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Psychomotor, Affective, Cognitive (PAC) Project: Innovation in assessing skills in MAPEH

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Abstract: The traditional education system has primarily focused on cognitive development, emphasizing academic subjects, but research indicates that psychomotor and affective domains are also crucial for overall human growth. The study aimed to analyze the importance of the innovations of teachers in the Division of Roxas City. To determine the instructional innovations related to MAPEH in the Division of Roxas City. Out of 600 plus elementary and secondary teachers only 139 had an innovations starting 2014-2024. The researcher used a qualitative research design and applied purposive sampling technique that suits to her study. This qualitative design employed in-depth interview that was conducted to explore the innovations utilized by the teachers in assessing skills related to MAPEH. There were 15 participants who were selected in consideration of the inclusion and exclusion criteria. Thematic analysis by Clarke/Braun was used to interpret the responses of the participants. For the instructional innovations, it was found that the participants adopt innovation in teaching involves in a strategic integration of technology into instructional methods, focusing on enhancing students' engagement and meeting individual needs. Examples are: PAGHANAS, PODCAST, PROJECT ALL STARS, Whole Brain Teaching, Differentiated Instruction, Gamification, One-Stop Prep., Technology- Integrated teaching, and PROJECT SAOT. For the learning domains addressed by these innovation encompasses three interconnected areas that contribute to an individual's holistic development: psychomotor, affective and cognitive. The researcher finds out that most of their innovations engaged in psychomotor domains (9 out of 15), two (2) for affective domains and four (4) for cognitive. The participants carefully applied their innovations through inquiry-based learning, technology integrated lessons, PBL (Project-based Learning), Flipped Classroom, differentiated instructions and collaborative teaching. The advantages of these innovations are: integration of technology to enhance educational management, personalize education, innovative methods like interactive activities, help learners to be aware of their health status and to avoid bullying. Nevertheless, there are areas that need to improve such as implementation of peer teaching programs, leverage digital assessment tools, curriculum based training programs, incorporate experiential learning activities that connect theory with practical applications.

Keywords: Innovations, Psychomotor, Affective, Cognitive, MAPEH

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INTRODUCTION

The traditional education system has often given precedence to cognitive growth, concentrating primarily on academic subjects and intellectual activities. While cognitive abilities are certainly important, an increasing amount of research highlights the significant impact of psychomotor and affective domains on overall human development (Plaza, 2020). Psychomotor skills, which include physical coordination, dexterity, and manual abilities, are essential for various life aspects, from everyday tasks to career- related activities.

On the other hand, the affective domain—comprising emotions, attitudes, values, and social competencies—is crucial for shaping individual character, developing healthy relationships, and managing the complexities of social interactions (Plaza, 2020).

The researcher, as a MAPEH teacher believes that, the socio-economic landscape of Roxas City, Capiz, underscores the importance of a comprehensive approach to education. Being a developing city, Roxas City encounters issues like poverty, restricted access to resources, and the need to provide its teachers and learners with the skills required to thrive in a fast-evolving world. The Philippines has long acknowledged the significance of a comprehensive education that includes not just academic subjects but also the overall development of students. The K-12 curriculum's integration of Music, Arts, Physical Education, and Health (MAPEH) highlights this dedication. However, conventional assessment techniques in MAPEH often depend too much on written examinations and limited performance evaluations, which may fail to fully reflect the wide range of skills and competencies fostered in these areas (Anita, 2018).

This study was built upon existing frameworks of holistic education and consider the unique needs and challenges of the Roxas City Division. It will explore the implementation strategies of the different innovation made by the MAPEH teachers, assess its effectiveness in achieving its objectives, and analyze the impact on student learning outcomes. The findings of this study would provide valuable insights for educators, policymakers, and stakeholders in the Roxas City Division and beyond, informing future educational initiatives that prioritize the holistic development of learners.

By recognizing the dynamic nature of these disciplines, the study aimed to move beyond traditional tests to include performance-based evaluations, portfolio assessments, and technology-enhanced strategies. By adopting these modern assessment techniques, MAPEH teachers in Roxas City Division can gain a deeper understanding of student development, pinpoint strengths and weaknesses, and give more focused and effective feedback tailored to individual learning needs. This research would enhance MAPEH education in Roxas City Division by offering valuable insights into the practicality and effectiveness of these innovative assessment methods.

