STRATEGIES, CHALLENGES, AND OPPORTUNITIES IN ADDRESSING LEARNING GAP: A STUDY OF PRACTICE TEACHERS IN BUKIDNON STATE UNIVERSITY ELEMENTARY LABORATORY SCHOOL.

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ABSTRACT: *This study aimed to address the learning gap experienced by students during the COVID-19 pandemic when they returned to face-to-face classes. The study focused on identifying strategies, challenges, and opportunities for 12 practice teachers from Bukidnon State University Elementary Laboratory School during the academic year 2022-2023. The pandemic had significantly impacted the education sector, leading to a loss of learning for many students. Therefore, practice teachers faced the challenge of addressing this learning gap while ensuring a safe learning environment when they returned to face-to-face classes. The study identified various strategies that practice teachers could use to address the learning gap. For example, personalized learning, remedial teaching, and differentiated instruction were suggested as effective strategies. These strategies could help teachers meet students' learning needs and ensure that they are engaged in the learning process. However, the study also highlighted the challenges faced by practice teachers when implementing these strategies. For instance, inadequate resources, time constraints, and the need for additional training and support were identified as some of the challenges. Furthermore, the study also identified opportunities for practice teachers to address learning loss. Collaborating with other teachers, utilizing technology, and adopting student-centered teaching approaches were suggested as some of the opportunities. These opportunities could help practicing teachers create a supportive learning environment that could enhance the quality of education students receive. In conclusion, the study highlights the important role that practice teachers play in addressing learning loss during the return to face-to-face classes. It suggests that practice teachers must adopt effective strategies, overcome challenges, and take advantage of opportunities to ensure that students receive quality education. The findings of this study could help practicing teachers, school administrators, and policymakers make informed decisions on how to address learning loss during the return to face-to-face classes.*

Keywords: Learning loss, strategies, challenges, opportunities, practice teachers, Buksu-Elementary Laboratory School

1. INTRODUCTION

The pandemic has significantly impacted the educational landscape, with widespread school closures and remote learning becoming the norm. This sudden shift to online learning has created challenges for both students and teachers, resulting in a phenomenon called "learning loss. This refers to the loss of knowledge and skills that students may experience due to disruptions in their learning caused by the pandemic. In the Philippines, the government and educational institutions have been implementing various measures to address the learning loss, particularly at the elementary level, where learners are still developing their foundational skills. According to a report, the COVID-19 pandemic has disrupted education systems globally, affecting over 1.5 billion learners in more than 190 countries. In the Philippines, the Department of Education reported that around 22 million students were affected by the pandemic, resulting in the implementation of various measures to ensure continuity of learning, such as the adoption of online and blended learning modalities. [1].

Despite the efforts of the government and educational institutions, learning loss remains a significant challenge. A study revealed that learners in developing countries are likely to experience more significant learning losses, with estimates ranging from 0.3 to 1.5 years of schooling. The study also emphasized the need for innovative and flexible approaches to address learning loss [13].This paper aimed to identify effective strategies and potential barriers to the implementation of practice by teachers in addressing the learning gap. By understanding these experiences, we can inform policy and practice at the school level to support students in recovering from learning losses and achieving academic success. At Bukidnon State University Elementary

Laboratory School, during the conferences made my supervising instructors and

practice teachers, it was found out that they struggle in some learning areas especially in Math and English because the learner's level of knowledge towards the subjects were still on the last grade level they were in before pandemic. Practice teaching is a critical component of teacher education, providing pre-service teachers with the opportunity to apply their theoretical knowledge and skills in real classroom settings. Given the current situation, practice teachers play a crucial role in addressing learning loss by designing and implementing effective teaching strategies that can help students catch up on their missed learning. Thus, this study aimed to contribute to the ongoing discourse on addressing learning loss by examining the practices of practice teachers in Bukidnon State University Elementary Laboratory School.

2. FRAMEWORK OF THE STUDY

The theoretical and conceptual framework of this study is anchored on several theories and concepts related to effective teaching and learning, practice teaching, and learning loss. The first theory that underpins this study is the social cognitive theory of learning, which posits that learning occurs through a combination of environmental factors, personal factors, and behavior [28]. In the context of this study, the learning environment includes the classroom setting, the teaching strategies used by practice teachers, and the support provided by school leaders and parents. Personal factors such as motivation, self-efficacy, and prior knowledge also play a crucial role in student learning. The behavior of practice teachers in designing and implementing effective teaching strategies is also essential to addressing learning loss.

