

## Post-pandemic challenges in addressing learning gaps of students in Mathematics: Experiences of the Junior High School teachers of the Division of Gingoog City

**Julius F. Baiño**

Saint Joseph Institute of Technology  
Butuan City, Philippines  
julius.baino1989@deped.gov.ph

**Abstract:** The study aimed to determine the post-pandemic learning gap created because of the prolonged school closures due to the COVID-19 pandemic in Mathematics. The study showcases the experiences of Mathematics Junior High School teachers in the Division of Gingoog City, illustrating how they tackle the identified learning gaps, the learning interventions they conducted, the different challenges they experienced, the potential risks they identified, and the importance of professional development support in addressing the learning gaps. The learning gaps identified by the Junior High School teachers include the lack of basic Mathematics skills among students, such as addition, subtraction, multiplication, and division. Students also show a lack of knowledge in the operations of integers. To tackle these learning gaps, teachers implemented several interventions such as drills, worksheets to master the operations of integers, and even one-on-one tutoring. Despite the interventions, several challenges were experienced by the teachers. It was challenging for them to finish the competencies since they also allocated their time to interventions. It is important for teachers to review these basic skills to help mitigate potential risks if the problems are not addressed, such as Mathematics anxiety, a high failure rate, and students' difficulty in progressing to the next level of Mathematics. Lastly, teachers identified important professional development support that they deemed crucial in tackling the learning gap, such as the utilization of Learning Action Cells (LAC) and Mid-year In-service training. The teachers also identified that supporting their efforts in the National Learning Camp is also crucial professional development support to prevent learning loss. Based on the findings of the study, teachers observed a significant learning gap among students, particularly in basic arithmetic operations and the operation of integers. Students also experienced reading comprehension problems. The teachers conducted several intervention programs to help mitigate the learning gaps; however, this led to several challenges such as the inability of teachers to finish the learning competencies and burnout. As a consequence, the students' lack of prior knowledge could lead to Mathematics anxiety, hindering their learning and further aggravating the learning gap. On the other hand, teachers are confident that with enough professional development support, these problems can be addressed accordingly.

Keywords: Learning Gaps in Mathematics, Post-Pandemic Learning, Learning Gaps

Date Submitted: May 16, 2025

Date Accepted: May 28, 2025

Date Published: June 11, 2025

### INTRODUCTION

The disruption caused by the COVID-19 pandemic has widened educational disparities, leading to significant learning gaps among students especially in Mathematics. This learning gap could potentially have effects that extend into their adulthood and impact their lives significantly if not address promptly. Among the core subjects impacted by these learning gaps, Mathematics is the most affected, as it has traditionally been taught in face-to-face settings.

“Learning gaps”, as defined by the Department of Education, refer to the difference between the expected knowledge acquired by the students in a particular grade level and the actual knowledge they learned up to that point. In the Philippines, the Department of Education also documented a notable extent of learning loss (Bautista, 2023). The report indicated that 50.9

percent of students entering the 2023-2024 school year would need a comprehensive refresher, while merely 27.11 percent were deemed "prepared" to be at their appropriate grade level. The report in question defines learning loss as the "retrogression in students' academic advancement" resulting from educational gaps that emerged during the pandemic-induced school closures spanning from 2020 to 2022. Furthermore, the Philippines performed poorly in the International Large-Scale Assessments (ILSAS), particularly in numerical literacy.

According to the Program for International Student Assessment (OECD, 2019) report, only 1 out of 5 participants from the Philippines reached the minimum proficiency level in Mathematics Literacy. This PISA report aligns with the findings from the Trends in International Mathematics and Study (TIMSS, 2020), in which the Philippines also took part, and where it ranked as the lowest among 58 countries in Mathematics. According to Balagtas et al., (2021), learning gaps in Mathematics Literacy skills were more profound in the domains of geometry, algebra, computer, and practical real-world problem-solving. The study of Golla and Reyes (2020), showed that the K-12 curriculum has a limited integrated of PISA collaborative problem solving especially in Mathematics from Grade 7 to 10 which could contribute to the low results.

Moreover, the most recent effort of the Department of Education to mitigate learning gap is enclosed in DepEd Order no. 14 series of 2023, titled "Policy Guidelines on the Implementation of the National Learning Camp". The objective of the National Learning Camp recovery program is to bridge educational disparities and provide support to learners across the nation in achieving established learning benchmarks. During its initial phase at the secondary level, the program will focus on Grade 7 and 8 students, concentrating on English, Science, and Mathematics. Depending on each student's skill level, they will be assigned to one of three distinct camps: Enhancement Camp, Consolidation Camp, or Intervention Camp.