Problem statement

This study aimed to determine the innovations of the MAPEH teachers in Roxas City Division and their application in assessing different skills in MAPEH. Specifically, this study aimed to answer the following questions:

1. What are the instructional innovations related to MAPEH in the Division of Roxas City?
2. What are the learning domains addressed by these innovations?
3. How do teachers apply these innovations?
4. What are the advantages of applying these innovations?

Theoretical framework

This study was anchored on two theories: the Constructivist Theory by Jean Piaget (1980) and Bloom’s Taxonomy by Benjamin Bloom (1956).

The Constructivist Learning Theory emphasizes the importance of active participation and the development of knowledge through personal experiences and interaction with the environment. It suggests that learners construct their own understanding, making it especially relevant to MAPEH subjects, which involve hands-on activities, creativity, and self-expression. This theory supports the use of performance-based assessments that highlight creativity, practical skills, and critical thinking. The researcher adopted this theory based on the findings of the study, which showed that most of the innovations were focused on the psychomotor domain. This

aligns with the principles embedded in the MAPEH curriculum in DepEd: "Move to learn, learn to move."

On the other hand, Bloom's Taxonomy provides a systematic classification of cognitive abilities, progressing from basic knowledge to higher-order thinking skills such as analysis, evaluation, and creation. By applying Bloom's Taxonomy in MAPEH assessments, teachers can ensure that evaluations encompass a broad spectrum of cognitive skills, extending beyond mere recall and recognition. This can be achieved through creative assessment techniques that encourage students to apply knowledge, analyze musical compositions, produce artistic works, exhibit critical thinking in health-related contexts, and design and implement physical fitness programs.

The study revealed that some teacher-innovators incorporated activities requiring higher-order thinking skills. Examples include the use of differentiated instruction, flipped classroom models, podcasts, and whole brain teaching strategies.

METHODOLOGY

This study employed a basic qualitative research design, which is appropriate for exploring and understanding the meanings individuals or groups ascribe to a social or human problem (Creswell & Creswell, 2018). This approach allowed for an in-depth exploration of the instructional innovations implemented by MAPEH teachers in the Division of Roxas City and how these innovations are applied in the assessment of psychomotor, affective, and cognitive domains. A qualitative method was selected to capture rich, descriptive data that reflect the real-life experiences, perspectives, and practices of the participants.

The study was conducted in the Schools Division of Roxas City during the School Year 2024–2025. The participants were fifteen (15) MAPEH teachers purposively selected based on their involvement in innovative instructional practices and assessment strategies. The inclusion criteria required that participants had at least three years of teaching experience in MAPEH and had engaged in or initiated any form of instructional or assessment innovation. Purposive sampling was utilized to ensure that the selected participants could provide relevant and insightful information concerning the study's objectives.

To gather the needed data, a semi-structured interview guide was developed by the researcher. The guide consisted of open-ended questions designed to elicit comprehensive responses regarding the teachers' instructional innovations, their alignment with learning domains, application in assessment, perceived benefits, and areas for improvement. The instrument underwent expert validation by educators and researchers with specialization in MAPEH and educational research to ensure content validity, clarity, and relevance to the research questions.

Upon securing approval from appropriate authorities and obtaining informed consent from participants, data collection was carried out through individual interviews. These interviews were conducted either face-to-face or via online platforms, depending on the availability and convenience of the participants. Each interview lasted approximately 30–45 minutes and was audio-recorded with permission for accuracy in transcription and analysis.

The data collected from the interviews were transcribed verbatim. The researcher then employed inductive coding to identify patterns, categories, and emerging themes. To systematically analyze the data, the Braun and Clarke (2006) six-phase thematic analysis framework was utilized. These phases included: (1) familiarization with the data, (2) generation

of initial codes, (3) searching for themes, (4) reviewing themes, (5) defining and naming themes, and (6) producing the final report. This analytical approach enabled the researcher to draw meaningful insights and interpretations grounded in the participants' experiences and narratives.