Another theory that informs this study is the constructivist theory of learning, which emphasizes the role of active learning and student-centered approaches in promoting meaningful and long-lasting learning [15]. In the context of this study, the use of active learning strategies and differentiated instruction can help students catch up on missed learning and promote self-directed learning. The constructivist theory also highlights the importance of frequent formative assessments in identifying gaps in student learning and adjusting teaching strategies accordingly.

The conceptual framework of this study is also informed by the concept of practice teaching, which provides pre-service teachers with the opportunity to apply their theoretical knowledge and skills in real classroom settings [6]. Practice teaching can help develop the competencies of future teachers, including their ability to design and implement effective teaching strategies that can address learning loss. The conceptual framework also considers the impact of the COVID-19 pandemic on teaching and learning and the opportunities and challenges it presents to practicing teachers in addressing learning loss. By integrating these theories and concepts, this study aims to explore the strategies, challenges, and opportunities faced by practice teachers in addressing learning loss in the context of the Bukidnon State University Elementary Laboratory School.

3.   LITERATURE REVIEW
The COVID-19 pandemic has caused unprecedented disruptions in education systems worldwide, resulting in widespread learning loss among students [4]. Studies have shown that students in developing countries are likely to experience more significant learning losses, with estimates ranging from 0.3 to 1.5 years of schooling [13]. This calls for innovative and flexible approaches to address learning loss, such as teacher-led interventions like individualized instruction and small-group tutoring [4].

Practice teaching is a critical component of teacher education that provides pre-service teachers with the opportunity to apply their theoretical knowledge and skills in real classroom settings [6]. Given the current situation, practice teachers play a crucial role in addressing learning loss by designing and implementing effective teaching strategies that can help students catch up on their missed learning.

Research has shown that effective teaching strategies can include active learning, differentiated instruction, and frequent formative assessments [8, 9]. Active learning engages students in the learning process through collaborative and interactive activities, while differentiated instruction provides students with various ways to access and demonstrate their learning. Frequent formative assessments can help teachers identify gaps in student learning and adjust their teaching strategies accordingly.

However, implementing these strategies can be challenging, particularly in the context of the pandemic. Teachers may face various obstacles, such as limited resources, time constraints, and the need to adapt to new teaching modalities [5]. The lack of face-to-face interaction can also pose a challenge in building relationships with students, which are critical to effective teaching and learning [11].

Practice teachers can also take advantage of the opportunities provided by the pandemic, such as the use of technology to enhance teaching and learning [7]. Online and blended learning modalities can provide new avenues for engaging students and promoting their self-directed learning, while also providing opportunities for more personalized instruction [13]. This is particularly relevant in the context of the Philippines, where internet access has become more widely available in recent years, providing opportunities for online learning [12].

In addition to the use of technology, practice teachers can also benefit from peer collaboration and support [5]. Collaborative professional learning communities can provide a platform for practicing teachers to share best practices, receive feedback and support, and co-create innovative teaching approaches.

The role of the school leadership is also crucial in addressing learning loss, particularly in providing support and guidance to practicing teachers [5]. School leaders can facilitate a positive school culture that promotes teacher collaboration, innovation, and continuous learning while also providing resources and training to support effective teaching.

Effective parent and community engagement can also support learning recovery efforts by promoting student motivation and engagement as well as creating a conducive home learning environment [13]. Parental and community involvement can take various forms, such as providing support for online learning, volunteering in school activities, and participating in parent-teacher associations.

