
Effect of Covid-19 Pandemic to The Performance of Grade 8 Students in Science

MA. JESSECA N. IBAY

Teacher I

Western Leyte College

Master of Arts in Education

Major in School Administration and Supervision

majesseca.ibay@deped.gov.ph

Abstract — Pandemic to the performance of Grade 8 students in Science. The findings of the study was the bases for a proposed intervention plan. The study utilized complete enumeration in identifying the respondents of the study. This study used the Quasi Experimental method of research to determine the Effect of Covid 19 Pandemic to the performance of Grade 8 students in Science. The test of difference between the scores in the pretest and posttest of the Grade 8 students in Science. The Test of Difference the scores in the pretest and posttest performance of the Grade 8 Students in Science and Technology. Based from the results, it shows that the pretest scores which is equal to 28.73 is lower than the posttest scores which is equal to 35.50 that resulted to computed p value of 0.00 which is lesser than the 0.05 level of significance so, the hypothesis which states that there is no significant difference in the pretest and posttest performance of the Grade 8 students in Science and Technology is rejected. Based on the results given in table 3 it implied that COVID 19 pandemic did not really stop the grade 8 students from learning the different competencies in Science and Technology considering that there was an increase in the performance in pretest to the posttest scores of the Grade 8 students. The reasons for increase of the performance is that it was really helpful for the students about how the teachers prepared learning materials that boost the student's motivation to learn the topics given to them though answering the Contextualized Learners' Activity Sheets that was crafted based on their capacity to learn the subject. Embedded also in the learner's activity sheets are the parallel questions or activities and formative tests that could easily understand by the students and easy also to them to answer and comprehend. In other words, during the giving of the summative test to the students, they have already the prior knowledge on the content of the test that is leads them to gained positive result in the examination. Aside from the Learners Activity Sheets, they also access the internet if they have something clarified.

Keywords — *COVID 19 Pandemic; Performance; Grade 8 Students; Science*

I. Introduction

Education is no exception. Students from privileged backgrounds, supported by their parents and eager and able to learn, could find their way past closed school doors to alternative learning opportunities. Those from disadvantaged backgrounds often remained shut out when their schools shut down. The lockdowns in response to COVID-19 have interrupted schooling with nationwide school closures. Department of Education together with their Regional and Division offices have made concerted efforts to maintain learning continuity during this period, learners have had to rely more on their own resources to continue learning remotely through different distance learning modality options. Teachers also had to adapt to new pedagogical concepts and modes of delivery of teaching, for which they may not have been trained. In particular, learners in the most marginalized groups, who don't have access to digital learning resources or lack the resilience and engagement to learn on their own, are at risk of falling behind.

The researcher focused in this study because this is a current situation we are facing, trending phenomenon, and to showcase the impact on the way we perceive our world and our everyday lives. To established sympathy in the world of the learners and the parents as an individual affected by the pandemic. In order for me to evaluate whether there is a significant difference in the performance of grade 8 students in Science prior to Covid-19 pandemic and the new normal way of education. To know learning loss due to the pandemic might look like or what sort of learning losses could we expect from the shortened face to face classes for the school year. In our school in Albuera District, some of the parents or guardian together with the students have really find difficulty in adjusting to the different learning delivery in the new normal. For them, it is really difficult for the students to acquire new knowledge using their own pace of learning specially in learning Science and Technology which is one of the subjects that is considered difficult to learn. Thus, students really needs proper guidance not really coming from their parents or guardian but coming from the expert of the subject which are the teacher themselves.

As a teacher, the researcher want to arrive with possible solutions in relation to teaching-learning process that are needed to be implemented in a new normal way of education including the different roles of stakeholders that will lead to a good or higher performance of the students. No face to face teaching-learning process. The teacher cannot directly assist, facilitate, guide the students. Authenticity of the output, or answers is questionable. With the aforementioned details, the researcher wanted to know whether COVID 19 has negative or positive effect to the performance of the Grade 8 students in Science.

This study aimed to determine effect of COVID 19 Pandemic to the performance of the grade 8 students in Science. The findings of the study served as a basis of a proposed Intervention plan.

