MATH OTSO ONLINE TURUAN:
An innovation in teaching Mathematics 8 in the New Normal Education for the SY:2020-2021

ABSTRACT

This action researched aimed to improve the academic performance of 54 selected Grade 8 students of Binan Integrated National High School. A 77.78% or 42 out of 54 students got a score of 14 and below in a 20 item Pre-Test for the Third Quarter. The Researchers addressed to improve the academic performance of the students is by conducting Math Otso Online Turuan, an online Platform of delivering the lesson to the students. The result of the study showed that the number of students with poor performance during the Pre-test was reduced in the post-Test. The findings stressed that the result of the Post-test have significant difference. It is proposed that the teachers should conduct Online Turuan through FB livestream or other social media platform to improve the academic performance of the students. It will help our learners to have a better understanding of the lesson as we deliver it via Online platform. Through proper planning, communication, and collaboration of teachers on how they will deliver the lesson via Online Turuan, we will achieve a high academic performance of our students.

Keyword: Online Turuan, Online Platform, Pre-Test, Post-test, academic performance.
INTRODUCTION

“No face-to-face classes until safe”, based on the Deped Order No 12, s 2020, page 3 paragraph 14 stated: Deped is one with the President in his non-negotiable commitment for the health and safety of our leaners, teachers, and staff. It is the first and most important of our BE-LCP. However, the BE-LCP also emphasizes that learning opportunities to our students may be provided through blended distance modalities.

Due to the Distance learning approach, students find it hard to really understand the lesson especially in Mathematics 8 during the First Quarter. Based on the data of the result of their Summative test of 55 students who answered via Google Form, the average score falls to only 19.24% which is very low. This is really alarming, that’s why MATH OTSO ONLINE TURUAN came up as an innovation for the students to learn Math like learning inside the classroom

Mathematics is considered as the mother of all learnings in both arts and sciences. It is a necessity for people of all ages to be successful in life. Despite the usefulness and importance of mathematics, students’ ability to understand and apply mathematical concepts has been adversely affected by several factors (Andaya, 2014).

Anxiety, on the other hand, shown to have negatively influence students’ performance. Students’ attitudes towards mathematics are affected by their teachers’ attitudes and beliefs (Sinay & Nahornick, 2016), and their teaching strategies (Adeyami, 2015 as cited by Bantiding, 2016). According to Colgan (2014 cited by Sinay & Nahornick, 2016), majority of the students find mathematics as boring, mostly irrelevant and unrewarding. This could explain why students perform poorly in mathematics.

Technology is omnipresent today. With the advent of communications technology and the proliferation of Web 2.0 tools, online learning is becoming more and more popular. It enables people from remote areas to have access to education, which was almost impossible some years ago. (David Hung Cheong Lan et al ).Olive and Makar (2016) argue that mathematical knowledge and mathematical practices are inextricably linked, and that this
connection can be strengthened by the use of technologies. However, as the school year started, it was unfamiliar for everyone to conduct this Learning Delivery modalities. In the latest data that we gathered about the proficiency level of the students during the second quarter in Mathematics 8, 435 out of 788 or 55.20% enrolled students received 75-79 grades which is very low performing. Almost half of the students are not performing well. While there is only 14 out of 788 or 1.77% of the total enrolled students got a Proficiency level of 90-94. This is really alarming for us Mathematics teachers, that is why we arrived at an innovation.

MATH OTSO ONLINE TURUAN as an innovation to help our learners to understand and learned Mathematics 8 even they are at home. The use of Facebook as a platform for delivering the lesson in Mathematics 8 will help us teachers to deliver what the students’ needs to understand and to clear their difficulties in learning Mathematics. Aside from watching the Facebook livestream on its aired time, it is also recorded so that the learners can go back and reviewed the lesson at their most comfortable time.

METHODOLOGY

The researchers employed a purposive sampling design. The participants are 54 Grade 8 students with access and internet connection at home. This research employed a quantitative-descriptive method since the objective of the researchers is to determine the average result in the Pre-test and Post-test before and after the intervention, and the significant increase in the percentage of Mathematics Academic performance between the Pre-test and Post-test.

All the 54 selected Grade 8 students from 7 sections will participate in Math Otso Online Turuan for the Third Quarter starting from week 1 to Week 8.

The conduct of this research is presented in the conceptual outline illustrated in figure 1 which is the flow chart of the conduct of Math Otso Online Turuan.

As shown in the flow chart, the focus of the study is the innovation, Math Otso Online Turuan. A quasi-
An experimental research method of investigation was used in this study. It is to evaluate whether Math Otso online truruan delivery of the lesson for the Third Quarter contributes to the improvement of the students' performance during pre-test and post-test. The researchers aim to determine the effectiveness of Math Otso Online Turuan in the improvement of the academic performance of the students during the third quarter. The level of students' learning is obtained after administering a pre-test before the conduct of Math Otso Online Turuan and a Post-test after the 8 sessions of Math Otso online Turuan.

