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Metacognitive Learning Approaches and Students' Performance in MAPEH

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Abstract: Metacognition is now recognized as a crucial aspect of successful learning, which encompasses an individual's capacity to organize, supervise, and assess their learning methods. The study utilized a descriptive-correlational research design. The respondents of the study for the quantitative data consisted of 175 teachers out of 320 total number of MAPEH teachers currently teaching in various high schools within the Schools Division of Capiz chosen using random sampling. The researcher utilized a researcher-made questionnaire that was carefully designed and underwent validation to measure and gather data needed for this research. The gathered data were then organized, tallied, tabulated, and submitted to the statistician for analysis using the Statistical Package for the Social Sciences (SPSS) software. The researcher found that the level of metacognitive learning approaches as a whole group and in terms of explicit instructions, encouraging self-assessment and reflection, fostering a growth mindset, utilizing technology, creating a supportive learning environment, the teachers have a "Very High" level of metacognitive learning approaches. The level of performance in MAPEH of the students was "Outstanding". There was no significant relationship between the teachers' metacognitive learning approaches and their students' performance in MAPEH.

Keywords: Metacognitive Learning Approaches, Performance, Students, Teachers, and MAPEH

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INTRODUCTION

Metacognition, frequently defined as "thinking about thinking," is now recognized as a crucial aspect of successful learning. It encompasses an individual's capacity to organize, supervise, and assess their learning methods. As students enhance their metacognitive abilities, they become more engaged and purposeful learners, able to assume responsibility for their education and adjust their learning approaches to suit their requirements (Sword, 2021).

MAPEH, which stands for Music, Arts, Physical Education, and Health, is vital for the overall development of students. This subject supports cognitive development and promotes creativity, emotional intelligence, physical health, and cultural understanding. By incorporating metacognitive strategies into MAPEH instruction, teachers can help students become more involved, thoughtful, and accomplished learners in these fields (Valencia, 2016).

In the field of research, there has been an increasing focus on the significance of metacognition in education, especially in subjects such as Music, Arts, Physical Education, and Health (MAPEH). Metacognition encompasses an individual's capacity to organize, supervise, and assess their learning methods. According to Sword (2021), this cognitive ability is essential for students to develop as autonomous and proficient learners. The use of metacognitive methods in teaching MAPEH is especially important given the unique characteristics of these

subjects. MAPEH incorporates theoretical knowledge, practical skills, and opportunities for creative expression. By honing their metacognitive abilities, students can better grasp their learning processes, recognize their strengths and weaknesses, and adapt their approaches accordingly. This can result in enhanced learning achievements and a greater understanding of and enthusiasm for MAPEH.

Prior research has examined how metacognitive methods can be beneficial in different educational settings, such as reading, math, and science. However, there is a lack of research specifically delving into the use of metacognition in MAPEH instruction. This presents an important opportunity for educational researchers to explore how metacognitive approaches can improve student learning and participation in these subjects. Moreover, in the context of the Visayas region in the Philippines, there hasn't been much exploration into incorporating metacognitive approaches into MAPEH teaching. Despite the country's strong focus on arts, music, physical education, and health education, there hasn't been extensive research on incorporating metacognitive strategies to improve student learning in these subjects.

The Visayas area, recognized for its diverse cultural legacy and varied customs, provides an exceptional setting for exploring the suitability of metacognitive methods in MAPEH. The region's focus on ingenuity, self-expression, and physical engagement corresponds effectively with the objectives of MAPEH education. Nonetheless, obstacles like scarce resources, differing educational criteria, and cultural factors could affect the integration of metacognitive approaches in educational settings.

Numerous studies have been carried out to investigate metacognition in the Philippine education, but their emphasis has mainly been on broad academic disciplines. As a result, there is a noticeable gap in understanding how metacognitive learning approaches function within specific subject areas like MAPEH, especially within the Visayas region. The lack of targeted research in this area suggests an opportunity to explore how reflective thinking and self-regulation can be applied to enhance teaching and learning in MAPEH.