Specifically, this study sought to answer the following questions.

1. What is the pretest performance of the Grade 8 students in Science and Technology?

2. What is the posttest performance of the Grade 8 students in Science and Technology?
3. Is there a significant difference in the pretest and posttest performance of the Grade 8 Science?
4. What Intervention plan can be proposed based on the findings of the study?

II. Methodology

Design. This study utilized the quasi-experimental type of research in gathering the responses employing the quantitative and approach. Damulaan National High School in the Division of Leytet is the main locale of the study. Grade 8 students are the main respondents of the study and the data based on the students' performance ratings were utilized. This research is mainly focused to gather data on: The effect of covid 19 to the performance of grade 8 students in science and technology; The performance of students; Proposed Intervention Plan based on the findings of the study.

Sampling. There are 40 students who are included in the study and the primary means of reach is through Facebook account or to their messenger account or cell phone numbers.

Research Procedure. The researcher prepared the research design and tools to be utilized in the study. Approval and recommendation from the principal was sought. The proposed title and design was submitted to the Office of the Dean of the Graduate School for screening, evaluation and approval. Upon approval, the office of the Dean of the Graduate School released endorsement through the assigned Adviser for further screening and approval. When the research was approved by the office of the Dean and Assigned adviser, the researcher began the process of data gathering. Validation of the instruments through the External Experts was sought. A Cronbach's alpha test was used for the reliability test. Orientation of the participants). Answering and retrieval of the research tool followed. Tallying of results and treatment of data. Analysis and Interpretation of Data. Making of Proposed Improvements

Ethical Issues. The right to conduct the study was strictly adhered through the approval of the principal, approval of the Public School District Supervisor (PSDS) approval of the Superintendent of the Division. Orientation of the respondents both the students and the teachers and parents and or guardian was done separately. In the orientation, the issue on distribution and retrieval of Learners Activity Sheets and Summative Test Questionnaires were raised.

Treatment of Data. The effect of COVID 19 Pandemic to the performance of the grade 8 students in Science treated through a weighted mean and descriptions (refer to appendices for the scoring and description). The data on the pretest and posttest was prepared through Simple Percentage. The test of mean difference was used to treat the pretest and posttest.

III. Results and Discussion

Table 1

Pre-Test Performance of Grade 8 Students in Science and Technology

| Score Range | Description | Grade 8 | |
|----------------------|-------------|--------------|-------------|
| | | Frequency | % |
| 41-50 | Excellent | 10 | 25 |
| 31-40 | Very Good | 7 | 18 |
| 21-30 | Good | 11 | 27 |
| 11-20 | Fair | 11 | 27 |
| 0-10 | Poor | 1 | 3 |
| Total | | 40 | 100 |
| Weighted Mean | | 28.73 | Good |

Table 1 shows the Pretest performance of the Grade 8 Students Science and Technology. In this table, it presents on how the students are being rated according to their level of performances in the Science and Technology Subject. Based from the results, the grade 8 majority of the students which equal to 11 total number of students or 27 percent have shown performance on the good level from the score ranging from 21 to 30 while the other level of performance having one of the highest number of students is in the excellent level having the score ranging from 41 to 50 with 10 students or 25 percent. In the poor level of performance having score ranging from 0 to 10 have 1 student or 3 percent out of the 40 students being tested. Moreover, in the fair level, there were 11 total number of students or 27 percent having belong to the score ranging from 11 to 20 and in the very good level of performance ranging from 31 to 40, there were only 7 students or 18 percent out of the 40 students (100%) being tested.

Based from the results given in table 1 it implied that prior to COVID 19 pandemic majority of the students have already gained knowledge and master their skills in the different competencies in Science and Technology for the second quarter. Maybe because of the reasons that they have long vacation and they have all the time to read and learn the different topics or competencies in Science subject. In other words, the grade 8 students have already learning independently and are already exposed to the different platforms to acquire knowledge and skills. They will just use their cellphones and if they have internet it is just one click away for them and there they are new

learning will happen. It is also implied the some of the Garde 8 students have their own way of learning things such as reading Science and Technology books from the private schools or just simply showing videos. With the aforementioned statements w=it resulted to an average weighted mean of 28.73 (good). Moreover, in order for the students to increase their academic performance during the covid 19 pandemic, teacher must find another teaching modality strategy that will fit in this time of pandemic to fully address the needs of the Grade 8 Students.