A group of 54 students was determined in the study. They are selected from 7 sections. They all have the access of watching the Math Otso Online Turuan through FB Livestream. The level of students' learning is obtained after administering a pre-test before the conduct of Math Otso Online Turuan and a Post-test after the 8 sessions of Math Otso online Turuan.

The result of the Pre-test and Post-test will be compared to determine the significant difference in the level of the students' learning. Based on the findings an action plan should be developed to enhance teaching effectiveness and improvement in Mathematics 8.

**RESULT**

This Part shows the result of the study. The data presented follows the arrangement of the problems as set in the Action Research Questions.

Upon the administration of Pre-test and Post-test, the collected data were evaluated and analyzed. And as a result, there is a significant difference between the result of the Pre-Test and Post-Test of the students, with a computed p-value of less than 0.01.

Table 2 shows the level of academic performance of 54 grade 8 students of Binan Integrated National High School in a 20-item pre-Test.

In the Pre-test, the data showed that there are 9 out of 54 or 16.67% who belong to the Very Good Level of performance in Mathematics since the range of their score is from 16-20. However, a huge number of students from Good level of performance, 21 out of 54 or 38.89% of the students get a score of 11-15.
For the Average level of performance in the Pre-test, 16 out of 54 or 29.63% of the students get a score of 6-10 points. And finally, 8 out of 54 or 14.81% of the students belong to the Poor level of performance during the pre-test since they get a score of 1-5 points.

The mean score of 54 students in the Pre-Test is 10.79 which means that generally, the students have an AVERAGE level of performance in Mathematics in their pre-test.

Table 3 shows the level of academic performance of 54 grade 8 students of Binan Integrated National High School in a 20-item post-Test.

In the Post-test, the data showed that there are 28 out of 54 or 51.85% who belong to the Very Good Level of performance in Mathematics since they get a score from 16-20 points. However, the students who belong to the Good level of performance whose range of score is 11-15 are 14 out of 54 or 25.93%.

For the Average level of performance in the Post-test, 11 out of 54 or 20.37% of the students get a score of 6-10 points. And finally, only 1 out of 54 or 1.85% get a Poor level of performance in the post-Test.

The mean score of 54 students in the Post-Test is 14.69 which means that generally, the students have a GOOD level of performance in Mathematics.

**SUMMARY**

Based on the findings, we found that the Math Otso Online Turuan proved that there was great improvement in the Mathematics performance of the Grade 8 students of Binan Integrated National High School and it was shown in the results of the Post test of the student. **Math Otso Online Turuan** is a great help to students to continue their learnings in Mathematics in this New Normal education.

**ACKNOWLEDGEMENT**

The Researchers would like to express their heartfelt thanks to the following individuals whose valuable assistance, professional supervision, effort and support, encouragement for the completion of this action researched.

Ms. Julie Ann D. Natividad, Principal III, Binan Integrated National High School for her leadership and
supervision which greatly help the researchers to complete this action researched.

Binan Integrated National High School Research Group headed by Mam Anne Marie De Guzman, Research Coordinator, and to all the members of this group for sharing your expertise and encouragement for us researchers to push hard in completing all the parts of this research.

SDO Binan City Research Committee headed by Sir Edward R. Manuel, for conducting the orientation and giving us advice for the improvement of this action research.

Mam Lany R. Jamero, Master Teacher I-Mathematics, for the checking of our Pre-test and Post-test.

Mam Arlene Candelaria, Mathematics Teacher, for sharing her insight about the use of T-Test and some statistical treatment.

Grado Walo teachers of Binan Integrated National High School and advisers headed by Sir Michael b. Dioquino, Head Teacher III-MAPEH, for their moral support and actively participating in our FB Livestream and always reminding their students about the schedule of Math Otso Online Turuan. It helped us a lot to make this Online Turuan successful.

Sir Jonard Castillo, Head Teacher III-Mathematics, and to all Mathematics teachers of Binan Integrated National High School for their support in our action research.

To the wife, husband, and all family members of the researchers for their love and care. Friends and colleagues who are there providing their moral and inspirational words.

And most specially to our almighty God, for giving us strength, health, love, care, and guidance in conducting this action research. You are always with us in trouble and in light, you are always our inspiration.

REFERENCES

*Kister quin e. Escanilla(2019), the effect of computer assissted instruction to mathematics achievement of grade v students (p 13)

*Severa c. Salamat, interactive media (knowledge channel – package) as a tool in improving mathematics performance of grade 6 pupils in sinalhan elementary school
David hung cheong lan and jean claude ah-teck, the quest for improved student achievement and well-being: a journal of educational inquiry and practice