

The Performance of the Junior High School Students in Online Learning and Blended Learning Approach

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Abstract:- The study identifies and examines the performance of the junior high school students in the Blended and Online learning approach. The purpose of the study is to compare the academic performance of the Junior High School students between the two modes of learning: Online learning and blended learning. The 2019 Pandemic has forced students to take online classes, increasing their stress levels and negatively impacting their academic performance. This issue urges the development of a mechanism to make online learning more effective in this nerve-racking time. By the year 2022, Arellano University implemented blended learning as other schools do so. Students attend in-person or face to face classes and online classes. The respondents in this study are the Junior High School Students of Arellano University Plaridel Campus. This will be a quantitative research, specifically the Ex-Post-Facto Research Design. The respondents are not assigned or not randomly selected. The mean of the grades of the students in blended and in online learning in three subjects will be determined and compared using the t - test. Based on the data gathered, it has no significant relationship between the performances of the three subjects. This implies that the learners' performance is not affected by the learning approaches used in teaching. This indicates that all throughout the school year online or blended learning doesn't affect the grades of students. Strategies/Methods in teaching that can attract the students' interest were recommended. Teaching lessons in the simplest way may help the students to understand the lessons easily.

Keywords:- Performance, Online Learning, Blended Learning.

I. INTRODUCTION

Prior to the "information age," which the Merriam-Webster Dictionary describes as "a period in which information has become a commodity that is quickly and widely disseminated and easily available, especially through the use of technology," there were two main ways to deliver education: face-to-face (or regular mode) and distance mode. Online learning is defined in this research study as learning that is assisted and facilitated by the use of computers, networking, and multimedia. Use of networking (through the Internet or an internal network) is essential in this conception of digital learning. The term "blended

course" refers to a course in which face-to-face activities were combined with online modules for a significant portion of the instruction. The teacher, who initiates, motivates, and consolidates the learning of students through classroom conversations, is intended to complement the online component of blended learning. Face-to-face instruction is typically thought of as a lecture-discussion format with textbooks and chalkboards as instructional aids. (Ranjan, 2020) Recent studies demonstrate the effectiveness of online and blended learning in the classroom by describing current viewpoints on remote learning for emergencies, such as the Covid-19 pandemic. The pandemic accelerated the pace of technological advancement, but this analysis also discusses how instructors use technology, especially outside of the classroom, and how this includes several adjustments and procedures that go beyond the equipment itself. (Topping and Douglas et.al, 2022)

The importance of the study indicates how online and blended learning affects the academic performance of a student. Online learning has developed into a global trend in the education industry for students. Digital learning has made it simple to access the organized and preserved files and folders without causing any physical harm. Online learning platforms support student-centered learning and are simple to control in a lockdown situation. (Prakash, 2021) Meanwhile, The advantages of both online and face-to-face learning are combined in blended learning. It helps students communicate better, provides them a sense of power, and is very adaptable. Its settings blend the advantages of face-to-face and online instruction. This technologically enhanced instruction improves synchronous and asynchronous communication between teachers, parents, and students. (Banger, 2022)

The significance of the study will benefit the school administration; this will help them determine the strengths and weaknesses of pure online and blended learning based on the grades of the students in the 1st and 2nd quarters. It will also help to determine what specific areas they should focus on and further enhance in order to make the program more responsive towards preparing the students for their future professions. For teachers, this will aid them in their preparation in terms of their learning style of teaching regarding their related lesson. For students, this study may serve as a guide and reference for those undertaking similar studies. Finally, for future researchers, this research will be

a useful reference. This research will be a useful reference for the researchers who plan to make any related study

precisely based on the standards underlying the course in education.

