

# Online Learning and Academic Achievement of First Year Based Students of Mindoro State University (MinSU)

<sup>1</sup>Romeo C. Castillo, <sup>2</sup>Izzy Kay F. Castillo

<sup>1</sup> Dean, College of Teacher Education, Mindoro State University, Oriental Mindoro Philippines

<sup>2</sup> Faculty Researcher, College of Arts and Sciences, Mindoro State University, Oriental Mindoro Philippines

**Abstract:-** The researchers are interested in finding out the correlation of online learning and academic achievement of First Year Bachelor of Secondary Education (BSEd) Major in English of Mindoro State University (MinSU), specifically the students' level of performance of students in online learning in terms of: quizzes, major examinations, performance tasks, and recitation. The data revealed that the level of writing skills of first year BSEd Majors who used the pen-and-paper method in terms of spelling, vocabulary, and sentence structure was high, all with average scores of 11. On the other hand, the results showed that the level of writing skills of first year BSEd Majors who used Microsoft Teams was very high in terms of spelling, with an average score of 14, and high in terms of vocabulary and sentence structure, with both average scores of 12. The computed p-value between the Microsoft Teams spelling and pen-and-paper method spelling was 0.001. In terms of Microsoft Teams vocabulary and pen-and-paper method vocabulary, the p-value was 0.004. Lastly, the computed p-value between the Microsoft Teams sentence structure and pen-and-paper method sentence structure was 0.002. Based on the results, the computed p values of the three variables were less than the critical value at the 0.05 level of significance. Therefore, the null hypothesis of no significant difference was rejected. The findings revealed that there was a significant difference in the level of writing skills between first year BSEd Majors who used the pen-and-paper method and those who used Microsoft Teams in terms of spelling, vocabulary, and sentence structure.

**Keyword:-** Academic Achievement, BSEd Students, Mindoro State University, Online Learning.

## I. INTRODUCTION

The COVID-19 pandemic has spread over the world and has had a significant impact on education. As a result, learning methods were supplied through remote learning halfway through the second semester of the academic year 2019/2020. (DL).

It has caused the most significant disruption to education systems in human history, affecting approximately 1.6 billion students in over 200 nations. More than 94 percent of the

world's student population has been touched by school, institution, and other learning facility closures. This has resulted in significant changes in every part of our life. Traditional educational techniques have been considerably disrupted by social alienation and limited movement policies.

To combat the spread of COVID-19, most governments agreed to temporarily close educational institutions. As of January 12, 2021, around 825 million students are affected by school closures as a result of the epidemic. According to UNICEF monitoring, 23 nations have implemented countrywide closures and 40 have implemented local closures, affecting over half of the world's student population. Schools in 112 nations are currently open.

In reaction to school closures, UNESCO advised that schools and teachers employ distance learning programs as well as open educational tools and platforms to reach learners remotely and minimize disruptions in education.

When it came to dealing with the epidemic, universities used a variety of measures. The University of Cambridge, for example, taught entirely online, while the majority used a 'blended' strategy that combined remote and in-person instruction. After debate about the technique, GCSE and A-level exams, as well as their Scottish equivalents, were abolished, and scores were issued based on teacher projections.

In reaction to the COVID-19 epidemic, schools, nurseries, and universities in the United Kingdom were closed in March 2020. Except for children of critical workers and minors considered vulnerable, all schools in the UK have closed for all in-person teaching by the 20th of March. Teaching took place online with youngsters at home. Following the discovery of a new form of COVID-19 in December 2020, face-to-face teaching in England, Northern Ireland, Scotland, and Wales was discontinued the following month.

People with less money have been impacted globally by fewer educational possibilities, whereas others with more money have found education. People everywhere who relied on schools rather than computers and home life have had more difficulty accessing their education thanks to new online programs that have shifted the labor of education from schools

to families and individuals. As a result, people everywhere who relied on schools rather than computers and home life have had more difficulty accessing their education. School closures and early childhood education and care (ECEC) have far-reaching economic and societal effects, not just for students, teachers, and families. Student debt, digital learning, food hardship, and homelessness, as well as access to childcare, health care, housing, the internet, and disability services, have all been highlighted as a result of school closures in reaction to the pandemic. For underprivileged children and their families, the effects were more severe, producing disruptions in schooling, poor nutrition, childcare issues, and a financial cost to families who were unable to work.