This gap became particularly evident to the researcher through both personal and academic experience. As a former student and an educator, the researcher encountered both effective and ineffective learning strategies to recognize that academic success often hinges not just on effort or intelligence, but on the learner's ability to think about their own thinking. This realization sparked a deep interest in metacognition, which has been shown to significantly improve student outcomes across disciplines by helping learners become more reflective, independent, and self-directed.

The researcher observed that many students do not struggle due to a lack of capability, but rather due to an absence of strategies that teach them how to learn. This insight drove a strong commitment to explore metacognitive learning not merely as a theoretical concept, but a practical approach that can transform classroom instruction and empower learners. Thus, the researcher conducted the study to address the gap by examining how metacognitive approaches can enhance MAPEH learning outcomes. This study examined the relationship between metacognitive learning methods employed by MAPEH teachers and students' performance in MAPEH. Furthermore, this study identified effective metacognitive learning strategies and provided recommendations for improving MAPEH instruction through the integration of metacognitive learning approaches.

Problem statement

Generally, this study aimed to describe the metacognitive learning approaches employed by MAPEH teachers in the Schools Division of Capiz and the performance of the students in MAPEH during the school year 2024-2025.

Specifically, it sought to answer the following questions:

1. What is the level of metacognitive learning approaches applied by MAPEH teachers as a whole and in terms of explicit instruction, encouraging self-assessment and reflection, fostering a growth mindset, utilizing technology, and creating a supportive learning environment?
2. What is the level of students' performance in MAPEH?
3. Is there a significant relationship between metacognitive learning approaches employed by MAPEH teachers and the performance of students?

Theoretical framework

The nature of the problem and the aims of this study can be understood insofar as the following theories were considered and examined. These theories serve as a set of guidelines for gathering, analyzing, and evaluating the facts that form the focus of this study.

This study was supported by the Metacognitive Theory developed by John Flavell in 1979. The metacognitive theory emphasizes the importance of individuals' awareness and regulation of their own cognitive processes during learning. Flavell introduced the concept of metacognition, which refers to "thinking about thinking." According to his theory, metacognition involves two primary components: metacognitive knowledge and metacognitive regulation. Metacognitive knowledge includes awareness of one's cognitive abilities, understanding different strategies for learning, and knowing when and why to apply them. Metacognitive regulation involves actively monitoring and controlling cognitive processes through activities like planning, self-monitoring, and evaluating. This theory supports the idea that when teachers use metacognitive strategies, such as self-assessment, reflection, and explicit instruction, students can better understand their learning processes, leading to improved learning.

The Metacognitive Theory was directly related to this study, which explored theteacher's metacognitive learning approaches and how it affectsstudents' academic performance in MAPEH. When teachers apply metacognitive approaches, they create a learning environment that promotes students' ability to think and take control of their own learning. This is especially relevant in MAPEH as it requires both conceptual understanding and practical skills. This study was based on the idea that teachers who consistently use metacognitive learning approaches can influence students to adopt similar strategies, potentially leading to better academic outcomes. Therefore, the Metacognitive Theory by John Flavell provided a foundation for this study to understand how teachers' metacognitive learning approaches can shape students' ability to become self-regulated and reflective learners.

Another theory on which this study was anchoredwas the Constructivist Learning Theory proposed by Lev Vygotsky in 1978. This theory highlights the role of social interaction, cultural context, and the active involvement of learners in constructing their own knowledge. It highlights the importance of reflection, self-regulation, and the Zone of Proximal Development (ZPD), which is the range of tasks that a learner can perform with guidance. This theory suggests that metacognitive strategies, such as encouraging self-reflection and fostering a growth mindset, align well with a constructivist approach. When teachers apply these strategies, students can internalize concepts and take an active role in their learning.