➤ *Conceptual Framework*

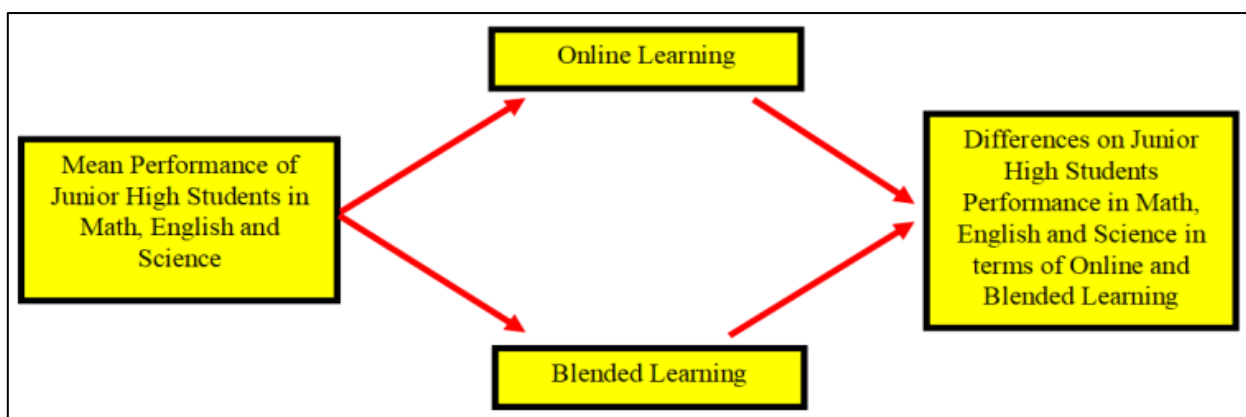


Fig 1 Conceptual Framework of the Study

The researchers have come up with an outline of a plan with the processes of conducting the study. The figure shows how the study will be conducted by the researchers. There are three (3) subjects considered in this study: English, Mathematics, and Science. The first process is describing the mean performance of the students from grade 7 to grade 10 in Arellano University Plaridel Campus on blended and online classes. In the second process, the different learning approaches on three subjects are compared to determine how the students perform with subjects.

➤ *Statement of the Problem*

This study will determine the performance of the Junior High School students in Arellano University Plaridel Campus. Specifically, it will seek to answer the following problems:

- *What is the Mean Performance of JHS Learners in Online Learning in Terms of:*

- ✓ *English*
- ✓ *Mathematics, and*
- ✓ *Science*

- *What is the Mean Performance of JHS Learners in Blended Learning in Terms of:*

- ✓ *English*
- ✓ *Mathematics, and*
- ✓ *Science*

- *Is there a Significant Difference between the Performance of the Students in Online Learning and Blended Learning?*

II. METHODS AND DESIGN

This will be a quantitative research, specifically the Ex-Post-Facto Research Design. This is also known as the "after-the-fact" research wherein the investigation starts after the fact has occurred without interference from the researchers (Salkind, 2010). This study is a quasi-experimental method since the respondents are not randomly assigned.

The reference scores, which are secondary data in nature, to be used in the study. These are obtained from the grades of the students last school year 2022-2023.

➤ *The mean will be Determined. the Performance Scores will be Compared with the T - Test.*

Table 1 Determined the Performance Scores

Grading Scale	Descriptors
90 - 100	Outstanding
85 - 89	Very Satisfactory
80 - 84	Satisfactory
75 - 79	Fairly Satisfactory
Below 75	Does not meet expectations

- H_0 = there is no significant difference between the students' performance in online learning and blended learning.
- H_a = there is a significant difference between the students' performance in online learning and blended learning.