The rapid changes and increased complexity of today's world present new challenges and put new demands in the country's educational system. There has been generally a growing awareness of the necessity to change and improve the preparation of students for productive functioning in the continually changing and highly demanding environment. As our country faces a pandemic, the ways to use the traditional mode of teaching has been restricted. Thus, the use of other modes of teaching such as online learning and blended learning upsurge. Online learning is an education that takes place over the Internet; it is often referred to as "e-learning". This mode of learning has greatly emerged since the pandemic started. The country has opened its door to online education especially to the college level. Now that the pandemic continues, millions of students in the Philippines are staying at home for the second year in a row. Online classrooms are still in use blowing concerns of both students and teachers about a deteriorating education crisis in a country where access to the internet is uneven and most students are experiencing poverty.

According to Obana (2020), as the country approaches the start of the school year last August 24, 2020, most schools and higher education institutions (HEIs) and teachers, students and parents has been confused about what education will look like in the new normal. Many were unconvinced that our schools were ready for the implementation of the new learning delivery modalities, such as the digital technology, despite the many examples offered by the Department of Education (DepEd) and the Commission on Higher Education (CHED). The integration of digital technology into teaching, learning and assessment is a complex and challenging process that goes well beyond introducing digital technology in schools. As stated by Obana (2020), integration requires carefully considering within the broader context of schoolwide improvement issues such as change management, educational leadership, teacher professional development, evaluation systems and sharing best practices.

The Department of Education in Region 4 continues to seek for ways in order to help the students learn effectively in this time of crisis. Webinars and trainings have been around the social media allowing the teachers to develop themselves as

learning facilitators and life coaches in order to deliver education during the times of crisis and beyond. As the Regional Director of DepEd MIMAROPA stated (2020), distance learning is not new to us. This educational system has been done in many schools. MIMAROPA DepEd made sure that there is a Learning Continuity Plan which focuses on five important aspects, learners, internal and external partner engagement, varied learning modalities, empowering the teachers, and creating a safe learning environment.

The traditional way of teaching was a long-established teaching style in Philippine education system wherein the students are passive in terms of participating in class, due to they only have to seat quietly on their places and listen to the teachers' discussion. However, the current education system has been greatly affected by the issues that the country currently faces. According to Saavedra (2020), present education system has encountered challenges in delivering basic education caused by the COVID-19 pandemic. As this mode of learning has been implemented for two years now, there are certain problems encountered by both of the teacher and the student such as the technicality or the availability of resources, self-learning module's reliability, sense of authority, focus and concentration of the students, and the parent's or guardian's capability to help their students. These problems are just some of the difficulties that the New Normal brings to the Philippine Education System. However, the hasty determination of our country's readiness to adapt to the new norm is way off.

Based on the previous explanation, the researchers are interested in finding out the correlation of online learning and academic achievement of First Year Bachelor of Secondary Education (BSEd) Major in English of Mindoro State University (MinSU), specifically the students' level of performance of students in online learning in terms of: quizzes, major examinations, performance tasks, and recitation. Based on the findings of the study, the researchers will propose possible intervention activities that can improve the online learning. Thirty First Year students, fifteen (15) males and fifteen (15) females from BSEd students.

## II. METHODOLOGY

This chapter presents the research design, research locale, respondents of the study, sampling technique, research instrument, scoring and quantification of data, data gathering procedure and statistical treatment of data.

### ➤ *Research Design*

This study employed the correlational method research which aims to determine the relationship of online learning and academic performance of First Year Bachelor of Secondary Education (BSEd) Major in English students.

### ➤ *Research Locale*

This study will be conducted in one of the tertiary schools in Calapan City named Mindoro State University in Masipit, Calapan City. MinSU has three campuses, these are the Bongabong, Victoria (Main Campus), and Calapan Campus. It is established as a public secondary trade school known as Calapan School of Arts and Trades (CSAT) by virtue of R.A. 3397 in June 1961 but only started operating five years later. In 1972, CSAT merited the approval of Ministry of Education, Culture and Sports (MECS) to offer trade Technical Education Curriculum. Efforts to convert CSAT into a higher education authorized to offer degree courses were realized with the approval of R.A. 8076 on June 19, 1995, converting CSAT to Polytechnic College of Calapan (PCC). With the integration, then PCC has evolved as MinSu Mindoro State University.