In the Division of Gingoog City, the analysis of Division Achievement Test results for Mathematics conducted in the year 2022 reveals noteworthy patterns in student performance. Across various grade levels, the mean percentage scores (MPS) portray a consistent trend of suboptimal attainment: Grade 7 students attained an MPS of 39.27 percent, Grade 8 achieved 32.34 percent, Grade 9 garnered 38.58 percent, and Grade 10 obtained 38.38 percent. These scores significantly deviate from the established passing threshold of 50 percent. In the West 2 District, an analysis of student performance on the Division Achievement Test (DAT) in Mathematics mirrors a concerning trend observed elsewhere. Across different grade levels, the mean percentage scores (MPS) indicate notable disparities from the expected standards. Specifically, Grade 7 students achieved an MPS of 39.24 percent, Grade 8 exhibited 27.12 percent, Grade 9 attained 37.49 percent, and Grade 10 recorded 34.74 percent. Similarly, in the West 3 District, a comparable pattern emerges. Grade 7 students attained an MPS of 31.17 percent, Grade 8 exhibited 23.05 percent, Grade 9 showed 29.59 percent, and Grade 10 displayed 48.51 percent. The Division of Gingoog City recorded a below average mean percentage score (mps) across different level in Junior High School. This revelation underscores the pandemic's disruptive influence on traditional education, particularly in Mathematics, prompting an urgent need for targeted interventions and educational strategies to mend this regression and enhance overall learning outcomes.

By examining the experiences of Mathematics teachers in West 2 and 3 District in addressing the learning gap in Mathematics and collectively understanding the lessons learned, a better educational strategies and approaches have emerged.

### *Problem statement*

The purpose of this study is to find out the post pandemic challenges in addressing learning gaps of students in mathematics: experiences of the junior high school teachers of the Division of Gingoog City.

Specifically, this study will seek to answer the following questions:

1. What are the learning interventions implemented by teachers in addressing the learning gaps of students in Mathematics?
2. What are the challenges experienced by teachers while addressing the learning gaps of students in Mathematics?
3. What are the potential risks associated with those challenges experienced by teachers while addressing the learning gaps of students in Mathematics?
4. What kinds of professional development support do junior high school teachers identify as crucial in addressing learning gaps in Mathematics?

### *Theoretical framework*

The study has been grounded in the Social Learning Theory (Bandura, 1977), which underscores the significance of observation and modeling in the learning process. According to this theory, learning is facilitated by witnessing the outcomes of others' actions and behaviors. The social learning theory suggests that learning occurs through observing the behavior of individuals via the processes of observation, imitation, and modeling. During observation, learners observe others' behavior. Subsequently, in the imitation process, learners assimilate and mimic the observed behavior. The final process in the social learning theory is modeling, wherein learners shape their behavior based on observations. In the modeling process, individuals are more likely to imitate the behavior of those they perceive as similar.

In the context of addressing the learning gap of the students through exploration of the experiences of junior high school Mathematics teachers, it is important to understand that teachers' experiences, adaptations, and successful practices is critical for devising effective strategies to mitigate learning gaps. By considering the social learning theory, the research can delve into how teachers' behaviors, approaches, and interactions influence students' post-pandemic learning journeys and contribute to mitigating the widening learning gaps. As educational systems have faced disruptions due to the COVID-19 pandemic, students' learning experiences have been affected, and teachers play a pivotal role in shaping the learning outcomes.

## METHODOLOGY

### *Research design*

To answer the research questions, the researcher employed a phenomenological research design, a type of qualitative research methodology. Phenomenological research design aims to understand and interpret individuals' subjective experiences of a particular phenomenon, exploring the essence or meaning of these experiences as perceived and lived by the participants. The researcher identified, analyzed, and interpreted textual data to code for emerging themes among the experiences of Junior High School teachers in addressing learning gaps in Mathematics. Interview guide questions have been utilized in focus group discussions, and the process involved coding, adopting a bottom-up approach. The research begun with no predefined

codes and progressively developed as the dataset was analyzed. There were no predetermined notions of what the codes should be; instead, researchers allowed themes to naturally unfold from the collected dataset.

#### *Research participants*

A purposive sampling will be used to determine the number of participants in the study under the following criterion: junior high school Mathematics teachers in Districts West 2 and 3 of the Division of Gingoog City, who have taught Mathematics from Grade 7 to Grade 10. The twelve (12) participants were taken from Fructoso Rife Integrated School (1), Murallon Integrated School (1), Pedro Maligmat Integrated School (2), Lunao National High School (3), San Luis National (3) High School, Kalagonoy Integrated School, (1) Civoleg Integrated School (1).