In the context of this study, the Constructivist Learning Theory enforced the idea that teachers' role goes beyond delivering content. It not only relates to but also strengthens the

foundation of this study by framing teachers as critical agents in shaping students' learning. Teachers act as facilitators who provide meaningful guidance and create opportunities for students to reflect on and regulate their thinking processes. This theory validated the focus of this study on the metacognitive learning approaches employed by teachers and underscored its impact on students' academic performance.

Lastly, another theoretical support for this study was the Self-Regulated Learning Theory propounded by Barry Zimmerman in 1989. Self-Regulated Learning Theory emphasizes the active role of learners in managing their own learning process through a combination of cognitive, behavioral, and motivational strategies. This theory is based on the idea that students are not passive recipients of information but are active participants in their learning. The theory involves three key phases: forethought, where learners set goals and plan strategies; performance, where they monitor and regulate their progress; and self-reflection, where they evaluate their performance and adjust for future learning. This theory highlights how self-regulation allows learners to take control of their educational journey, improving their ability to learn independently, stay motivated, and achieve better academic outcomes. By using self-regulated strategies, students can better manage challenges, enhance their critical thinking skills, and become more effective learners in various contexts.

The Self-Regulated Theory has provided a strong groundwork by supporting the idea of this study that when teachers integrate metacognitive learning approaches into their teaching, they not only enhance students' content knowledge but also equip them with self-regulatory skills essential for academic success. This theory reinforced the core objective of this study to examine how the metacognitive approach influences students' academic performance. It underlined the importance of instructional practices that go beyond content delivery and focus on empowering students to become active, self-reflected, and self-directed learners. This alignment further validates the study's premise that fostering self-regulation through metacognitive learning approaches can lead to more meaningful and sustained academic achievements.

METHODOLOGY

This descriptive-correlational research focused on determining the relationship between the metacognitive learning approaches employed by MAPEH teachers and the performance of students in MAPEH during the school year 2024-2025. The respondents in this study were 175 out of 320 MAPEH teachers currently employed in various schools within the Division of Capiz. Respondents were selected through stratified random sampling.

In this study, the researchers used a researcher-made questionnaire. Prior to the study, pilot testing was conducted to assess the validity of the questionnaire. An interview was also conducted with teachers to determine their understanding and use of metacognitive learning approaches. Students, selected through random sampling, were also interviewed to identify whether the teachers applied metacognitive learning approaches in their lessons.

Mean was used to determine the level of metacognitive learning approaches employed by the MAPEH teachers and the students' performance.

Pearson r, set at a .05 alpha level, was utilized to determine the statistical relationship between the metacognitive learning approaches and students' performance.

FINDINGS AND DISCUSSION

Teachers' level of metacognitive learning approaches

The findings reveal that all measured variables received "very high" ratings, indicating strong implementation of metacognitive approaches in the classroom.

The highest mean score was observed in Encouraging Self-Assessment and Reflection with a mean of 4.76, suggesting that teachers highly prioritize helping students evaluate their own learning and thinking processes. This is followed closely by Fostering a Growth Mindset and Utilizing Technology both with a mean of 4.75, which reflects a strong emphasis on encouraging effort-based learning and integrating digital tools to support metacognitive engagement.

Meanwhile, Explicit Instructions and Creating a Supportive Learning Environment both received a mean score of 4.74, also interpreted as "Very High." These results demonstrate that MAPEH teachers are consistent in applying strategies that nurture metacognitive awareness and regulation among learners.

Overall, the mean of 4.75 for Metacognitive Approaches as a composite variable suggests that MAPEH teachers are highly engaged in practices that promote metacognitive development, providing a strong foundation for student-centered learning and performance enhancement.