➤ *The Interpretation of the Computer Generated p – value in Comparison with the Level of Significance will be as Follows:*

Table 2 Computer Generated p – value

Comparison	Interpretation	Decision
$P - value > \alpha$	Not significant	Accept H_0 , Reject H_a
$P - value \leq \alpha$	Significant	Accept H_a , Reject H_0

III. RESULTS AND DISCUSSION

➤ The Results that were Gathered in this Research was Examined and given an Interpretation According to the Tables Below:

Table 3 JHS Learners Performance in Online Learning of the Three Subjects

Grade Level	English		Mathematics		Science	
	Mean	Interpretation	Mean	Interpretation	Mean	Interpretation
7	85.82	Very Satisfactory	81.07	Satisfactory	86.00	Very Satisfactory
8	86.55	Very Satisfactory	82.65	Satisfactory	86.12	Very Satisfactory
9	86.63	Very Satisfactory	81.42	Satisfactory	87.24	Very Satisfactory
10	83.42	Very Satisfactory	83.43	Satisfactory	86.85	Very Satisfactory
Gen. WM	85.61	Very Satisfactory	82.14	Satisfactory	86.55	Very Satisfactory

Based on the data gathered the grade 9 students perform better in English during the online learning platform with a mean of 86.63 in comparison with the other levels in Junior High School.

The table shows that grade 8 students excel in mathematics during the online learning period having a

mean of 82.65 showing a satisfactory performance during the online learning platform.

The data shows that grade 9 students excel in science during the online learning compared to the other year levels with the mean of 87.24.

Table 4 JHS Learners Performance in Blended Learning of the Three Subjects

Grade Level	English		Mathematics		Science	
	Mean	Interpretation	Mean	Interpretation	Mean	Interpretation
7	85.15	Very Satisfactory	83.19	Satisfactory	88.34	Very Satisfactory
8	87.19	Very Satisfactory	82.23	Satisfactory	86.77	Very Satisfactory
9	86.81	Very Satisfactory	82.94	Satisfactory	86.37	Very Satisfactory
10	85.93	Very Satisfactory	82.78	Satisfactory	87.23	Very Satisfactory
Gen. WM	86.27	Very Satisfactory	82.79	Satisfactory	87.18	Very Satisfactory

Based on the data gathered the grade 8 students perform better in English during the blended learning platform with a mean of 87.19 in comparison with the other levels in Junior High School.

The table shows that grade 7 students excel in mathematics during the blended learning period having a

mean of 83.19 showing a satisfactory performance during the online learning platform.

The data shows that grade 7 students excel in science during the blended learning compared to the other year levels with the mean of 88.34.

Table 5 Significant Difference in the Students' Performance in Online and Blended Learning in Three Subjects

Subjects	p - value	Alpha Value	Description	Decision
English	0.6746	0.05	Not significant	Accept H_0 , Reject H_a
Math	0.7422	0.05	Not significant	Accept H_0 , Reject H_a
Science	0.8749	0.05	Not significant	Accept H_0 , Reject H_a

The computed p-value for English, Mathematics and Science subjects is greater than the alpha value of 0.05 which states that the researcher needs to Accept H_0 , and Reject H_a . It means that there is no significant relationship between the performances of the three subjects. This implies that the learner's performance is not affected by the platform used in teaching. This indicates that all throughout the school year online or blended learning doesn't affect grades of students.

IV. GENERAL FINDING, CONCLUSION AND RECOMMENDATION

Based on the results presented in tables 1-2, students are Very Satisfied with the online and blended learning in English and Science while Satisfied with Mathematics subject. In table 3, it indicates that students' performances have no significant relationship with the platforms that teachers use.

In conclusion, students can learn in whatever platform the teacher uses. It also implies that strategies used in the two learning modality are effective and can be utilized.

With the results, the researchers come up with recommendations to make the teaching and learning more improved and to make strategies for blended learning on Mathematics subjects.

Strategies / Methods that can attract students' interest. Mostly in mathematics subjects students are afraid to explore because of the fear. Making a strategy that will lessen the fear of students would be much more effective.

Teachers need to focus not on the platform itself but also the content of the subject. It is more effective if teachers teach the subject in the simplest form that young minds can easily understand.

Parents at home can also help their children in focusing on their lectures. They can encourage them and give support so that students will be confident.

Schools should also provide better facilities and equipment for teachers and students to have a conducive environment to learn.

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