This study adhered to ethical research practices, including securing informed consent, ensuring voluntary participation, maintaining participant anonymity and confidentiality, and seeking approval from the appropriate institutional review board. Participants were assured that the information they provided would be used solely for academic purposes and that they could withdraw from the study at any time without penalty.

FINDINGS AND DISCUSSION

Instructional innovations related to MAPEH in the Division of Roxas City

The instructional innovations related to MAPEH include innovative teaching and technology-integrated instruction, student-centered innovation and integrated responsive teaching, teacher assistance in curriculum delivery and resourcefulness, active teaching strategies and learning methodologies, and targeted engagement and resource diversification.

Adopting innovation in teaching requires a significant shift toward incorporating technology into instruction. It goes beyond simply using digital tools; it involves a strategic approach that reshapes teaching methods. The researcher observed with great interest that most of the innovations in the Division of Roxas City were modern, forward-thinking, and strongly centered on the integration of technology.

The instructional innovations related to MAPEH in the Division of Roxas City include the following: All Stars, Paghanas, Project SAOT, One-Stop Prep, Flipped Classroom, Collaborative Teaching, Whole Brain Teaching, Differentiated Instruction, Project-Based Learning (PBL) with cross-subject integration, and Integrated Technology-Enhanced Learning such as interactive apps and virtual performances.

One notable innovation was the PODCAST. Developed during the pandemic, this innovation allowed teachers to store learning activities and modules online (via Google Forms) or through USBs for students without internet access or mobile devices. This initiative served as a bearer of information, provided lesson updates, and, most importantly, ensured the safety of students.

Another example is One-Stop Prep, an automated progress report program used in Senior High School that proved useful for both students and teachers. This innovation was recognized and awarded at the national level by DepEd and featured on the educational research platform E-SALIKSIK.

Whole Brain Teaching is another innovation adopted by both public and private schools across the country. It has also gained international recognition, particularly in Malaysia, and has been published in peer-reviewed journals. One of the innovator's names is even indexed on Google Scholar, reflecting the academic recognition of this contribution.

These innovations reflect a continuous effort to find more effective ways to facilitate learning, challenge conventional methods, and respond to the evolving needs of students with carefully selected technological solutions. Such integration enhances student engagement through interactive experiences and multimedia, personalizes learning with adaptive technologies, broadens access to information and diverse perspectives, promotes collaboration beyond the classroom, and fosters critical digital literacy skills. Ultimately, meaningful innovation lies in the thoughtful application of technology to support educational goals, which

requires critically evaluating digital resources, ensuring equitable access, and nurturing responsible digital citizenship.

This technology-rich innovative approach is closely linked to student-centered learning, where individual learner needs are prioritized. In this context, innovation involves the ongoing refinement and application of teaching practices that empower students, support independence, and encourage active participation in their learning journeys.

At the heart of student-centered innovation is integrated and responsive teaching, which requires educators to deeply understand their students' needs through formative assessments and feedback. Teachers must flexibly adapt instruction, design relevant learning experiences that connect curriculum content to students' lives, foster learner agency and ownership, and establish supportive teacher-student relationships. Techniques such as project-based learning, differentiated instruction, and personalized learning pathways are prime examples of this approach, which aims to make education more meaningful, engaging, and relevant to each learner.

Educators play a crucial role in transforming curriculum content into impactful learning experiences. Their role in curriculum delivery includes simplifying complex ideas, offering a variety of examples, facilitating thoughtful classroom discussions, providing individualized assistance, and delivering timely feedback. A central element of this responsibility is the teacher's resourcefulness—the ability to identify, select, adapt, and create appropriate instructional materials, whether from textbooks, multimedia, online tools, or professional networks. In today’s ever-evolving educational environment, this adaptability ensures that curriculum implementation remains dynamic, relevant, and engaging, even in the face of challenges or limitations.

Furthermore, applying active teaching techniques and interactive learning approaches is essential for promoting deeper understanding. Rather than passively receiving information, students are encouraged to participate through discussions, problem-solving tasks, collaborative projects, simulations, and inquiry-based experiences. These strategies foster critical thinking, problem-solving, and teamwork skills. Interactive methods create stimulating and motivating classroom environments that spark curiosity, make learning meaningful, accommodate diverse learning styles, encourage student ownership, and nurture a positive learning culture. By deliberately applying these engaging strategies, educators can transform the classroom into a vibrant space where students actively construct knowledge and connect learning to their real-life experiences.