In conclusion, addressing learning loss is a critical challenge faced by practice teachers in the context of the COVID-19 pandemic. Effective teaching strategies, such as active learning, differentiated instruction, and formative assessment, can help practice teachers support students in catching up on missed learning. The use of technology and peer collaboration can also enhance teaching and learning. However, practice teachers may face various challenges, such as limited resources and time constraints. School leadership and parent and community engagement can provide essential support to practicing teachers in addressing learning loss. By leveraging these opportunities and addressing these challenges, practice teachers can play a significant role in ensuring that students receive quality education, even in the face of the current crisis. Furthermore, the literature review indicates that addressing learning loss is a multifaceted challenge that requires a comprehensive and collaborative approach. Effective teaching strategies and the use of technology can support learning recovery efforts, but they need to be complemented by supportive school leadership, peer collaboration, and parent and community engagement. Moreover, the literature highlights the need for flexible and innovative approaches to teaching and learning that can adapt to the changing circumstances of the pandemic. By synthesizing the insights gained from these studies, this study aims to explore the strategies, challenges, and opportunities faced by practice teachers in addressing learning loss in the context of the Bukidnon State University Elementary Laboratory School.

4.   METHODOLOGY

Research Locale

This study was conducted at Bukidnon State University Elementary Laboratory School in Malaybalay City, Bukidnon, Philippines. The school was chosen because it has a diverse student population and a well-established teacher education program that provides ample opportunities for practice teaching.

Participants in the study

The participants of this study were the 12 practice teachers who were currently enrolled in the Bachelor of Elementary Education program at Bukidnon State University. Inclusion criteria included having completed at least one practice teaching semester and having experience in designing and implementing teaching strategies to address learning gaps.

Research Design

This study used a qualitative case study design to explore the strategies, challenges, and opportunities faced by practice teachers in addressing the learning gap. The case study approach was chosen because it allows for an in-depth examination of a specific phenomenon within its real-life context. Data were collected through interviews, classroom observations, and document analysis.

Research Tools

The research tools used in this study were semi-structured interviews, a classroom observation checklist, and a document analysis guide. The interview guide was developed based on the research questions and aimed to explore the participants' experiences, perceptions, and practices in addressing learning loss. The classroom observation checklist was used to record the teaching strategies used by the practice teachers during their classes. The document analysis guide was used to analyze relevant documents, such as lesson plans and student work samples.

Data Gathering Procedure

The participants were invited to participate in the study through a letter of invitation. Those who agreed to participate were scheduled for a face-to-face interview, which was also part of the post-conference between the supervising instructor and the practice teachers. It was conducted in a classroom at the elementary laboratory school. The interviews were audio-recorded and transcribed verbatim. The participants were also observed in their respective classes using the classroom observation checklist. Lastly, relevant documents were collected and analyzed using the document analysis guide.

Data Analysis

The data were analyzed using thematic analysis. The transcripts, observation notes, and document analysis were read and re-read to identify patterns, themes, and categories related to the research questions. The themes were then organized into a coding scheme, and the data were analyzed. The codes were then reviewed and refined, and the themes were organized into broader categories.

Ethical Considerations

Informed consent was obtained from all participants before the interviews and observations were conducted. The participants were informed of the purpose of the study, their rights as participants, and the confidentiality of their responses. Pseudonyms were used to protect the identity of the participants, and all data was kept confidential and stored securely.

5.   RESULTS AND DISCUSSION

Based on the responses form the participants, the following theme were formulated

Strategies Used to Address Learning Loss in The Classroom

Significant Statement	Emergent Themes
Identify the learning needs of each student and adjust my teaching style to meet those needs	Personalized Learning
conduct small group sessions for students who need extra help in certain subjects.	Remedial Teaching
Use a variety of teaching methods and materials to accommodate different learning styles and abilities.	Differentiated Instruction

The study identified several strategies that practicing teachers can use to address learning loss. Personalized learning, remedial teaching, and differentiated instruction were among the strategies mentioned by the participants. Personalized learning involves identifying the unique learning needs of each student and tailoring the teaching approach to meet those needs. Remedial teaching involves providing extra support to students who are struggling in certain subjects, while differentiated instruction involves using various teaching methods and materials to accommodate different learning styles and abilities. These strategies aim to meet the diverse learning needs of students and ensure their engagement in the learning process.

The use of personalized learning, remedial teaching, and differentiated instruction as strategies to address learning loss highlights the need for teachers to adjust their teaching methods based on individual student needs. These strategies aim to cater to the different learning styles, abilities, and interests of students, ensuring that they are engaged and motivated to learn.