#### *Research locale*

The study took place across four (4) schools within West 2 District and three (3) schools in West 3 District, both are under the supervision of the Division of Gingoog City.

#### *Research instruments*

The participants were given an interview guide with questions that were to be answered during a focus group discussion. A hardcopy of the guide questions was provided during the interview. The collected data was transcribed, coded, and analyzed to identify emerging themes. To manage the substantial data volume, the researcher employed MAXQDA software for analysis. MAXQDA was widely acknowledged as the premier software for conducting qualitative data analysis. It provided an extensive array of tools for comprehensively dissecting and interpreting qualitative data. It had the capacity to code and classify data, identify patterns and themes, and generate visual representations of the information.

#### *Data gathering procedures*

The researcher obtained a letter of request from the Schools Division Superintendent of Gingoog City to secure the necessary permission for conducting the research study. Once permission was granted by the SDS, the researcher forwarded the letter to inform the School Heads about the study. Subsequently, the researcher identified the study participants, who received an ethics consent form for signing. Participants were provided one (1) day prior to the focus group discussion to facilitate the consent form.

The researcher used focus group discussions in the study. To guide these discussions, the researcher furnished the participants with an interview guide question designed to answer the research objectives.

#### *Data analysis*

The following tool was used to answer the research question “Post Pandemic Challenges in Addressing Learning Gaps of Students in Mathematics: Experiences of the Junior High School Teachers of the Division of Gingoog City”. The researcher used inductive thematic analysis, a type of qualitative research design that identified, analyzed, and reported patterns or themes within a dataset, often derived from interviews, surveys, focus groups, or other forms of textual or visual data. The researcher transcribed the collected data from the focus group discussion and applied thematic analysis to come up with emerging themes among the experiences of teachers in addressing the learning gap in post-COVID-19 pandemics. Moreover, the researcher used

MAXQDA software to assist in the analysis and extraction of themes from the data derived from the results of the focus group discussions.

## DISCUSSION OF FINDINGS

### *Learning gaps in Mathematics identified by junior high school teachers in post-pandemic learning*

Two major themes emerged - the lack of basic Mathematics skills and poor reading comprehension. The severe impact of the pandemic on education has resulted in students developing deficiencies in both Mathematics and reading, significantly impacting their learning outcomes. In the post-pandemic learning landscape, Junior High School students are grappling with basic operations involving integers, even in Grade 7 and Grade 8. Across all grade levels from Grade 7 to Grade 10, students are observed to struggle with fundamental mathematical operations like division and multiplication.

These challenges highlight a significant learning gap in essential topics such as basic operations with integers, including addition and subtraction, which should have been mastered during their elementary education. Additionally, students exhibit difficulties in basic arithmetic skills such as addition, subtraction, multiplication, and division, particularly struggling with 2-to-3-digit addition and single-digit multiplication and division. These foundational competencies should have been acquired and honed during their elementary years, as they form the basis for mastering advanced competencies in Junior High School subjects like Algebra, Statistics, Geometry, and Trigonometry. In the study of Igarashi and Suryadarma (2023), it was found that a significant number of Grade 10 students still lacks the basic and foundational skills in Mathematics and Reading comprehension.

Another learning gap that has a significant impact on students' learning in Mathematics is their poor reading comprehension. Reading comprehension refers to the ability to understand and interpret written text. It involves various skills such as understanding the main idea of a passage, identifying key details, making inferences, drawing conclusions, and recognizing the author's purpose and tone. Strong reading comprehension skills are essential for academic success across all subjects, as well as for everyday tasks such as following instructions, gathering information, and making informed decisions. In the study of Nicolas and Emata (2018), reading comprehension skills can have an effective impact on problem-solving skills of the students especially in the areas of critical thinking. Reading comprehension is crucial because students need to understand the correct terms in the English language, which is also important for solving problems. It can also affect the motivation of the students towards learning (Torres, 2019). The medium of instruction in Mathematics is often in the English language. Therefore, students who struggle with reading comprehension may face challenges in understanding mathematical concepts and instructions, hindering their overall learning experience in the subject.

### *Learning interventions implemented by teachers in addressing the learning gaps of students in Mathematics*

Participants have varying responses to address the learning gaps in Mathematics in post-pandemic learning. The two main themes that emerged were “classroom interventions”, which are interventions conducted within the four corners of the classroom, and “outside classroom

interventions”, which refer to learning intervention strategies that go beyond the limits of the classroom.

