Journal of Multidisciplinary in Education | ISSN: 3082-5237
AARRC CONSCRIPTOR PUBLISHING CORP | Volume 1 | APRIL 2025

LEADING PRACTICES IN EDUCATION: COMPENDUIM OF RESEARCH ON STRATEGIES INTERVENTION AND EDUCATOR WELL-BEING

An Educational Website as a Supplementary Tool for Science Class Subject of Grade 10 of the Sacred Heart Academy of Pasig

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Abstract –This study sought to test online supplementary lessons to be used as a supplementary tool to the online class of selected Grade 10 Science class of Sacred Heart Academy of Pasig (SHAP).

The study used the quasi-experimental research method which aims to establish a cause-and-effect relationship between independent and dependent variables. The data were gathered through the comparative results of the pretest and post-test of the respondents.

The data shows the mean of the controlled group which is 38.85 and the experimental group which has a mean of 39.26. Since the p-value of 0.8137 is greater than the significance level at 0.05, this fails to reject the null hypothesis. This concludes that there is no sufficient evidence to support that there's a significant difference between the two groups based on the post-test scores.

This study may be implemented in other major subject areas such as English, Filipino, Mathematics, and Araling Panlipunan and be done in at least 3 consecutive grading periods. It can also consider the attributes and learning styles of the students in designing the interface and functionality of the online learning tool. Future researchers can determine the probability that the specified scale responses will be the assessment of the respondent on not only one component as a formative assessment.

Keywords *– Asynchronous classes, Educational websites, E-learning, MELC, Online platform, Supplementary Online Learning Tool, Synchronous classes, Website.*

INTRODUCTION

In response to the COVID-19 pandemic, the school system has rapidly changed from face-to-face to online learning modalities. Some changes from conventional learning to online learning were the limited time for learning and personal consultation and remediation

As the online classes started, the number of hours for study has declined to consider the guideline of DepEd on limitations in front of the screen of the gadgets. The personal consultation and remediation had also been suspended during this time. Because of this, there is a threat to the students' school performance.

This study on an educational website as a supplementary online learning tool can fill the gap in the learning process of the learners at this time of online classes. This could help the students further understand the lessons

presented by the teachers through browsing the supplementary activities and input any review the lessons discussed during an online class. They can independently maneuver and navigate this tool. The educational website can help improve the academic performance of the students who utilize

OBJECTIVES OF THE STUDY

This study aims to allow students to access content anytime, enabling flexible and personalized learning and providing structured lessons, review materials, and progress-tracking features. In line with this, the researcher seeks to answer the following questions:

1. What is the pretest performance of the student respondents assigned in the two groups?

2. What is the post-test performance of the respondents assigned in the two groups?

3. What are the significant differences in the post-test scores between the controlled group and the experimental groups?

4. What supplementary website can be developed and shared with the students?

METHODOLOGY

time of the day. The educational website can be a tool for students to study further and

The target group was divided into two- the experimental and the controlled. The experimental group was given a pretest and received treatment, then was given a post-test. The control group was also given a pretest but did not receive the treatment, then was given a post-test. This was conducted for the whole grading period of the second quarter of the School Year 2021-2022. This study used a quantitative research method that emphasized objective measurements and the statistical, mathematical, or numerical analysis of data collected. The quasi-experimental research method aimed to establish a cause-and-effect relationship between an independent and dependent variable.

The question, then, was not simply whether participants who received the treatment improved but whether they improved more than participants who did not receive the treatment. Depicted in the Figure below is the paradigm of the experimental design for this study.

Treatment Group	N	O_1	X	O_2
Control Group	N	O_3		O_4

Where:

N Indicates the group

O_1 Pretest of the Treatment Group

X administration of some program or treatment

O_2 Post-test of the Treatment Group

O_3 Pretest of the Control Group

O_4 Post-test of the Control Group

Randomization is a statistical term that can be used to describe the processes that are eventually used in experimental designs to ensure that subjects are chosen and assigned at various levels of the treatment with predetermined possibilities. When the probabilities are equal, we say that we have a uniform probability distribution. Other probability distributions may also be used. The theory of randomization allows the researcher to randomly assign the subjects to the two groups and be confident that the groups are equivalent (statisticshowto.com/).

The class sectioning in SHAP is being done, first, by ranking the students according to the final average of their school grades from the previous school year. After they were ranked accordingly, the students were distributed to every section; this means that the top 10 of the whole batch would not be put in the same section as the other students on the list. It is safe to say that the sectioning of the students was heterogeneous. In the same way, this setup eliminated all possible sources of contamination in the experimental study. The main weakness of the experimental design is the use of a large number of subjects hence to control all possible sources of contamination, this design and subject are liable to the effects of other experimental contaminants (statisticshowto.com/).

No sampling scheme was used in the study as the total population of the students enrolled in Junior High School of the Sacred Heart Academy of Pasig (SHAP) for School Year 2021-2022 was included. This study covers the population of two (2) sections of the Grade 10 level. Each section is composed of 27 students- a total of 54 students. One section will serve as a control group and the other one will be the experimental group

RESULTS AND DISCUSSION

Indicator	Group	Mean	p-value	Decision
Scores of Grade10 Students	Controlled	38.85	0.8137	Failed to Reject the null hypothesis
	Experimental	39.26		

Figure 1

The figure 1 exhibits the comparison between the post-test scores of the control group and the experimental groups which implies that there is no sufficient evidence to support that there's a significant difference between the control and experimental groups based on the post-test scores.

The E-website approach does not help to increase and improve the assessment of the grade 10 students at Sacred Heart Academy of

Pasig. These results can be about the limited face-to-face interaction of the students with their teacher (Kumar, 2015). Since students can access the E-website anytime and without any requirement to meet and see their respective teachers for follow-up. The implementation of new resources for education must be accurate for a long period (Aberg, 2017), due to the limited time of preparation before the implementation of the E-website, students may not be ready to undertake the new form of the learning process

Parents' involvement in this kind of approach is also one of the factors that need to be considered particularly in basic education (NHE surveys, 2013).

A follow-up from a parent about whether the students are learning or not through the E-website should be encouraged especially in the early implementation of it.

CONCLUSION AND RECOMMENDATION

Based on the summary of findings presented, the following conclusions were drawn:

a. The pre-test performance of the controlled and treatment groups is approximately the same across the groups.

b. The post-test performance of the controlled and treatment groups was approximately the same across the groups.

c. There is no significant difference between the controlled and experimental groups based on the post-test scores. It concludes that the implementation of the online resources needs to follow guidelines or online instructional material models to consider factors that may affect the use of this platform.

d. The students' engagement with the supplementary educational learning website happens every week mostly if there is a newly uploaded supplement about the lesson of the previous week.

The following are recommended to address the concerns of the E-learning approach.

a. This research may be implemented in other major subject areas such as English, Filipino, Mathematics, and Araling Panlipunan

b. This study could be done in at least 3 consecutive grading periods.

c. It is suggested to cover the whole school wide system to conduct this study.

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