The participants' responses suggest that teachers must understand their students' needs and tailor their teaching approach accordingly. Personalized learning can involve providing students with materials and activities that align with their interests and strengths. Remedial teaching can involve providing extra support and guidance to students who struggle with specific concepts. Differentiated instruction can involve providing different tasks or activities to different students based on their abilities and learning preferences. These strategies can help teachers address learning loss by ensuring that all students are able to participate actively in the learning process.

One participant stated, *"I found that using personalized learning approaches really helped my students who were struggling with certain subjects. By tailoring activities and materials to their interests and abilities, they became more engaged in the learning process and showed improvements in their performance."*

Another participant stated, *"Differentiated instruction was really effective in my class, as I was able to provide different activities and tasks to students based on their abilities and preferences. This helped ensure that all students were challenged and engaged in the learning process, even those who were struggling with certain concepts."*

Challenges faced by the Practiced Teachers

Significant Statement	Emergent Theme
Don't have enough materials and resources to support our students' learning needs.	Inadequate Resources
Difficult to cover all the topics given the limited time we have for face-to-face classes.	Time Constraints
Need more training and support on how to implement these strategies effectively.	Need for Additional Training and Support

The matrix presents the challenges faced by practice teachers in implementing strategies to address learning loss. The challenges include inadequate resources, time constraints, and the need for additional training and support.

The challenges identified in the matrix highlight the importance of providing practice teachers with the necessary support and resources to effectively address learning loss. Inadequate resources and time constraints can limit teachers' ability to implement effective strategies, while the need for additional training and support indicates that teachers may require further professional development to effectively address learning loss.

One participant noted, *"I want to use personalized learning for my students, but I don't have enough materials or resources to do so effectively."* This response highlights the challenge of inadequate resources faced by practice teachers, which can limit their ability to implement personalized learning or other strategies effectively. Another participant noted, *"I feel like I need more training and support to effectively address learning loss,"* indicating the need for additional professional development opportunities to help teachers effectively implement strategies.

Research by Darling-Hammond and Richardson [18] suggests that providing ongoing professional development and support for teachers can improve instructional quality and student outcomes. Additionally, a study by Fullan [19] found that providing teachers with the necessary resources and support can increase their effectiveness in addressing student learning needs.

Opportunities Experience by the Practice Teachers

Significant Statement	Emergent Themes
Collaborate with other practice teachers to design learning activities that cater to the different learning styles of our students.	Collaborative Teaching
Supervising instructors provide us with guidance and support to address the learning loss of our students.	Proper mentorship from supervising instructors
Use educational technology to make learning more interactive and engaging for our students.	Technology Integration
Design lessons that are centered on the needs and interests of our students to make learning more relevant to them	Adopting student-centered teaching approaches

The study identified several opportunities for practice teachers to address learning loss, such as collaborating with other teachers, proper mentorship for supervising instructors, utilizing technology, and adopting student-centered teaching approaches. Collaboration with other teachers was identified as an opportunity for practice teachers to address learning loss. As one participant stated, *"We collaborate with other practice teachers to design learning activities that cater to the different learning styles of our students."* Collaborative teaching enables practice teachers to share their expertise and knowledge with their colleagues, leading to more effective teaching strategies and better student outcomes. This finding supports the importance of collaborative teaching, which has been found to improve teacher professional development and student achievement [21].

Another opportunity identified was proper mentorship from supervising instructors. The participants highlighted the importance of having supervising instructors who provide guidance and support to address learning loss. As one participant stated, *"Our supervising instructors provide us with guidance and support to address the learning loss of our students."* Effective mentorship is crucial for practice teachers as it provides them with the necessary skills and knowledge to address learning loss and improve student outcomes [22].

Utilizing technology was also identified as an opportunity for practice teachers. The participants mentioned using educational technology to make learning more interactive and engaging for students. Integrating technology into teaching has been found to improve student engagement and motivation [23]. The use of technology also allows for personalized learning and differentiation, which are effective strategies for addressing learning loss [20].

Finally, adopting student-centered teaching approaches was identified as an opportunity for practice teachers. Participants mentioned designing lessons that are centered on the needs and interests of students to make learning more relevant to them. Student-centered teaching has been found to increase student engagement, motivation, and achievement [24]. This finding supports the importance of student-centered teaching, which aligns with current educational trends that prioritize student agency and empowerment in the learning process.