The teachers' immediate response was to review basic operations skills, which are important for students to connect with subsequent topics. Teachers also utilized face-to-face instruction strategies to further improve students' abilities in using basic operation skills in Mathematics. To enhance students' proficiency, daily review and regular drills were necessary to deepen their understanding. To address the learning gap in multiplication and division, teachers implemented multiplication drills and incorporated them during attendance check to further hone their multiplication skills.

When a student truly struggles with a Mathematics lesson, the teacher uses one-on-one tutoring to focus on the specific problem the student was lagging behind. Some teachers implemented 30-minute special classes, and sometimes, when the regular class time is over, they provided extra hours to teach the students the basic Mathematics skills. Face-to-face instruction was also important for students to better understand the lesson. There are many classrooms interventions that was used by teachers to improve the academic performance of the students. In the study of De Las Penas et al., (2022), the integration of technology such as a game app will help improve the performance of students in learning Mathematics.

Teachers also use peer tutoring in their teaching strategy. Peer tutoring is a teaching method where students work together in pairs or small groups to help one another learn. In this approach, a more knowledgeable student, known as the tutor, assists another student, known as the tutee, in understanding a subject or concept. The tutor helps explain concepts, answer questions, and provide guidance to the tutee. Peer tutoring promotes collaborative learning, enhances understanding of material, builds confidence, and fosters positive relationships among students. It's often facilitated and supervised by teachers or educators to ensure effectiveness and provide additional support when needed. In the study of Ycong et.al (2021), peer tutoring emerged as one of the most effective teaching strategies for improving learning outcomes in Mathematics instruction. The research demonstrated that students in the peer tutoring group exhibited higher learning outcomes compared to those in the lecture group. This result is consistent with the study conducted by Candelaria, (2022) which stated that in Mathematics, peer tutoring helps by building an active and cooperative learning environment for students, fostering cooperation, motivation, and promoting student engagement. Peer tutoring was one of the best practices used by teachers in overcoming the learning loss of the students (Campit et. Al, 2024).

Another teaching strategy employed by teachers to overcome learning gaps among students is the revision of topics to make them easier to teach. To facilitate better understanding among students, competencies needed to be revised to be presented in the simplest manner possible without compromising the standards set by the Department of Education (DepEd).

Teachers also employed outside the classroom interventions like giving assignments and worksheets which will be completed at home. The teachers provided worksheets immediately after the lesson and assigned homework to be completed at home to ensure that students do not forget their lessons and further hone their basic Mathematics skills.

### *Challenges experienced by teachers while addressing the learning gaps of students in Mathematics*

Participants have experienced significant challenges while addressing the learning gaps of students in Mathematics. There are two major themes that emerged: "Students' Behavior and

Academic Performance" and "Instructional Challenges." The theme "Students' Behavior and Academic Performance" is further subdivided into four (4) categories, Lack of Interest/Fear in Mathematics, Students' attitude toward Mathematics, and students with poor reading comprehension. In "Instructional Challenges," teachers experienced unfinished competencies and a lack of resources to address the learning gaps.

One of the challenges experienced by teachers is the difficulty in providing interventions due to their students' lack of interest in Mathematics, which is also caused by their insufficient skills. Some students developed a fear of Mathematics and preferred to be absent during Mathematics classes. Mathematics anxiety refers to a psychological condition characterized by feelings of fear, tension, or apprehension when faced with tasks involving Mathematical concepts or calculations. Individuals experiencing Mathematics anxiety may feel nervous, stressed, or even panicky when confronted with Mathematical problems or situations. There are students who simply do not want to memorize multiplication tables, even though they have been reprimanded several times. Additionally, some students hesitated to answer questions due to shyness. In the study by Nuñez-Peña et al. (2013), students who suffer from mathematical anxiety have a negative attitude towards learning mathematics. Furthermore, the students who have Math anxiety suffer from lower levels of enjoyment, motivation, and self-confidence in learning Mathematics. Turner and Patrick (2016) explore Mathematics anxiety, highlighting its impact on mathematics performance. They have shown how high level of Mathematics anxiety can lead to avoidance behaviors, negative self-perceptions, and decrease academic resilience.