Kelly (2015) pointed out a major barrier to the effective use of technology in education: teachers often lack the necessary preparation to utilize instructional technology effectively. The study emphasizes that simply providing technological tools is not enough; educators require proper training, continuous support, and professional development to integrate technology into their teaching practices confidently and skillfully. This insight connects to our discussion about innovative teaching and technology-rich instruction, highlighting that genuine innovation depends not only on the availability of technology but also on educators' ability and confidence to use it in ways that enhance learning outcomes.

Moreover, Klimova and Kacet (2017) provided valuable insights into the innovative application of technology in language education. Their research emphasized the use of games and online activities as engaging strategies for vocabulary development and reinforcement of grammatical concepts. This study illustrates how technology-integrated instruction can align with active teaching strategies and interactive learning methods. By incorporating enjoyable and

interactive digital resources, educators can transcend traditional rote learning and create more dynamic and effective educational experiences that significantly boost student engagement and understanding.

Lastly, Freiberg et al. (2020) observed a significant and ongoing transformation in educational approaches, shifting from conventional teacher-led methods to a more comprehensive, student-focused model. This transformation underscores the growing recognition of the value of student agency, active involvement, and personalized learning experiences. The findings of this study strongly support the principles of innovative, student-centered practices and emphasize the need for active teaching techniques and engaging learning methods that empower learners and promote independence in the educational journey.

Learning domains addressed by innovations

The three main domains of learning are identified as cognitive, psychomotor, and affective. These domains serve as a comprehensive framework for understanding the multifaceted nature of human development and the processes through which learning occurs. Interconnected and mutually influential, the domains collectively contribute to an individual's holistic growth.

The cognitive domain pertains to intellectual development and encompasses mental activities such as acquiring knowledge, understanding concepts, applying information, analyzing situations, synthesizing ideas, and evaluating outcomes. Influenced by several learning theories, cognitive development can be understood through Piaget's stages, which describe the evolution of children's thinking; the Information Processing Theory, which explains how individuals perceive, process, store, and retrieve information; and Vygotsky's Sociocultural Theory, which emphasizes the role of social interactions and cultural contexts in cognitive growth. Concrete examples of cognitive development include learning mathematical operations, enhancing critical thinking, acquiring historical knowledge, improving language comprehension, and solving problems.

Conversely, the psychomotor domain focuses on the development of physical skills, coordination, and movement. This domain includes basic motor functions, perceptual skills, physical fitness, precision movements, and non-verbal communication. Progress in the psychomotor domain involves the acquisition of both gross and fine motor skills, facilitated by repetition, practice, constructive feedback, and neuromuscular development. Examples include writing and drawing, playing musical instruments, participating in sports, and improving hand-eye coordination through physical tasks.

The affective domain relates to emotional growth, values, attitudes, and interpersonal skills. It involves the processes of receiving and responding to stimuli, valuing experiences, organizing beliefs, and internalizing values to form a personal philosophy. Key components of affective development include emotional intelligence, empathy, social integration, moral reasoning, and self-awareness. Evidence of development in this domain may include cultivating a positive attitude toward learning, engaging collaboratively with peers, establishing personal ethics, expressing empathy, managing emotions, and building self-confidence.

Holistic development emphasizes the importance of nurturing all three domains—cognitive, psychomotor, and affective—in a balanced and integrated manner. It acknowledges that individuals are complex beings and that progress in one domain can influence development in others. Fundamental principles of holistic development include interconnectedness, balance, individuality, contextual learning, and a lifelong learning orientation. The benefits of a holistic approach are substantial: it helps produce well-rounded individuals with robust intellectual

capabilities, physical competence, and emotional intelligence; leads to improved academic and personal outcomes; enhances social-emotional well-being; fosters adaptability; and increases the potential for success and fulfillment in various life contexts.

Darko and Vasilakos (2020) emphasized that the effective assessment of student outcomes must encompass all three learning domains to fully capture and understand learners' development. This is especially relevant in the context of holistic education, which goes beyond a narrow focus on academic achievement to consider emotional and physical growth as well.