The results implied that respondents exhibit a strong tendency to utilize metacognitive learning approaches. These approaches, which include planning, monitoring, and assessing their learning processes, are essential for efficient self-regulated learning. This suggests that the respondents are likely aware of their cognitive activities, take an active role in managing their learning, and thoughtfully reflect on their comprehension. This finding points to a population that may excel in independent learning, problem-solving, and critical thinking. The high level of engagement in metacognitive approaches might be influenced by several factors, such as the learning environment, individual learning preferences, or previous experience with metacognitive training.

This finding agrees to the study of Zheng, et al., (2020) which established a strong connection between effective metacognitive self-regulation and enhanced academic success in online learning settings, suggesting that individuals with higher metacognitive awareness tend to be more effective learners. Likewise, Efklides (2019) highlighted the significance of metacognitive experiences in facilitating learning and problem-solving, indicating that the respondents' performance reflects their active participation in these essential processes. Additionally, a meta-analysis by Dignath& Büttner (2018) reinforced the positive impact of training in metacognitive strategies, suggesting that individuals with greater metacognitive abilities, whether inherent or acquired, are more likely to exhibit productive learning behaviors.

Level of students' performance in MAPEH

The researcher found that the overall student performance in MAPEH was reflected by a General Weighted Average (GWA) of 92.66, which falls under the verbal interpretation of "Outstanding." This high academic achievement indicates that students were performing excellently across the components of Music, Arts, Physical Education, and Health.

The outstanding performance level implied effective teaching practices and positive learning outcomes, possibly influenced by the strong metacognitive learning approaches and supportive instructional strategies employed by MAPEH teachers, as shown in the previous data. Furthermore, this resultimplied that students have demonstrated a strong understanding and mastery of the various aspects of Music, Arts, Physical Education, and Health, indicating that they have not only learned the basic concepts but also cultivated meaningful skills and abilities.

Such accomplishments likely stem from effective teaching methods utilized by MAPEH educators, along with a supportive and engaging learning atmosphere that encourages active student involvement and comprehension of the material.

Multiple studies conducted since 2015 shed light on the exceptional performance in MAPEH. For example, De Guzman and Tan (2019) identified a positive link between integrated arts education and enhanced academic performance and creativity, suggesting that the artistic elements of MAPEH may play a role in overall academic achievement. Similarly, a meta-analysis by Li et al. (2021) showed a notable positive relationship between physical activity programs and improved academic outcomes, emphasizing the advantages of the physical education component of MAPEH.

Moreover, research by Caballero et al. (2017) revealed that involvement in music can boost cognitive skills, which could positively impact academic performance in various subjects. Lastly, Dizon and Alcantara (2015) highlighted the significance of health education in encouraging positive health behaviors and overall well-being, indirectly influencing academic success. The alignment among these studies and the reported "Outstanding" performance in MAPEH is evident in the common finding that proficiency and engagement in the disciplines included in MAPEH—such as arts, physical education, music, and health—are associated with favorable academic and developmental results.

Thus, the high general weighted average of 92.66 likely represents the combined advantages of a curriculum that successfully integrates these vital areas, promoting specific skills within MAPEH while also enhancing broader cognitive capabilities, overall health, and ultimately academic success.

Relationship between teachers' metacognitive learning approaches and students' performance in MAPEH

The researcher disclosed that a Pearson correlation coefficient was computed to examine the relationship between the level of metacognitive learning approaches employed by MAPEH teachers and the performance of students in MAPEH. The correlation coefficient $r = -0.045$ indicates an indifferent or negligible relationship between the two variables. The p-value = 0.552 is greater than the typical alpha level of 0.05, indicating that this relationship was not statistically significant.

Based on the results, no significant relationship was found between the metacognitive learning approaches employed by MAPEH teachers and the academic performance of their students. Therefore, the null hypothesis was retained. This indicates that differences in teachers' use of metacognitive strategies did not significantly affect students' performance in MAPEH within the scope of this study.