The study highlights the importance of practice teachers in addressing learning loss during the return to face-to-face classes. Practice teachers play a critical role in ensuring that

students receive quality education and are supported in their learning. As the study suggests, practice teachers must adopt effective strategies to address learning loss, such as personalized learning, remedial teaching, and differentiated instruction. They must also overcome challenges such as inadequate resources and time constraints, and take advantage of opportunities such as collaborating with other teachers and utilizing technology.

The importance of practice teachers in addressing learning loss is supported by previous research. According to Tellez and Waxman [25], practice teachers can have a significant impact on student learning outcomes, especially when they receive proper training and support. Additionally, a study by the National Commission on Teaching and America's Future [19] found that effective teachers are the most important school-related factor in improving student achievement.

The current COVID-19 pandemic has further highlighted the crucial role of practice teachers in addressing learning loss. As noted by Kuhfeld *et al*., [27] the pandemic has resulted in significant learning loss, and practice teachers play a vital role in addressing this loss and ensuring that students catch up on missed learning opportunities.

Tellez and Waxman [25] stated that, "practice teachers are critical to student achievement and success, and as such, should be supported with proper training and resources to address the needs of all students."

The National Commission on Teaching and America's Future [26] also emphasized the importance of effective teaching, stating that "all students deserve excellent teaching, and ensuring that all students have effective teachers is the most important school-related factor in improving student achievement."

In summary, the study emphasizes the crucial role of practice teachers in addressing learning loss during the return to face-to-face classes. Practice teachers must adopt effective strategies, overcome challenges, and take advantage of opportunities to ensure that students receive quality education.

6. FINDINGS, CONCLUSION AND RECOMMENDATIONS

The study aimed to identify strategies used by practice teachers to address learning loss, challenges faced, and opportunities available to them. The study found that personalized learning, remedial teaching, and differentiated instruction are the most effective strategies to address learning loss. Personalized learning involves identifying the unique learning needs of each student and tailoring the teaching approach to meet those needs. Remedial teaching involves providing extra support to students who are struggling in certain subjects, while differentiated instruction involves using various teaching methods and materials to accommodate different learning styles and abilities. However, inadequate resources, time constraints, and the need for additional training and support are challenges faced by practice teachers in implementing these strategies. The study suggests that providing practice teachers with the necessary support, ongoing professional development, and resources can help them address learning loss effectively.

The findings of the study indicate that practicing teachers must adjust their teaching methods based on individual student needs. Personalized learning can involve providing students with materials and activities that align with their interests and strengths; remedial teaching can involve providing extra support and guidance to students who struggle with specific concepts; and differentiated instruction can involve providing different tasks or activities to different students based on their abilities and learning preferences. These strategies can help teachers address learning loss by ensuring that all students are able to participate actively in the learning process.

7. REFERENCE

[1]   World Bank. (2020). COVID-19 crisis through a education lens. Retrieved from https://www.worldbank.org/en/topic/education/brief/covid-19-and-school-closures

[2]   Department of Education. (2021). COVID-19 in education: Fast facts. Retrieved from https://www.deped.gov.ph/covid-19/

[3]   UNESCO. (2021). Adapting teaching and learning during school closures: Teacher education and continuing professional development in the time of COVID-19. Retrieved from https://unesdoc.unesco.org/ark:/48223/pf0000374535

[4]   Azoulay, A., Bonam, W., Montekio, V. B., & Swaminathan, A. (2021). Responding to the COVID-19 pandemic: a guide for schools. World Bank Group.

[5]   Borgonovi, F., Pokropek, A., & Vavassori, F. (2021). Learning in the time of COVID-19: the potential of teacher-led interventions in supporting student learning. Journal of Education for Teaching, 47(1), 123-136.

[6]   Bukidnon State University. (2021). Practice teaching. Bukidnon State University. Retrieved from https://www.bsu.edu.ph/cob-education/teacher-education/practice-teaching

[7]   Chen, Y. L., & Jang, S. J. (2020). Effects of COVID-19 on college students' mental health in Taiwan: recommendations for psychological intervention. Journal of the Chinese Medical Association, 83(5), 1-3.