In support of this, a study conducted by the Teachers Institute demonstrated that integrating all three domains into instructional design facilitates holistic education, enabling students to develop their intellectual, emotional, and physical abilities simultaneously. This supports the foundational principles of holistic development, which promote comprehensive and interconnected learning experiences.

Furthermore, research has explored the impact of external factors on these learning domains. A study by Baharom et al. (2015) revealed that the quality of cognitive, affective, and psychomotor skills acquired by students directly influences the overall effectiveness of teaching and learning within schools. This finding reinforces the need for educational systems to implement balanced and well-rounded pedagogical strategies that address all domains of learning for sustained student development.

Ways on how teachers apply the innovations

Teachers apply instructional innovations through five key approaches: creative action and embodied innovation, promoting active engagement and technology access, empowering learners through structured inquiry and tangible outcomes, navigating challenges to create meaningful results, and student-centered empowerment through personalized exploration and discovery.

The idea of creative action and embodied innovation plays a central role in how teachers implement changes in instructional delivery. This concept emphasizes the importance of hands-on experiences and physical engagement in learning processes. It asserts that active participation not only stimulates creativity but also fosters the development of novel solutions to complex problems. In educational contexts, this approach encourages teachers to design learning spaces where students are engaged in tangible, practical tasks—enhancing their capacity for innovation and critical thinking.

Following this, educators promote active participation and ensure equitable access to technology, recognizing these elements as crucial in an increasingly digital and fast-paced educational environment. Active engagement ensures that learners are not passive recipients of knowledge but instead take initiative in constructing their own understanding. Simultaneously, providing access to technology ensures inclusivity, allowing all students—regardless of socioeconomic background—to participate fully and benefit from innovation. This commitment to access and engagement reflects a broader objective of equity and inclusion in education.

Another method teachers employ is empowering learners through structured inquiry and real-world outcomes. Guided inquiry provides students with a framework that encourages curiosity, question formulation, research, and application of knowledge in meaningful contexts. This approach leads to deeper learning and greater knowledge retention, as students are encouraged to think critically and creatively to solve real-world problems. As shown in the meta-analysis by Pedaste et al. (2015), inquiry-based learning supports the development of higher-order thinking and enhances students' ability to transfer learning to practical settings.

In implementing innovations, teachers also address the challenges students face and guide them toward achieving meaningful outcomes. This aspect of teaching innovation recognizes the complexity of diverse learning environments, particularly in addressing barriers such as limited resources, academic difficulties, or emotional struggles. Wu et al. (2015) highlighted these issues in the context of international students but emphasized the broader need for resilience and adaptive strategies in education. Educators, therefore, play a vital role in helping students navigate these challenges through flexible approaches, consistent support, and the strategic use of instructional resources.

Finally, student-centered empowerment through personalized exploration is a key way in which teachers apply innovations. This approach prioritizes the individual needs, interests, and learning styles of students, creating opportunities for personalized and meaningful learning. It fosters ownership of learning, increases intrinsic motivation, and deepens engagement. Wang et al. (2023) advocate for student-centered instructional strategies that support self-directed learning and promote personalized educational journeys. By designing instruction that adapts to students' unique pathways, teachers build inclusive, dynamic classrooms that nurture student agency.

Collectively, these five interrelated strategies offer a comprehensive framework for applying innovations in education. They emphasize creativity, accessibility, student empowerment, and practical application—core values that underpin effective and transformative teaching practices.

Recent literature supports these approaches. Li and Xue (2023) identified student engagement with technology as a key factor in enhancing active learning. Pedaste et al. (2015) confirmed the impact of structured inquiry on critical thinking and knowledge retention. Wu et al. (2015) explored student adjustment challenges in academic and social contexts, highlighting the need for flexible instructional support. Lastly, Wang et al. (2023) emphasized the transition toward learner-centered strategies that promote autonomy and personalized learning.

These studies affirm that innovation in teaching is not solely about introducing new tools or methods—it is about creating empowering, inclusive, and engaging educational experiences that respond to the diverse needs of 21st-century learners.

Advantages of applying innovations

Leveraging technology and enhancing educational engagement and equity, nurturing holistic Development and personalized pathways, navigating shifting educator responsibilities and learner connection, addressing the digital divide and healthcare implementation, and amplifying positive change and collaboration are the key advantages of applying instructional innovations.