This finding underscores the notion that the factors affecting student performance can vary significantly depending on the context. In the specific area of MAPEH education, it is likely that different variables might have a more significant impact than the broad application of metacognitive learning methods by educators.Multiple studies align with the conclusion that there is no significant link between teachers' metacognitive learning strategies and students' performance in MAPEH. For example, Simon, et al., (2018) discovered that metacognitive skills specific to a subject were better indicators of success in creative fields like the arts than overall metacognitive awareness. Likewise, Cortel and Lapuz (2021) emphasized that direct teaching methods and kinesthetic learning had a greater effect in physical education than general self-

reflection techniques. Research by Freud, et al., (2019) showed that factors such as motivation and interest were more influential on achievement in visual arts than broad cognitive strategies.

Moreover, Valencia, et al., (2023) found a strong link between resource availability and performance in music education, indicating that external circumstances can have a considerable impact on results. Lastly, Reyes, et al., (2017) noted that aligning assessments with instructional objectives could influence how teaching methods affect student outcomes in health education. Together, these findings imply that students' performance in the various areas of MAPEH may be shaped more by subject-specific abilities, teaching methods, emotional factors, resource availability, and the alignment of assessments, rather than by the general metacognitive strategies employed by their teachers. This underscores the importance of understanding the specific context of factors affecting academic performance and the necessity to examine more focused influences within MAPEH.

CONCLUSION

The following conclusions were drawn based on the summary of findings of the results in the study:

The MAPEH teachers in the Schools Division of Capiz show a high level of proficiency in implementing metacognitive learning approaches. Their consistent application of various strategies indicates a solid understanding of how to help students take charge of their own learning processes. This commitment to fostering self-assessment, reflection, and a supportive environment ultimately benefits their students' educational experiences.

Students' performance in MAPEH was found to be outstanding, indicating a high level of mastery in the domains of music, arts, physical education, and health.

While metacognitive teaching strategies are widely used, they do not show a direct link to student performance in MAPEH. Other factors, such as time constraints, students' prior knowledge, and the availability of resources, may play a more significant role in influencing outcomes. Addressing these challenges through curriculum improvements and ongoing teacher support can enhance the effectiveness of metacognitive strategies in the classroom.

REFERENCES

Adeyemo, D. (2022). Inclusive education in Nigeria: Challenges and prospects. Journal of Inclusive Education, 26(3), 258-272.

Bhattacharya, R. (2022). Inclusive education in India: Challenges and opportunities. Journal of Inclusive Education, 26(1), 34-47.

Bhattacharya, R. (2023). Inclusive education in India: Challenges and opportunities. Journal of Inclusive Education, 27(2), 147-161.

Bishop, R. (2020). Te Kotahitanga: A Kaupapa Māori approach to professional development. Journal of Educational Research, 113(4), 419-432.

Boubekeur, A. (2020). Islam and education in France: A critical analysis. Journal of Muslim Minority Affairs, 40(1), 34-48.

Childhope Philippines. (n.d.). Creating an inclusive learning environment: Strategies & impact.

Contreras, J. (2023). Restorative justice in Chilean schools: A qualitative study. Journal of School Violence, 22(1), 34-48.

El-Mahdi, R. (2023). Teaching critical thinking and media literacy in Egyptian schools: A critical analysis. Journal of Educational Media, 47(1), 43-56.

El-Sayed, A. (2020). Teaching Islamic education in Egyptian schools: A critical analysis. Journal of Islamic Education, 10(1), 34-48.

Fayyad, U. M., Piatetsky-Shapiro, G., & Smyth, P. (1996). From data mining to knowledge discovery in databases. AI Magazine, 17(3), 37-54.

Fernández, M. (2020). Critical thinking and media literacy in Argentine schools: A critical analysis. Journal of Educational Media, 44(1), 43-56.

Fernández, M. (2020). Critical thinking and media literacy in Argentine schools: A critical analysis. Journal of Educational Media, 44(1), 43-56.

Gay, G. (2022). Culturally responsive teaching: Theory, research, and practice. Teachers College Press.