### ➤ *Respondents of the Study*

The respondents are from the First Year BSEd Major in English. In particular, the study has a total of thirty (30) First Year students, fifteen (15) males and fifteen (15) females. The study will use random sampling. Random sampling is a part of the sampling technique in which each sample has an equal probability of being chosen. A sample chosen randomly is meant to be an unbiased representation of the total population.

### ➤ *Research Instrument*

To determine the online learning, level of academic achievement, and the relationship between online learning and academic achievement, a self- designed questionnaire will be used in this study. The questionnaire is composed of two (2) parts.

Part I of the questionnaire is apportioned on the items that identify the online learning of the student-respondents. Part II will not use a questionnaire since the level of academic performance of student-respondents will be based on their general weighted average in 1st semester of the academic year 2021-2022.

The questionnaire will be administered through google form. The respondents will fill out the necessary details in the questionnaire such as name, age, sex, year level and section, contact number, and email/Gmail address which served as profile. The identity and responses of every respondent will remain confidential.

### ➤ *Scaling and Quantification of Data*

A rating scale will be used on the first part of the questionnaire. To describe this, the researchers used the table below.

**Table 1. Numerical Scale, Statistical Limits and Verbal Descriptions for Measurement of the Level of Student's Performance in Online Learning in terms of Quizzes, Major examinations, Performance Tasks, and Recitation.**

Numerical Scale	Statistical Limit	Verbal Description	Verbal Interpretation
4	3.50-4.00	Strongly Agree	Very high Extent
3	2.50-3.49	Agree	High Extent
2	1.50-2.49	Disagree	Low Extent
1	1.00-1.49	Strongly Disagree	Very low Extent

**Table 2. Scaling and Quantification of the Level of Academic Achievement of Student-respondents in their general weighted average for the 1st semester of the academic year 2021-2022**

Grade Point	Description	Percentage
1.00	Excellent	97-100
1.25	Outstanding	94-96
1.50	Very Good	91-93
1.75	Good	88-90
2.0	Very Satisfactory	85-87
2.25	Thoroughly Satisfactory	82-84
2.5	Satisfactory	79-81
2.75	Fair	76-78
3.00	Passed	75
5.0	Failed	Below 75%

### ➤ *Data Gathering Procedures*

The researcher will send a letter of request to conduct the study to the campus director of the school with the recommending approval of the researcher's adviser. Upon the approval of the request, the researcher in coordination with the class adviser and the parents of the respondents will gather in one place for the planned administration of the instrument. Information and response of the students will be handled and statistically treated. The findings will be extracted and examined based on the processed data.

Furthermore, the responses of every respondent will be recorded and documented. The numerical data that are collected will be analyzed using descriptive statistics to formulate factual descriptive findings, conclusions and recommendations. In addition, the proposed output which is an educational intervention was made.

### ➤ *Statistical Treatment*

According to Allen & Chao (2017), descriptive and inferential statistics such as Pearson's R. Pearson's r is a numerical summary of the strength of the linear association between the variables. If the variables tend to go up and down together, the correlation coefficient will be positive. If the variables tend to go up and down in opposition with low values of one variable associated with high values of the other, the

correlation coefficient will be negative. Data gathered was treated statistically using descriptive statistics such as frequency, and percentage, mean and rank.

### III. RESULTS AND DISCUSSION

➤ *Interpretation of Data*

Table 3 shows the level of writing skills of first year BSED Majors of Mindoro State University-Calapan City Campus using the pen-and-paper method.

**Table 3. Level of Writing Skills of First Year BSED Majors Using the Pen-and-Paper Method**

Writing Skills	Average	Verbal Description	Verbal Interpretation
Spelling	11	Very Good	High Level
Vocabulary	11	Very Good	High Level
Sentence Structure	11	Very Good	High Level

Table 3 presented the level of writing skills of first year BSED majors using the pen-and-paper method. The results revealed that the respondents got an average score of 11 in spelling with a verbal description of very good and interpreted as high level. In vocabulary, the students got an average score of 11, described as very good and interpreted as high level. The results also showed that respondents garnered an average score of 11 in sentence structure using the pen-and-paper method, described as very good with a high level of verbal interpretation.