Exploring the complex realm of instructional innovations in MAPEH within the Roxas City Division reveals several important themes that require thorough discussion and consideration of their broader implications. A key focus is the use of technology to enhance educational engagement and ensure equity, which is fundamental to contemporary teaching practices. Technology holds significant potential for widening access to learning resources and overcoming geographical and socio-economic barriers.

Imagine students from even the most remote barangays in Roxas City participating in virtual museum tours to appreciate art, joining synchronized online dance sessions, or using interactive applications to understand nutritional concepts in health education. This digital environment allows for personalized and engaging learning experiences, catering to each

learner's unique style and pace, thus promoting deeper involvement and addressing diverse educational needs.

Additionally, technology enables more dynamic assessment methods, shifting away from traditional evaluations to include digital portfolios, video performance assessments, and real-time feedback. However, this optimistic outlook is tempered by the pressing issue of the digital divide. Disparities in access to reliable internet, suitable devices, and essential digital skills among students and teachers in Roxas City could unintentionally worsen existing inequalities if technological integration is not implemented with inclusivity and equitable resource distribution in mind. Therefore, any exploration of instructional innovations must consider the current technological infrastructure, levels of digital literacy, and strategies in place to ensure that technology acts as a bridge—not a barrier—to educational access.

The theme of supporting holistic development and personalized learning pathways reflects a significant shift in educational philosophy, moving beyond mere cognitive achievement to embrace the comprehensive growth of each learner. MAPEH, with its focus on physical health, artistic creativity, musical appreciation, and health awareness, is well aligned with this holistic approach. Personalized learning pathways in MAPEH might involve allowing students to explore specific artistic disciplines that align with their strengths, engage in physical activities suited to their interests, or delve into health topics that resonate with their personal experiences.

This customized approach not only boosts motivation and ownership of learning but also nurtures essential life skills such as teamwork, self-expression, critical thinking, and self-care. For instance, a student passionate about dance might explore advanced choreography, while another interested in music composition could use digital audio workstations to express creativity. The implications for instructional innovation include designing flexible curricula, offering varied learning opportunities, and developing assessment methods that acknowledge and celebrate each student's unique strengths and progress across multiple developmental domains.

Research in Roxas City could investigate current teaching strategies that promote holistic development through MAPEH and identify ways to further customize learning experiences to suit the diverse talents and aspirations of students.

As educational contexts continue to evolve, so too do the responsibilities of educators and the dynamics of teacher-student connections. The integration of technology and a focus on personalized learning often require a shift in the teacher's role—from being knowledge transmitters to becoming facilitators, mentors, and guides. In this new paradigm, teachers in Roxas City must not only become proficient in using new digital tools and pedagogical strategies but also foster meaningful relationships with students in an increasingly digital world.

Establishing strong connections with learners is essential for creating a supportive and engaging learning environment, understanding individual needs, and providing the necessary emotional and academic support. This requires educators to develop their Digital Pedagogical Content Knowledge (DPACK)—the ability to seamlessly integrate technology, pedagogy, and content to enhance learning. Moreover, managing diverse learning needs within personalized pathways requires effective differentiation strategies and a deep understanding of student progress.

Research in this field could explore how MAPEH teachers in Roxas City are adapting to these evolving roles, the methods they use to build and maintain strong relationships with students in technology-rich environments, and the professional development support available to help them navigate these significant transformations.

A study conducted by Ponsaran (2024) examined how technology can be used to improve engagement and equity in education, specifically focusing on MAPEH performance tasks in Roxas City. The study revealed that educators are implementing flipped classrooms and collaborative technology, using video platforms and editing software to create more interactive learning experiences. However, the study also noted ongoing issues such as limited accessibility and differing digital skill levels among students, highlighting the equity challenges associated with the digital divide.

Similarly, Prasetyawati & Ardi (2020) emphasized the essential role of teachers in managing technology integration to boost student engagement, while acknowledging limited access to technology as a major hurdle. These insights underscore the need to assess the technological infrastructure and digital literacy in Roxas City to effectively use technology for better engagement and to avoid exacerbating existing inequities.