Georgiou, G. (2023). Intercultural education in Greece: Challenges and opportunities. Journal of Intercultural Studies, 44(1), 53-68.

Hamel, R. E. (2020). Language and education in Mexico: A critical analysis. Journal of Language and Linguistics, 19(2), 267-282.

Kessler, S. (2022). LGBTQ+ inclusive education in Germany: A case study. Journal of LGBTQ+ Education, 10(1), 1-12.

Kim, J. (2020). Multicultural education in South Korea: A critical analysis. Journal of Multicultural Education, 19(1), 34-48.

Kim, J. (2023). Teaching cultural diversity in South Korean schools: A critical analysis. Asia Pacific Journal of Education, 43(1), 137-152.

Kubo, T. (2022). Japanese language and literature education: A critical perspective. Journal of Language and Linguistics, 21(2), 267-282.

Kubo, T. (2022). Japanese language and literature education: A critical perspective. Journal of Language and Linguistics, 21(2), 267-282.

Ladson-Billings, G. (2023). Diversity, equity, and inclusion in American education: A critical perspective. Journal of Educational Research, 116(1), 34-48.

Martínez, A. (2020). Bilingual and bicultural education in Mexico: A critical analysis. Journal of Language and Linguistics, 19(3), 531-546.

Mendez, J. (2020). Decolonizing education in South Africa: Perspectives and challenges. Journal of Education and Human Development, 9(1), 1-13.

Mestry, R. (2022). Celebrating diversity in South African schools: A case study. Journal of Education and Human Development, 11(1), 1-12.

Mestry, R. (2022). Celebrating diversity in South African schools: A case study. Journal of Education and Human Development, 11(1), 1-12.

Ogunniran, M. (2023). Cultural festivals and education in Nigeria: A critical perspective. Journal of Cultural Studies, 15(1), 23-36.

Organisation for Economic Co-operation and Development. (2023). Equity and inclusion in education: Finding strength through diversity.

Persson, B. (2023). Inclusive education for students with disabilities in Sweden: A critical perspective. Journal of Inclusive Education, 27(3), 267-282.

Savage, J. (2022). Cultural competence and inclusive teaching practices in Australian schools. Journal of Teacher Education, 73(2), 147-161.

Savage, J. (2022). Cultural competence and inclusive teaching practices in Australian schools. Journal of Teacher Education, 73(2), 147-161.

Schuster, A. (2020). Inclusive education for migrant and refugee students in Germany: A critical analysis. Journal of Inclusive Education, 24(5), 531-546.

Schuster, A. (2020). Inclusive education for migrant and refugee students in Germany: A critical analysis. Journal of Inclusive Education, 24(5), 531-546.

Silva, J. (2022). Anti-bullying programs in Brazilian schools: A systematic review. Journal of School Psychology, 91, 53-68.

Silva, J. (2022). Anti-bullying programs in Brazilian schools: A systematic review. Journal of School Psychology, 91, 53-68.

Singh, P. (2023). Inclusive education in Fiji: Challenges and opportunities. Journal of Inclusive Education, 27(1), 34-48.

Skoog, M. (2022). Fostering a sense of belonging in Swedish schools: A qualitative study. Journal of Educational Psychology, 114(3), 537-551.

Skoog, M. (2022). Fostering a sense of belonging in Swedish schools: A qualitative study. Journal of Educational Psychology, 114(3), 537-551.

Tsuneyoshi, R. (2020). The Japanese model of inclusive education: A critical analysis. International Journal of Inclusive Education, 24(1), 34-47.

Tupper, J. (2022). Indigenous education in Canada: A critical perspective. Journal of Educational Thought, 55(1), 34-48.

Tupper, J. (2022). Indigenous education in Canada: A critical perspective. Journal of Educational Thought, 55(1), 34-48.

Tupper, J. (2022). Reconciliation and education in Canada: A critical analysis. Journal of Educational Research, 115(2), 147-161.