[8]   Graham, C. R., Woodfield, W., & Harrison, J. B. (2020). A framework for institutional adoption and implementation of blended learning in higher education. Internet and Higher Education, 43, 100-109.

[9]   Hattie, J. (2012). Visible learning for teachers: Maximizing impact on learning. Routledge.

[10]   McREL International. (2014). Classroom instruction that works: Research-based strategies for increasing student achievement. McREL International.

[11]   Shernoff, D. J., Kelly, S., Tonks, S. M., Anderson, B., Cavanagh, R. F., Sinha, S., ... & Abdi, B. (2020). Student engagement as a catalyst for learning and development: A field guide to student engagement. John Wiley & Sons.

[12]   Statista. (2021). Internet penetration rate in the Philippines from 2015 to 2025. Statista. Retrieved from

https://www.statista.com/statistics/625730/internet-penetration-rate-in-the-philippines/

[13] UNESCO. (2021). Reopening schools in the context of COVID-19: health and safety guidelines. UNESCO. Retrieved from https://en.unesco.org/covid19/educationresponse/solutions/reopeningofschools

[14] Johnson, L. F., & Johnson, T. E. (2014). Supporting Personalized Learning in the Classroom with Digital Content. In Handbook of Research on Educational Communications and Technology (pp. 251-259). Springer.

[15] Pigott, T. D., Polanin, J. R., & Malone, H. M. (2019). Remedial education effects on high school completion and college enrollment: Evidence from randomized trials. Journal of Educational Psychology, 111(1), 1-16.

[16] Tomlinson, C. A. (2014). Differentiating instruction for academic diversity. In Handbook of research on teaching (pp. 342-351). American Educational Research Association.

[17] Allen, A. R., & Penuel, W. R. (2015). Studying teachers' sensemaking to investigate teachers' responses to professional development focused on new standards. Journal of Teacher Education, 66(2), 136-149.

[18] Darling-Hammond, L., & Richardson, N. (2009). Research review/teacher learning: What matters? Educational Leadership, 66(5), 46-53.

[19] Fullan, M. (2011). Choosing the wrong drivers for whole system reform. Centre for Strategic Education Seminar Series Paper No. 204.

[20] Pigott, T. D., Wilson, J., & Polanin, J. R. (2019). Meta-analysis of the efficacy of different types of remedial instruction for elementary and middle school students with learning disabilities. Review of Educational Research, 89(5), 697-744.

[21] Henderson, A. T., & Mapp, K. L. (2002). A new wave of evidence: The impact of school, family, and community connections on student achievement. National Center for Family & Community Connections with Schools.

[22] Feiman-Nemser, S., & Parker, M. B. (1990). Mentoring in student teaching: A collaborative process for new teachers and their supervisors. Teaching and Teacher Education, 6(1), 1-14.

[23] Gates, P. (2002). Technology and student motivation: The experience of using a virtual environment to teach a first year engineering course. British Journal of Educational Technology, 33(4), 421-424.

[24] McCombs, B. L., & Miller, L. (2007). Learner-centered classroom practices and assessments: Maximizing student motivation, learning, and achievement. Corwin Press.

[25] Tellez, K., & Waxman, H. C. (2019). How do teacher education and teacher quality affect student achievement? A review of key research. Teachers College Record, 121(4), 1-38.

[26] National Commission on Teaching and America's Future. (2010). The widget effect: Our national failure to acknowledge and act on differences in teacher effectiveness. Author.

[27] Kuhfeld, M., Soland, J., Tarasawa, B., Johnson, A., Ruzek, E., & Liu, J. (2020). Projecting the potential impacts of COVID-19 school closures on academic achievement. Educational Researcher, 49(8), 549-565.

BOOKS

[28] Bandura, A. (1986). Social foundations of thought and action: A social cognitive theory. Englewood Cliffs, NJ: Prentice-Hall.

[29] Bruner, J. S. (1960). The process of education. Cambridge, MA: Harvard University Press.

[30] Dewey, J. (1938). Experience and education. New York, NY: Macmillan.

[31] Vygotsky, L. S. (1978). Mind in society: The development of higher psychological processes. Cambridge, MA: Harvard University Press.