In terms of supporting holistic development and personalized learning paths, the JETIR Research Journal (2024) explored how MAPEH contributes to students' overall development—cognitive, physical, emotional, and social. This supports the notion that MAPEH fosters well-rounded growth. Additionally, the Department of Education's MATATAG Curriculum review (2023) in the Philippines emphasized the integration of Physical Education and Health to support a holistic wellness approach, and highlighted the importance of designing a curriculum that accommodates diverse learner needs. These findings suggest the need to evaluate how MAPEH curricula and teaching methods in Roxas City are currently addressing holistic development and what opportunities exist for more personalized pathways.

Regarding the shifting roles of educators and their connection with students, the research of Eskici & Çayak (2023) underscored the growing importance of teachers' technological competencies, noting that those with advanced degrees demonstrated higher proficiencies. This indicates a need to assess the professional development and support systems available for MAPEH educators in Roxas City to equip them with essential digital teaching skills.

The work of Leema & Saleem (2017), as cited by Eskici & Çayak (2023), further introduced the concept of teachers as "technopedagogues"—professionals who must effectively organize and implement classroom activities using technology. These studies highlight the necessity of examining how MAPEH teachers in Roxas City are adapting to these evolving roles and the strategies they employ to maintain strong student connections in tech-enhanced learning environments.

In addressing the digital divide and healthcare integration, research on disparities in education and health access emphasizes how socioeconomic factors influence the availability and use of technology (SHS Web of Conferences, 2023; NCFR, 2022). These studies show that unequal access to technology can significantly impact both educational outcomes and health literacy. In the context of MAPEH in Roxas City—particularly in health education—it is crucial to assess the extent of the digital divide among students and how it may affect the implementation of technology-based health programs and access to health-related resources.

Finally, in fostering positive change and collaboration, research shows that teacher collaboration plays a vital role in professional growth and instructional improvement. According to Park and Lee (2015), collaborative efforts among teachers—especially when supported by technology—facilitate the sharing of best practices and the development of innovative teaching strategies. A study published in the Pertanika Journal of Social Sciences & Humanities (2025) further investigated the digital tools used for educator collaboration and highlighted the common

challenges teachers face, including time constraints, unequal participation, and varying familiarity with digital platforms.

CONCLUSIONS

Incorporating innovation in teaching is essential for fostering an effective learning environment. By focusing on student engagement, personalized learning, and positive relationships between teachers and students, educators can improve the learning experience. Using technology, ongoing assessments, and various teaching methods allows teachers to meet each student's individual needs. This approach promotes inclusivity and helps students succeed both academically and personally, leading to a more meaningful education.

The domains of learning framework highlights the need for a balanced approach to education and personal growth. By developing skills in thinking, physical activities, and emotional understanding, people can become well-rounded individuals. This balance not only helps with academic and career success but also promotes resilience and adaptability in personal life. Embracing these interconnected areas is key to creating capable, empathetic, and fulfilled individuals who can succeed in a changing world..

Exploring creative action and hands-on learning is essential in education. By providing opportunities for active participation and access to technology, we help students engage fully with their learning, fostering innovative thinking. Guided inquiry and structured exploration enable students to understand complex topics and gain practical skills. Additionally, addressing the challenges students face builds resilience and adaptability, equipping them with strategies to overcome difficulties. Overall, focusing on student empowerment and personalized learning enhances individual growth and creates a more inclusive educational experience that allows all learners to succeed in their quest for knowledge and creativity.The need to use technology to ensure all students have equal access to education while bridging the gap in digital resources. It's important for teachers to shift their approach to support the overall development of each student, considering their unique strengths and interests. This change requires teachers to take on the role of facilitators and emphasizes the need for ongoing training in digital teaching methods. By building strong connections and adapting to different learning styles, teachers can create an inclusive environment that enhances the educational experience for everyone, leading to a more engaged and creative future generation.

Using innovative teaching methods like peer teaching, digital assessments, and hands-on experiences enhances the learning process and supports students' overall growth. These methods encourage collaboration and sharing of resources, allowing students to take an active role in their education. This supportive school environment fosters creativity and well-being, helping students develop the critical thinking skills needed for success in a constantly changing world.

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