The results prove that first year BSED majors who used the pen-and-paper method have high-level writing skills in spelling, vocabulary, and sentence structure. According to Bothwell (2017), university students find it simpler to retain information when taking notes using pen and paper instead of a computer. He revealed that students see the benefits of reading and writing with paper which the students continue to use. He said that some students preferred the pen-and-paper method because it helps them learn and retain knowledge or information.

Gepila Jr. (2018) analyzed the writing proficiency of grade 7 pupils at PUP Laboratory High School in his study. It primarily focused on the writing methods utilized in the classroom, the writing strategies used, the composition writing abilities of the students, as well as the typical errors made by students. The research's conclusions showed that the writing method used in the classroom was rated as very exceptional to good.

Table 4 shows the level of writing skills of the BSEd-Filipino majors of Mindoro State University-Calapan City Campus using Microsoft Teams.

**Table 4. Level of Writing Skills of First Year BSED Majors Using Microsoft Teams**

Writing Skills	Average	Verbal Description	Verbal Interpretation
Spelling	14	Excellent	Very High Level
Vocabulary	12	Very Good	High Level
Sentence Structure	12	Very Good	High Level

Table 4 presented the level of writing skills of first year BSED majors using Microsoft Teams. The results revealed that BSEd-Filipino majors got an average score of 14 in spelling with a verbal description of excellent and interpreted as very high level. In vocabulary, the students got an average score of 12, described as very good and interpreted as high level. Lastly, the results showed that first year BSED majors using Microsoft Teams have an average score of 12 in sentence structure, described as very good with the interpretation of high level.

It means that first year BSED Majors using Microsoft Teams have a very high level of writing skills in spelling and a high level of vocabulary and sentence structure. As per Noda (2018), users can utilize online softwares to build editable Docs, Sheets, or presentation Slides with pictures, tables, equations, drawings, links, and more. Multiple users may see and edit the same document concurrently if the document's owner authorizes it.

Additionally, according to Firth, et. al. (2019), online platforms are a useful and convenient tool that outweighs the deficiencies of its technical issues, such as "prospective speed or availability issues."

Woodrich & Fan (2017) also recommended that Microsoft Teams is an effective tool that helps students peer edit a specific word document. In other words, students can utilize it for a variety of purposes and forms.

Table 5 shows the difference between the level of writing skills of BSEd-Filipino Majors of Mindoro State University-Calapan City Campus who use the pen-and-paper method and Microsoft Teams in terms of spelling.

**Table 5. Difference between the Level of Writing Skills of First Year BSED Majors who use the Pen-and Paper Method and Microsoft Teams in terms of Spelling**

Variables		w	p	Results
Microsoft Teams Spelling	Pen-and-Paper Spelling	557.000	0.001	Significant

Table 5 presented the difference between the level of writing skills of first year BSED Majors who use the Pen-and-Paper Method and Microsoft Teams in terms of spelling. Since the computed p value is lower than the critical value of 0.05, the result is significant. Therefore, there is a significant difference between the spelling scores of students using Microsoft Teams and the pen-and-paper method.

Cheung & Yin (2015) showed the impact of using pen-and-paper against word computers on writing quality and frequency of revision in a control group and an experimental group of 20 freshmen with advanced writing skills. Although the pen-and-paper group revised more than the computer group, neither group showed a significant increase in writing quality.

Similarly, Teichman and Poris (2018) discovered in a semester-long study in New York that freshmen with average writing ability did not show better writing quality when writing their essays on computers compared to another group of students using traditional pen-and-paper, given that both groups had a similar level of apprehension about writing when they enrolled in a college.

Table 6 shows the difference between the level of writing skills of first year BSED Majors of Mindoro State University-Calapan City Campus who use the pen-and-paper method and Microsoft Teams in terms of vocabulary.

**Table 6 Difference between the Level of Writing Skills of First Year BSED Majors who use the Pen-and-Paper Method and Microsoft Teams in terms of Vocabulary**

Variables		w	p	Results
Microsoft Teams Vocabulary	Pen-and-Paper Vocabulary	158.000	0.004	Significant

Table 6 presented the difference between the level of writing skills first year BSED Majors who use the pen-and-paper method and Microsoft Teams in terms of vocabulary. Since the computed p value is lower than the critical value of 0.05, the result is significant. Therefore, there is a significant difference between the vocabulary scores of students using Microsoft Teams and the pen-and-paper method.