One of the additional challenges encountered by teachers in teaching Mathematics during post-pandemic learning was the overall attitude of the students. Some of the students have been observed to possess a relaxed mindset towards studying, especially in the initial days of returning to school from the pandemic. They became accustomed to a more relaxed lifestyle during the pandemic, and this attitude has carried over upon returning to school. Teachers have also observed that some students exhibit a lower level of maturity compared to previous generations of students. Additionally, poor reading comprehension among students has posed a significant challenge for teachers in implementing their classroom interventions. Children with poor reading comprehension often lagged behind in their studies. Teachers have observed that there are still students in Grade 8 and Grade 9 who struggled to understand what they read. Their lack of reading comprehension can hinder their ability to understand instructions and solve problems effectively.

Teachers have also encountered instructional challenges such as unfinished competencies because they were focused on mastering the basic Mathematics skills of students. Time constraints arise in completing all competencies. On average, there are around 10 competencies that should be completed within 10 weeks in a quarter. Some teachers were unable to teach the actual competencies because they prioritize teaching basic skills, which are necessary for learning the actual competencies. On average, teachers can only finish 5 to 6 competencies per quarter.

Moreover, some teachers also experienced lack of resources to address the learning gaps of the students such as bond papers, printers, and other instructional materials. In the study of Mendiola and Estonanto (2022), the teachers also experienced difficulty in crafting their own instructional materials thus creating a further time constraint in teaching.

*Potential risks associated with those challenges experienced by teachers while addressing the learning gaps of students in Mathematics*

There are several potential risks associated with the learning gaps in teaching mathematics. Two major themes have emerged: "Risks on Teachers" and "Risks on Students." These risks have been further subdivided into "Unfinished competencies" among teachers and "loss of interest" in Mathematics among junior high school students, as well as poor academic performance among students.

One of the potential risks for teachers is the unfinished competencies due to students lacking basic knowledge and prior understanding, which are crucial for advancing to the next topics. Teachers often find themselves needing to revisit fundamental concepts such as operations with integers, addition, subtraction, multiplication, and division. By the time students reach Grade 10, it is expected that they have already mastered these basic skills. However, many teachers observed that there are still students who struggle with these lessons. As a result of constantly revisiting previous lessons, teachers experience burnout because they continuously adjust their lessons to accommodate interventions. This extra work requires teachers to work outside of their teaching contact time just to address the problem of learning gaps in Mathematics. The situation clearly demonstrates a decline in math learning, as students constantly conduct remediation to progress to new lessons, leading to further learning gaps (Torres, 2021).

On the students' side, the first potential risk for them is the loss of interest in Mathematics because they struggle to understand the topics, which adds to their stress. The lack of interest can serve as an additional obstacle to their learning. In study of Aguilar (2021), many students are not fond of studying Mathematics because they find it difficult, confusing, and too much work. Furthermore, his study showed that students are not attracted to learning Mathematics. Similarly, the same pattern can be observed in this research. There are many students who no longer enjoy learning Mathematics and have been observed getting overwhelmed.

Lastly, the potential risk of the learning gap is the continuation of poor academic performance among students even after the pandemic. Since students lack basic knowledge in Mathematics, they are unable to master the competencies they should have learned in Grade 7, Grade 8, Grade 9, and Grade 10. As a result, they will face even greater difficulties in learning higher-level Mathematics. Also students may obtain low scores on the quarterly exams because they did not cover all the competencies that should have been taught in each quarter. Since the exams in the Gingoog City Division are standardized and centralized, some of the questions on the exam may not have been taught by the teachers because their focus is on mastering the basic skills of the students. This can be seen in the low mean percentage score (MPS) of each quarter. If this pattern continues and the learning gap is not addressed, the problem will persist, or in the worst-case scenario, the gap may widen.

*Professional development support do junior high school teachers identify as crucial in addressing learning gaps in Mathematics*

Participants suggested several professional developments supports that they believe will help them address the learning gaps in Mathematics. One common theme that emerges is the provision of additional programs or the utilization of already existing programs to assist teachers in tackling the problem.

One of the best professional developments supports seen by teachers is the continuation of the national learning camp held during the summer months. Teachers want to expand the scope

of the national learning camp and further equip teachers on how to teach it to students especially in Mathematics. According to the teachers, they see the potential of the national learning camp in truly addressing the problem of learning gaps because it will allow teachers to be creative and capture the attention of the students. Volunteer teachers in the national learning camp also have the independence to use creative teaching strategies and are not constrained by the competencies they need to teach, unlike in regular class schedules. Teachers have also observed that because they are teaching basic concepts, children enjoy and are more encouraged to learn Mathematics. The teachers' observations align with the study by David et al. (2024), wherein it was found that the National Learning Camp is effective in encouraging students, especially in group discussions and hands-on exercises. The National Learning Camp (NLC) under DepEd Order No. 14 series of 2023 is a voluntary three-to-five-week learning recovery program designed by the Department of Education for public elementary and secondary schools. The purpose of the National Learning Camp is to improve learning performance and strengthen teacher capacity. It is also stipulated in the policy and guidelines of the National Learning Camp to effectively support teachers in conveying learning content and developing higher order thinking skills, including problem-solving skills among learners.