Table 2

Posttest Performance Of Grade 8 Students In Science And Technology

| Score Range | Description | GRADE 8 | |
|----------------------|-------------|--------------|------------------|
| | | Frequency | % |
| 41-50 | Excellent | 16 | 40 |
| 31-40 | Very Good | 8 | 20 |
| 21-30 | Good | 13 | 33 |
| 11-20 | Fair | 3 | 7 |
| 0-10 | Poor | 0 | 0 |
| Total | | 40 | 100 |
| Weighted Mean | | 35.50 | Very Good |

Table 2 shows the Posttest performance of the Grade 8 Students Science and Technology. In this table, it presents how the students are being rated according to their level of performances in the Science and Technology Subject. Based from the results, the performance of the grade 8 was amazingly increase. Majority of the Grade 8 students which was equal to 16 students or 40 percent have shown performance on the excellent level from the score ranging from 41-50 while the other level of performance having one of the highest number of students is in the good level having the score ranging from 21-30 with 13 students or 33 percent. In the poor level of performance having score ranging from 0 to 10 have 0 student or 0 percent out of the 40 students being tested. Moreover, in the fair level, there were 3 total number of students or 7 percent having belong to the score ranging from 11 to 20 and in the very good level of performance ranging from 31 to 40, there were only 8 students or 20 percent out of the 40 students (100%) being tested.

Based from the results given in table 2 it implied that COVID 19 pandemic did not stop the grade 8 students to learn the different competencies in Science and Technology considering

that majority of the students have already gained knowledge and master their skills in the different competencies in Science and Technology for the second quarter with an excellent result of their result on the posttest. The reasons for the positive result of the performance of the students is that teachers have already prepared some of the materials that could help the students learn in an easy manner that boost the students motivation the topics given to them such as giving of Contextualized Learners' Activity Sheets that was crafted based on the level of students capacity to learn and creating parallel questions that could give additional knowledge in answering the summative test questions that was given to them after the giving of all of the Most essential learning competencies for a specific period of time. In other words, the grade 8 students have easily grasp or adopt the new type of learning that resulted them to become independent in acquiring knowledge and skills. Aside from the Learners Activity Sheets, they also use their cellphones learning things simply showing videos and more that resulted to an average weighted mean of 35.50 (very good).

Table 3

Test of Difference Between the Scores in the Pre-test and Post-test Scores in Science

| Groups | Test Scores | | p value | Level of Sig | Decision | Interpretation |
|----------------|--------------------|-------|----------------|---------------------|-----------------------|-----------------------|
| Grade 8 | Pre | 28.73 | 0.00 | 0.05 | Reject H ₀ | Significant |
| | Post | 35.50 | | | | |

Table 3 presents the Test of Difference the scores in the pretest and posttest performance of the Grade 8 Students in Science and Technology. Based from the results, it shows that the pretest scores which is equal to 28.73 is lower than the posttest scores which is equal to 35.50 that resulted to computed p value of 0.00 which is lesser than the 0.05 level of significance so, the hypothesis which states that there is no significant difference in the pretest and posttest performance of the Grade 8 students in Science and Technology is rejected.

Based from the results given in table 3 it implied that COVID 19 pandemic did not really stop the grade 8 students to learn the different competencies in Science and Technology considering that there was an increase in the performance in pretest to the posttest scores of the Grade 8 students. The reasons for increase of the performance is that it was really helpful for the students about how the teachers prepared learning materials that boost the student's motivation to learn the topics given to them though answering the Contextualized Learners' Activity Sheets that was crafted based on their capacity to learn the subject. Embedded also in the learner's activity sheets are the parallel questions or activities and formative tests that could easily understand by

the students and easy also to them to answer and comprehend. In other words, during the giving of the summative test to the students, they have already the prior knowledge on the content of the test that is leads them to gained positive result in the examination. Aside from the Learners Activity Sheets, they also access to the internet if they have something to be clarified.