According to Ifigeneia & Dimitrios (2018), the modern world's expansion and globalization have a direct impact on people's ability to access a variety of materials and digital education. It was discovered that students require suitable digital tools, such as Microsoft Teams, to give them access to the information they need. Students who have access can negotiate the meaning of complicated material knowledge and the skills necessary for print-based literacy, such as grammar, vocabulary, and reading abilities. Technology can be used as an entertaining, additional tool that is more advanced than pen and paper to encourage vocabulary learning in ELLs.

In addition, Rojabi (2020) explained that Microsoft Teams is an ideal platform for negotiating meaning with students as they integrate their writing language into their writing. When students find errors or areas for improvement in the formulas or content, they can make changes.

Table 7 shows the difference between the level of writing skills of first year BSED Majors of Mindoro State University-Calapan City Campus who use the pen-and-paper method and Microsoft Teams in terms of sentence structure.

**Table 7. Difference between the Level of Writing Skills First Year BSED Majors who use the Pen-and-Paper Method and Microsoft Teams in terms of Sentence Structure**

Variables		w	p	Results
Microsoft Teams Sentence Structure	Pen-and-Paper Sentence Structure	449.500	0.002	Significant

Table 7 presented the difference between the level of writing skills of first year BSED majors who use the pen-and-paper method and Microsoft Teams in terms of sentence structure. Since the computed p value is lower than the critical value of 0.05, the result is significant. Therefore, there is a significant difference between the sentence structure scores of students using Microsoft Teams and the pen-and-paper method.

According to Lint (2017), writing is a weaker skill for students studying English as a second or foreign language. Consequently, teachers must use innovative techniques to assist students in learning vocabulary, sentence structure, grammar, and other aspects of writing while also keeping students involved and motivated to learn. As technology develops and students get more immersed in it, there is an increasing interest in using digital tools to help English writing teaching.

The research done by Lapitan (2021) sought to examine the usefulness of using Microsoft Word and Microsoft Teams as a tool for implementing the 4-step sentence construction exercises, which gradually encourage students to expand their notes from a single word to a whole sentence based on the provided title. According to the data presented, the 4-step sentence construction activities that were carried out on Microsoft Teams resulted in a 16 percent boost in the students' sentence construction skills. In conclusion, the 4-step sentence construction activities on Microsoft Teams are successful at teaching sentence structure.

#### IV. CONCLUSION AND RECOMMENDATION

##### ➤ Conclusions

Based on the findings derived from this study, the following conclusions were drawn.

1. There is a need to find strategies for improving the writing skills of first year BSED Majors who used the pen-and-paper method since their level of writing skills are not yet fully developed in terms of spelling, vocabulary, and sentence structure.
2. There is a need to practice the use of Microsoft Teams since it helps the first year BSED Majors in improving their writing skills specifically in terms of spelling, vocabulary, and sentence structure.
3. By determining and comparing the writing skills using the pen-and-paper method and Microsoft Teams of selected students of first year BSED Majors of the MinSU-Calapan City Campus, the study confirmed that Microsoft Teams is indeed an effective tool in developing students' writing skills, particularly when it comes to spelling, vocabulary, and sentence structure.
4. The proposed remediation program “Into Writing” will help the first year BSED students of Mindoro State University to improve their writing skills in terms of spelling, vocabulary, and sentence structure which are essential for professional advancement and to be globally competitive individuals.

##### ➤ Recommendations

The following recommendations are offered based on the findings and conclusions of the study.

1. The researchers recommend that the teachers should use a digital platform for testing like Microsoft Teams than using the traditional pen and paper method to measure the writing skills of the students in terms of spelling, vocabulary and sentence structure.
2. The researchers also recommend using a digital tool like Microsoft Teams in order to develop the writing skills of the students in terms of spelling, vocabulary, and sentence structure.
3. Teachers of Mindoro State University are recommended to incorporate digital platforms like Microsoft Teams to measure the students' skills in writing. Additionally, it is advised that they make greater use of technological techniques to satisfy the current needs and appeal to students' interests in these areas.
4. The researchers also recommend that Mindoro State University fix the technical problems encountered by the students when utilizing the online platform Microsoft Teams to develop their writing skills.
5. The use of the traditional pen and paper method for testing the writing skills of the students should be explored further.
6. The researchers also recommend that Mindoro State University-Calapan City Campus conduct a remediation program promoting Microsoft Teams to enhance the writing skills of students.

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