Another professional development support that the teachers are looking forward to is the sharing of teaching strategies and experiences, such as through School's Learning Action Cell (LAC) and in-service training. Sessions like these are helpful in comparing and contrasting effective teaching strategies used by Mathematics teachers. Learning Action Cell as stipulated in DepEd Order No. 35, s. 2016 defined as a "group of teachers who engage in collaborative learning sessions to solve shared challenges encountered in the school facilitated by the school head or designated LAC leader. The feedback of the teachers aligned with the study of Ortiz (2023) about Learning Action Cell. The study shows that the Learning Action Cell (LAC) can provide comprehensive continuing professional development for teachers. This can improve their professional well-being and enhance their lifelong learning. It also has a significant impact on the effectiveness of their teaching.

On the other hand, the Mid-year In-service can complement the Learning Action Cell, allowing teachers to share effective strategies and challenges with educators from various schools and districts. Teachers pointed out that the mid-year in-service training can be an effective professional development support to help teachers acquire more teaching strategies that will tackle the issues of learning gaps in mathematics. INSET, which stands for "In-Service Training", encompasses a professional development training organized either at the school level (school-based INSET) or at the division/district level (cluster-based INSET). Its purpose is to address and resolve identified areas of need as recognized by teachers or school leaders, aiming to continuously enhance their competencies. Lastly, continuous professional development such as pursuing master's or doctoral degrees is also important to consistently update teachers on new teaching strategies that are appropriate for addressing learning gaps. Mathematics teachers believe that this is necessary to become more effective in teaching students. Seminars and training sessions provided by the Department of Education (DepEd) are also needed to specifically address the learning gap issue in the country. One example mentioned by teachers is the Higher Order Thinking Skills Professional Learning Package (HOTS-PLP) in Mathematics. The learning packages for Grades 7-10 teachers of Science, Mathematics, and English/Reading aim to develop students' higher order thinking skills by creating Higher Order Thinking Skills (HOTS) questions using the Structure of the Observed Learning Outcome (SOLO) framework.

These packages include guides for teachers to effectively implement the new approach for learning.

## CONCLUSION

The profound and lingering impact of the COVID-19 pandemic on the learning progression of Junior High School students, particularly in Mathematics. Two critical learning gaps existed: lack of basic mathematical skills and poor reading comprehension. They were found to significantly hinder students' academic development. These foundational deficiencies, which should have been addressed in the elementary years, continue to obstruct students' mastery of advanced mathematical concepts in secondary education.

To address these gaps, teachers employed a variety of interventions, including classroom-based strategies like drills, peer tutoring, and one-on-one instruction, as well as take-home worksheets and assignments. While these efforts yielded promising results, they also came with substantial challenges. Teachers struggled with students' lack of motivation and mathematical anxiety, compounded by unfinished competencies and a shortage of learning resources. These difficulties not only affected the pace of instruction but also increased the risk of teacher burnout and long-term student disengagement from the subject.

If left unresolved, these learning gaps may lead to continued academic underperformance, particularly in standardized assessments. Students who lack core mathematical knowledge are at risk of developing a persistent aversion to the subject, further widening the gap in achievement. Teachers emphasized the importance of structured professional development as a critical support system. Programs such as the National Learning Camp, Learning Action Cells, in-service training, and higher education opportunities were identified as essential to equipping educators with the tools needed to close the gap and support student learning effectively.

Ultimately, the study underscores the vital role of sustained teacher support, flexible pedagogy, and systemic policy alignment in navigating the post-pandemic educational landscape. It calls for continued investment in teacher development and collaborative, data-informed strategies to rebuild student competencies and ensure that no learner is left behind.

## REFERENCES

Akintola, S. (2020). Influence of teaching and learning resources on student's performance in senior secondary schools in Gusau Local Government, Zamfara State. ADENIRAN Federal College of Education (Technical). The Eurasia Proceedings of Educational & Social Sciences (EPESS) IConSE 2020: International Conference on Science and Education.

Ambrose, S.A. (n.d.). *How learning works: 7 research-based principles for smart teaching*. San Francisco, CA: Jossey-Bass.