IV. Conclusion

Based from the findings of the study, the results showed that the COVID 19 Pandemic does not really affects on the performance of the pretest and posttest thus it helps to increase the scores of the Grade 8 students in Science thus, it is significantly effective in improving the performance of the both learners and teachers.

V. Recommendations

1. The proposed intervention Plan should be implemented.
2. Principal and Supervisor should conduct observation and monitoring to the teachers handling major subjects to find out they have the same experience in this time of pandemic in the delivery of the competencies in this new normal.
3. During the School Learning Action Cell (SLAC), all the School Heads in the District should encourage and allow teachers to have a Demo lesson to showcase their techniques in teaching using the result in the LDM 2 and allow other teachers to observe their work.
4. School Heads should encourage teachers to write different contextualized self-learning modules using different techniques to sharpen their skills in making new things that can be used during discussion.
5. Furthermore, the researcher is allowing the future researcher to conduct the same study to verify the significance of the Covid 19 pandemic and it effect to the academic performance of the learners.

ACKNOWLEDGMENT

The researcher wishes to express her profound gratitude to the following who had contributed to the success of the study:

Dr. Bryant C. Acar, Dean of Graduate School, for his encouragement and untiring effort in improving the study;

Dr. Elvin H. Wenceslao, the writer's research adviser for his valuable suggestions, full support and encouragement;

Dr. Jasmine B. Misa and Dr. Annabelle A. Wenceslao, as members of the Panel of Examiners for giving their professional suggestions and recommendation for the realization of this study;

Mrs. Divina Dalanon, Schools District Supervisor, for giving permission to conduct the study in Damulaan National High School, Albuera, Leyte.

To the respondents of Damulaan National High School students, for their honesty and cooperation in completing the data needed.

The researcher's family, whose unconditional love and understanding inspired him to finish this book;

Above all, to our Lord and Savior Jesus Christ for the privileged and abounding grace given to be able to pursue the graduate studies thus gaining professional development.

More importantly, thanks to His immeasurable love and guidance.

To all those who helped make this research paper done

REFERENCES

- [1] DepEd Order No. 31 s. 2020 “ Guidelines for Assessment”
- [2] DepEd Order No. 162 s. 2020. Suggested Modular Delivery Options in the new Normal
- [3] DepEd. (2020). Official Statement Department of Education. Retrieved from <https://www.deped.gov.ph/2020/05/06/official-statement-2>
- [4] Habibi, R., Burci, G. L., de Campos, T. C., Chirwa, D., Cina, M., Dagon, S., ... Hoffman, S. (2020). Do not violate the International Health Regulations during the COVID-19 outbreak. *The Lancet*, 395(10225). [https://doi.org/10.1016/S0140-6736\(20\)30373-1](https://doi.org/10.1016/S0140-6736(20)30373-1)
- [5] Karalis, T. (2020). Planning and Evaluation during Educational Disruption: Lessons Learned from COVID 19 Pandemic for Treatment and Emergencies in Education. *European Journal of Education Studies*, 7(4). <https://doi.org/10.5281/zenodo.3789022>
- [6] UNESCO. (2020). COVID-19 Educational Disruption and Response. Retrieved from <https://en.unesco.org/covid19/educationresponse>
- [7] WHO. (2020b). Coronavirus disease 2019 (COVID-19) Situation Report - 51. World Health Organization. Retrieved from https://www.who.int/docs/default-source/coronaviruse/situation-reports/20200311-sitrep-51-covid-19.pdf?sfvrsn=1ba62e57_10

AUTHOR'S PROFILE



MA. JESSECA N. IBAY

The author is born on December 25, 1993 at Fairview, Quezon City Philippines. She finished her Bachelor of Secondary Education major in Biological Sciences at Visayas State University. She finished 36 units of Complete Academic Requirement in Supervision and Administration in Western College of Ormoc.

She is currently a teacher I in Department of Education in Damulaan National High School, Albura, Leyte, Philippines. She is teaching: Science 7 and MAPEH 8.