PRE-TEST PERFORMANCE OF GRADE 9 LEARNERS IN ARLING PANLIPUNAN

Score Range	Description	PRETEST	
		Frequency	%
33-40	Excellent	0	0
25-32	Very Good	2	5
18-24	Good	14	38
9-16	Fair	14	38
1-8	Poor	7	19
Total		37	100
Weighted Mean		16.05	Fair

Table 1 presents the pre-test performance of Grade 9 Learners in Araling Panlipunan Subject. This results was based from the learnings or skills of the respondents based on the things that they have learned from the lessons that they have learned before the integration of the different learning materials in the media learning resources. This set of results gained by the Grade 9 learners in Grade 9 is just focused on the things that they have studied in the second grading period which somehow covered the 4 different learning competencies in Araling Panlipunan.

Based from the table in Table 1 which presents a detailed understanding of the students' preliminary understanding of the subject matter based on their pre-test performance analysis of Grade 9 students in Araling Panlipunan. The Grade 9 students in Araling Panlipunan are shown in Table 1 with their pre-test results divided into five categories: Excellent (33–40), Very Good (25–32), Good (18–24), Fair (9–16), and Poor (1–8). Additionally given are the frequency and distribution of students' percentages in each category. Interestingly, none of the students are in the Excellent range, suggesting that there may be a gap in reaching the pinnacle of Araling Panlipunan proficiency. The fact that no student received a score in the "Excellent" ranging from the scores starting from 33-40, it indicates that there is still opportunity for improvement in terms of reaching the highest levels of comprehension. On the other hand, the distribution in other categories shows a wide range of competencies. Remarkably, 5 percent of pupils are categorized as "Very Good" (25–32), indicating an very good level of understanding. Furthermore, 38 percent of the class are rated as "Good" (17–24), indicating that a sizable portion of the class has a satisfactory understanding of Araling Panlipunan. Which the same results to the fair level of performance having the 38 percent or 14 total number of respondents out of the 37 total number of respondents being tested. While in the poor level of performance, with 1-8 ranging of scores, there are 7 total number of respondents or 19 percent.

The pre-test results' in table 3 implies that with a weighted mean computed to be 16.05, the overall performance is categorized as Fair. The distribution of students across the various score ranges affects this mean value, which serves as an average depiction of their overall accomplishment. The weighted mean's reliability as a measure of overall

performance is supported by the high proportion of students who fall into the Fair category and the prevalence of fair performance. Understanding the overall competency level of Grade 9 students at Araling Panlipunan is made easier with the help of this insight into the central tendency of scores. Moreover, A crucial area of attention is highlighted by the 38% student distribution between the Good (18–24) and Fair (9–16) categories. Although a balanced distribution is ideal, a sizable percentage of students must be performing at a moderate level if they are found in these mid-level categories. This calls on teachers to evaluate whether the ways they are currently teaching students meet their varied learning needs, or if they can do a better job of customizing their lessons to improve comprehension.

Concerns concerning a significant portion of the Grade 9 cohort's basic knowledge of Araling Panlipunan are raised by the 19% of students who fall into the Poor category (1–8). This finding suggests a possible risk of knowledge gaps that could impede further academic and learning advancement to address the unique challenges faced by students in the Poor category, educators and school administrators should think about implementing targeted interventions, such as extra support classes, remedial programs, or individualized attention. The distributions of performance of the learners in Araling Panlipunan must be thoroughly examined because the lack of students in the Excellent category raises concerns about the quality of the Araling Panlipunan curriculum and the efficacy of the teaching strategies. If teachers want to create a more favorable learning environment where students can reach higher levels of mastery, they might need to reevaluate the ways they teach. Further evidence that focused interventions are necessary to improve performance, especially for students who are having difficulty with the material, comes from the concentration of students in the Fair category. This could entail remedial classes designed to address particular issues that students are facing, extra resources, or personalized learning approaches.

TABLE 2

POST TEST PERFORMANCE OF GRADE 9 LEARNERS IN ARLING PANLIPUNAN

Score Range	Description	POST TEST	
		Frequency	%
33-40	Excellent	36	97
25-32	Very Good	1	3
18-24	Good	0	0
9-16	Fair	0	0
1-8	Poor	0	0
Total		37	100
Weighted Mean		36.08	Excellent

Table 2 presents the posttest performance of Grade 9 Learners in Araling Panlipunan Subject. These results of the learners were based from the learnings of the respondents based from the discussions of the teacher-researcher that they have gained from the past 4 weeks of the implementation of the web-based teaching and learning approach which covered the 4 different learning competencies.

Based from the table 2 as shown in Table 2, the Grade 9 learners in Araling Panlipunan performed significantly better on the post-test than they had on the pre-test considering that there are 36 total number of learners or 97 percent out of the 37 total number of learners being tested which are belong to the excellent level of performance while in the good level of performance having the scores ranging from 25-32, there was only 1 learners or 3 percent while the rest of the learning competencies having none of the Grade 9 learners belong in the good, fair and poor level of performance.

This significant improvement in quality indicates how well the teaching strategy used which is the web-based teaching and learning approach used during the pre-test and post-test periods worked. The increase in the "Excellent" category not only represents individual accomplishments but also favorably impacts the class's overall performance. The overall distribution shows that a significant portion of the class still has a strong grasp of the materials.

The table 2 results implied that the Grade 9 students' comprehension of Araling Panlipunan has significantly improved. The trend upward in the categories, particularly the notable rise in the "Excellent" range connotes that the intervention is really effective therefore, it has a beneficial effect on students' comprehension, leading to a considerable number of students achieving an excellent level of understanding considering that the majority of the class still showed a strong understanding of the lessons given by the teacher in Araling Panlipunan.