Baker, et al. (1997), as cited by Arifin Sultana, Md Nazirul Islam Sarker, AZM Shafiullah Prodhon (2018). Job satisfaction of public and private primary school teachers of Bogra District in Bangladesh. *Journal of Sociology and Anthropology*, 1(1), 41–46.

- Becker, N. M. (2012). Social aspects of classroom learning: Results of a discourse analysis in an inquiry-oriented physical chemistry class [Doctoral dissertation, Purdue University]. <https://docs.lib.purdue.edu/dissertations/AAI3544338/>
- Cheryan, S., Ziegler, S. A., Plaut, V. C., & Meltzoff, A. N. (2014). Designing classrooms to maximize student achievement. *Policy Insights from the Behavioral and Brain Sciences*, 1(1), 4–12. <https://www.flagworld.com.au/news/positiveClassroomenvironment...>
- Coristine, S., Russo, S., Fitzmorris, R., Beninato, P., & Rivolta, G. (2022). The importance of student-teacher relationships. *Classroom Practice in 2022*. <https://ecampusontario.pressbooks.pub/educ5202/chapter/the-importance-of-student-teacher-relationships/>
- Creswell, J. W. (2014). *Research design: Qualitative, quantitative, and mixed methods approaches*. Sage Publications.
- Creswell, J. W., & Clark, V. L. P. (2017). *Designing and conducting mixed methods research* (3rd ed.). Sage Publications.
- Cruz, J. P. (n.d.). Rappler: Will bare walls help students learn? It's for teachers to say – specialist.
- Department of Education. (2019). *Classroom design and resources: Guidelines for creating effective learning environments*. <https://www.ed.gov/classroom-design-guidelines>
- Department of Education. (2023). DepEd Order No. 21, s. 2023: Guidelines on the implementation of the Basic Education Learning Continuity Plan for SY 2023–2024 in light of the COVID-19 pandemic. [https://www.deped.gov.ph/wpcontent/uploads/2023/09/DO\\_s2023\\_021pdf](https://www.deped.gov.ph/wpcontent/uploads/2023/09/DO_s2023_021pdf)
- Department of Education. (2023). DepEd Order No. 21, Series of 2023. <https://www.philstar.com/headlines/2023/08/21/2290296/its-final-deped-requires-schools-remove-everything-classroom-walls>
- Dewey, J. (1938). *Experience and education*. Macmillan.
- Dillon, R. (2018). Room for improvement: Becoming more intentional about classroom design. *Educational Leadership*, 76(1), 40–45.
- El-Hindi, A. M., & Alkandari, A. A. (2016). Interactive learning approach: Types, advantages and challenges. *International Journal of Information and Education Technology*, 6(9), 674–678.
- Fisher, A. V. (2014). Carnegie Mellon University, Dept. of Psychology, 335-1 Baker Hall, 5000 Forbes Ave., Pittsburgh, PA 15213.
- Fisher, D., & Frey, N. (2018). *Better learning through structured teaching: A framework for the gradual release of responsibility*. ASCD.
- Frazier, B. N., & Fisher, D. L. (2018). The effects of classroom decoration on the student experience: A review of the literature. *Educational Psychology Review*, 30(1), 97–127.

- Garcia, R. M., & Patel, N. A. (2018). Impact of conducive classroom management on senior high school students' performance. *Journal of Educational Leadership*, 29(4), 289–305.
- Gump, P. V. (1987). School and classroom environments. In D. Stokols & I. Altman (Eds.), *Handbook of Environmental Psychology* (pp. 691–732). Wiley.
- Hafiazah, R. J. (2009). A study of learning environments in the Kulliyyah (faculty) of nursing, International Islamic University Malaysia. *Malaysian Journal of Learning*, 16(4), 15–24.
- Hamilton, D. L. (1976). Cognitive processes in stereotyping. *Journal of Personality and Social Psychology*, 33(4), 345–353.
- Hawthorne, H. (2022). How to create a positive learning environment. <https://www.highspeedtraining.co.uk/hub/how-to-create-a-positive-learning-environment/>
- Huang, Y., & Lee, J. C. K. (2019). Classroom environment, student engagement, and academic achievement: An exploratory study. *Journal of Environmental Psychology*, 64, 38–52.
- Johnson, M. A., & Smith, L. K. (2019). The impact of classroom design on student engagement. *Journal of Educational Psychology*, 122(3), 356–367.
- Kaplan, S. (1995). The restorative benefits of nature: Toward an integrative framework. *Journal of Environmental Psychology*, 15(3), 169–182.
- Kausar, A., Kiyani, A. I., & Suleman, Q. (2017). Effect of classroom environment on academic achievement. *Journal of Education and Practice*, 8(24).
- Kidd, D. H., & Cayci, B. (2006). The impact of classroom environment on student learning. *Journal of Educational Research*, 99(5), 283–293.
- Kingdon, J. W. (1984). *Agendas, alternatives, and public policies*. Little, Brown.
- Kolb, D. A. (1984). *Experiential learning: Experience as the source of learning and development*. Prentice Hall.
- Lazarus, R. S., & Folkman, S. (1984). *Stress, appraisal, and coping*. Springer.
- Lee, J. K., & Brown, S. P. (2018). Classroom design and student engagement. *Educational Sciences Quarterly*, 12(1), 56–72.
- Lincoln, Y. S., & Guba, E. G. (1985). *Naturalistic inquiry: A paradigm for the 21st century*. Sage Publications.
- Llego, M. A. (2023). AI revolutionizing education: Enhancing teaching and learning experiences. TeacherPH. <https://www.teacherph.com/ai-revolutionizing-education-enhancing-teaching-and-learning-experiences/>