TABLE 3

TEST OF DIFFERENCE BETWEEN THE SCORES IN THE PRE-TEST AND POST-TEST OF GRADE 9 LEARNERS IN ARALING PANLIPUNAN

Aspects	Test Scores		Computed T	Critical T	Decision	Interpretation
GRADE 9 Learners in Araling Panlipunan	Pre	16.05	2.122	0.822	Reject H_0	Significant
	Post	36.08				

Table 3 presents the test of difference between the scores in the pre-test and post-test of Grade 9 in Araling Panlipunan. In this table, it reveals how the grade 9 learners reacted and responded the learning intervention given by the teacher in the delivery of the t different learning competencies in second grading period of the aforementioned subject based on the web-based teaching and learning approach. Based on the results in table 3, it was revealed that the results of the test measuring the variation between the Grade 9 students' pre- and post-test scores in Araling Panlipunan showing that in the pre-test which was equal to 16.05 is lesser than the posttest performance which is equal to 36.08. This baseline assessment shows how well the students initially understood the material. The pre-test results offer a critical reference point for evaluating the intervention's efficacy and identifying any areas that might need more attention. The post-test results significantly improved after web-based teaching and learning were incorporated, the mean score. This impressive improvement shows that the use of interactive materials, internet resources, and group work tools improved students' understanding and recall of Araling Panlipunan concepts. which was resulted to the computed t-value of 2.122 and found to be higher in value compared to the critical t value of 0.822. This statistical significance suggests that the integration of web-based teaching and learning is responsible for the observed changes in scores rather than random variation. The choice to reject the null hypothesis highlights the intervention's real effects.

The results in the table 3 implies that there was this significant improvement in test results which indicates that the web-based teaching and learning approach being used by the teacher in the delivery of the most essential learning competency is significantly effective considering that the performance the Araling Panlipunan proficiency of students in Grade 9 learners were being improved. The notable increase in post-test scores suggests that web-based instruction is an effective addition to traditional teaching methods in Araling Panlipunan. A more dynamic and individualized learning experience for students appears to have been provided by the interactive and multimedia components of online resources, which appear to have catered to a variety of learning styles. This means that the overall test performance was significantly

impacted by the intervention. Furthermore, in order to maximize student learning outcomes in the subject, teachers should grasp and maintain the idea of integrating the aforesaid intervention in order to improve more the learning performance of the learners in Araling panlipunan.

IV. CONCLUSIONS

Based from the findings of the study, a statistically significant improvement in language proficiency is indicated by the analysis of the Test of Difference Between the Scores in the Pre-test and Post-test of Grade 4 Pupils in English. The significant improvement in test results between the pre- and post-test periods is highlighted by the rejection of the null hypothesis. This result suggests that the teaching strategies or interventions used during this time have significantly improved the English language proficiency of Grade 4 students. The results underline the significance of focused interventions in promoting improvement of performance and offer insightful information about the efficacy of the instructional strategy which is the interactive multimedia being used.

V. RECOMMENDATIONS

The researcher offered the following recommendations to improve the performance of the Grade 9 learners in Araling Panlipunan subject.

1. The proposed instructional supervisory plan should be utilized by both teachers and School Head specially in dealing with their daily plans or goals to sustain or even improve the performance of the learners in Araling Panlipunan.
2. Teachers should attend training programs for Araling Panlipunan educators in order to improve their ability to use web-based teaching resources and platforms. This might involve interactive resource use to create dynamic learning environments, workshops on effective online pedagogy, and the creation of captivating multimedia content. They should also incorporate a range of digital resources, including interactive simulations, educational websites, and multimedia presentations, into their lessons. This method can assist in accommodating various learning preferences and increase students' interest in and accessibility to Araling Panlipunan.
3. The school head should provide Araling Panlipunan teachers with online spaces to collaborate, exchange best practices, and talk about useful web-based teaching tactics. This cooperative setting can promote a feeling of community and offer a place for ongoing development.
4. The Public Schools District Supervisor should encourage teachers to integrate a variety of digital resources into their lessons, such as educational websites, interactive simulations, and multimedia presentations. This approach can help cater to different learning styles and make Araling Panlipunan more interesting and accessible for students.
5. To measure student progress and pinpoint areas that might require more attention, implement regular assessments, and feedback mechanisms using online tools should be done by the Education Program Supervisor in Araling Panlipunan. This will give teachers the ability to modify their pedagogical approaches to meet the unique needs of each student. Advocate for the improvement of digital infrastructure within the school, ensuring reliable internet connectivity and access to necessary devices for both teachers and students. This investment is crucial for the successful implementation of web-based teaching and learning approaches.

6. Organize parent orientation sessions to introduce them to Araling Panlipunan's web-based teaching and learning methodology. Stress the value of parental involvement in fostering a positive learning environment at home and urge them to participate fully in their kids' online learning.
7. In relation to the abovementioned, the researcher is giving the authority to those future researchers to conduct longitudinal research to evaluate the efficacy of the results and find some learning gap to create a more comprehensive findings that could help improve the study.

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REFERENCES

- [1] Dep.Ed. Order No. 34 s. 2022 "School Calendar and Activities for the School year 2022-2023."
- [2] DepEd Order No. 07 s. 2020. Policy Guidelines On The Implementation Of Learning Delivery Modalities For The Formal Education
- [3] Dep.Ed. Order no. 31 s. 2020 "Interem Guidelines for Assessment and Grading in the light of the basic education Learning continuity Plan."
- [4] Morgan, H. (2014). Maximizing Student Success with Differentiated Learning. The Clearing House: A Journal of Educational Strategies, Issues and Ideas, 87(1), 34-38. doi:10.1080/00098655.2013.832130