Post-pandemic challenges in addressing learning gaps of students in Mathematics: Experiences of the Junior High School teachers of the Division of Gingoog City

- Mahisay, H. F. L., & Abarquez, C. A. (2024). Teachers' acceptability in the implementation of teachers' bare-walls classroom policy. *Psychology and Education: A Multidisciplinary Journal*, 26(5), 444–462.
- Martinez, R. S., & Williams, A. C. (2020). Enhancing learning environments. *Educational Research Quarterly*, 45(2), 167–182.
- Muster, V., Iran, S., & Munsch, M. (2022). The cultural practice of decluttering as household work. *Frontiers in Sustainability*, 3, 958538. <https://doi.org/10.3389/frsus.2022.958538>
- Miller, E. L., & Brown, K. J. (2020). Teacher-student interactions and academic success. *Journal of School Psychology*, 78, 45–62.
- NBC News. (2014). The bare walls theory: Do too many classroom decorations harm learning? <https://www.nbcnews.com/news/education/bare-walls-theory-do-too-many-classroom-decorations-harm-learning-n223436>
- Nelson-Danley, K. (2019). Classroom organization ideas. TeachHub. <https://www.teachhub.com/classroom-management/2019/09/classroom-organization-ideas/>
- Palinkas, L. A., et al. (2015). Purposeful sampling for qualitative data collection. *Administration and Policy in Mental Health*, 42(5), 533–544.
- Rimm-Kaufman, S. E., & Sandilos, L. E. (2019). Improving students' relationships with teachers. American Psychological Association.
- Seva, M. A. M., & Escote, M. J. V. (2024). Peeling off the layers: Views on bare-walled classroom. *Educational Research Journal*, 10(4).
- Scientific Study. (2022). Why it's important to decorate classrooms very often? <https://www.linkedin.com/pulse/why-its-important-decorate-classrooms-very-often-scientificstudy-in/>
- Scriven, M. (1991). *Evaluation thesaurus*. Sage Publications.
- Smith, J., & Johnson, L. (2018). Exploring the relationship between teachers' happiness and work-life balance. <https://www.sciencedirect.com/science/article/pii/S1877042813017023>
- Sweller, J. (1988). Cognitive load during problem-solving. *Cognition and Instruction*, 5(4), 375–426.
- Tubo, A. (2023). The importance of school classroom conditions and teacher characteristics. *Educational Review*. <https://doi.org/10.1080/00131911.2019>
- Vygotsky, L. S. (1978). *Mind in society: The development of higher psychological processes*. Harvard University Press.
- Weinstein, T., & Mignano, A. (2018). Creating a positive learning environment. *Journal of Educational Psychology*, 110(2), 190–206.
- Weiss, C. H. (1972). *Evaluation research: Methods for assessing program effectiveness*. Prentice Hall.

Julius F. Baiño

Wiggins, G., & McTighe, J. (2005). *Understanding design*. ASCD.

Williams, C. D. (2016). The role of motivation and engagement in conducive classroom environments. *Educational Psychology Review*, 28(4), 587–602.

Williams, P., Green, K., Ford, L., & Roach, H. (2019). The impact of classroom design on learning. *Educational Psychology Review*, 34(1), 1–22. <https://doi.org/10.1007/s10648-021-09609-5>

Wong, H. K., & Wong, R. T. (2018). *The first days of school: How to be an effective teacher*. Harry K. Wong Publications.