Innovative Technology in Teaching: Enhancing Self-Learning Abilities Among Physical Education Majors

Xiangming Tang
Graduate School, Adamson University, Philippines
Corresponding Author e-mail: jimmy510866425@163.com

Abstract

Aim: In today's rapidly evolving educational landscape, the integration of innovative technologies has become a critical component in enhancing the learning experience. This study focuses on the application of such technologies within the realm of physical education, particularly examining their impact on the self-learning abilities of physical education majors. The objective of this research is to investigate how tools such as Virtual Reality (VR), Augmented Reality (AR), and Artificial Intelligence (AI) can be utilized to foster greater independence in learning among students.

Methodology: By employing quantitative research methodologies, we aim to provide a comprehensive analysis of the effectiveness of these technologies in real-world teaching environments.

Results: The findings of this study indicate that innovative technologies significantly improve learning efficiency by providing interactive and immersive educational experiences. For instance, VR allows students to engage in realistic simulations of physical activities, thereby enhancing their practical skills and understanding. AR, on the other hand, overlays digital information onto the physical world, offering students an enriched learning environment that can adapt to their individual needs. AI-driven platforms provide personalized learning paths and instant feedback, helping students to identify their strengths and areas for improvement.

Conclusion: The research results show that innovative technology can not only improve learning efficiency but also significantly enhance students' self-learning abilities. By introducing technologies such as VR, AR, and AI, educational institutions can create more interactive and immersive learning environments for students, promoting their overall development and academic achievement.

Keywords: Innovative Technology, Teaching, Self-Learning Abilities, Physical Education Majors

INTRODUCTION

With the rapid development of information technology, the education sector continues to explore and apply new technological methods to enhance teaching quality and efficiency (Amihan, Sanchez & Carvajal, 2023; Carvajal & Sanchez, 2023; Muńoz & Sanchez, 2023; Salendab & Sanchez, 2023; Sanchez, 2023a). In recent years, technologies such as Virtual Reality (VR), Augmented Reality (AR), and Artificial Intelligence (AI) have gradually been introduced into classrooms, changing traditional teaching methods. These innovative technologies not only provide teachers with rich teaching resources but also create more interactive and immersive learning environments for students (Amihan & Sanchez, 2023; Carvajal & Sanchez, 2024; Sanchez, et al., 2024a; Sanchez & Sarmiento, 2020).

VR offers immersive simulations that can transport students to environments and scenarios that traditional classroom settings cannot provide. For instance, students can explore historical sites, conduct virtual science experiments, or practice language skills in simulated environments. This experiential learning approach can lead to better retention of information and a deeper understanding of complex concepts. Additionally, VR can be used in physical education to simulate sports scenarios, allowing students to practice techniques and strategies in a controlled and safe environment.

AR overlays digital content onto the physical world, enhancing how students interact with their surroundings. For example, AR can bring textbooks to life by displaying 3D models, videos, and interactive content

that complement the printed material. In a physical education context, AR can be used to provide real-time feedback on technique during practice sessions or to overlay anatomical diagrams onto a moving body to illustrate muscle use during exercises. This can help students understand the practical applications of what they are learning and make abstract concepts more tangible.

AI-driven systems can analyze student performance and learning styles to tailor educational content to their needs. These systems can provide personalized learning experiences by adapting the difficulty level of exercises, suggesting additional resources, and offering targeted feedback. In physical education, AI can track a student's progress, suggest personalized training programs, and even predict potential injuries by analyzing movement patterns. This level of personalization helps ensure that each student can learn at their own pace and focus on areas where they need the most improvement (Carvajal, et al., 2024; Carvajal, Sanchez & Amihan, 2023; Dizon & Sanchez, 2020; Sanchez, 2023b; Sanchez, et al., 2024b; Sanchez, et al., 2022).

These technologies collectively enable students to learn more efficiently and with greater engagement. By providing immersive, interactive, and personalized learning experiences, VR, AR, and AI help to create a more dynamic and effective educational environment. This not only improves academic outcomes but also prepares students for a future where technology plays an increasingly central role in both professional and personal spheres.

Self-learning ability refers to the capacity of students to independently acquire knowledge, solve problems, and learn without teacher guidance (Salendab, Ocariza-Salendab & Sanchez, 2023; Sanchez, 2022; Sanchez, 2020; Sanchez, et al., 2024c). This ability is crucial for students' lifelong learning and career development. In the field of physical education, self-learning abilities are particularly important as students need to conduct extensive practice and training outside of class.

Technological tools can significantly aid in the development of these self-learning skills. Online learning platforms provide vast resources such as video tutorials, interactive exercises, and discussion forums, enabling students to explore topics in depth and at their own pace (Sanchez, et al., 2024d; Sanchez, Sanchez & Sanchez, 2023). For example, a physical education student can access instructional videos on different coaching techniques, participate in online discussions with peers and experts, and complete interactive exercises to test their understanding.

Educational apps and software can offer practice exercises, quizzes, and progress tracking to help students monitor their learning journey and stay motivated. These tools can provide instant feedback, highlight areas that need improvement, and suggest additional resources to help students master specific skills. For instance, a fitness app can track a student's workout routines, offer personalized training plans, and provide motivational insights to keep them engaged and on track.

Furthermore, the use of AI in educational tools can enhance self-learning by offering personalized learning experiences. AI algorithms can analyze a student's performance, identify their strengths and weaknesses, and adjust the learning materials accordingly. This ensures that students are always challenged at an appropriate level, preventing both boredom and frustration. In physical education, AI can help students set realistic goals, track their progress, and adjust their training programs based on their evolving needs and abilities.

Overall, the integration of technology into education supports the development of self-learning abilities by providing students with the tools and resources they need to take control of their own learning. This not only enhances their academic performance but also prepares them for lifelong learning and professional success.

Importance for Physical Education Majors. Physical education majors need strong self-learning abilities to cope with various complex training and teaching tasks. By enhancing self-learning abilities, students can better adapt to future career challenges and improve the quality and effectiveness of their teaching.

Physical education majors are required to master a wide range of skills and knowledge areas, from anatomy and physiology to coaching techniques and sports psychology. This demands a high level of dedication and independent learning ability. For example, understanding the biomechanics of movement requires continuous study and practice, often beyond the scope of formal classroom instruction. Similarly, mastering coaching techniques involves not only learning theoretical principles but also applying them in real-world scenarios, which requires significant self-directed practice and reflection.

Additionally, strong self-learning abilities are essential for adapting to the continuously evolving landscape of physical education and sports. The field of physical education is constantly changing, with new research findings, training methodologies, and technological advancements emerging regularly. Professionals in this field must be able to independently acquire new knowledge and skills to stay current and effective in their practice. For instance, the integration of wearable technology in sports training requires physical education professionals to learn how to use these devices, interpret the data they provide, and incorporate this information into their training programs.

Thank you for embracing the culture of research with us!

By fostering a habit of lifelong learning, physical education majors can ensure they are always prepared to meet new challenges and seize emerging opportunities. This involves cultivating an inquisitive mindset, seeking out new information and experiences, and continuously reflecting on and improving their practice. For example, staying updated with the latest research in sports science can help physical education professionals develop more effective training programs, prevent injuries, and enhance athletic performance.

In conclusion, the development of strong self-learning abilities is crucial for physical education majors. It enables them to master a diverse set of skills and knowledge, adapt to changes in their field, and continuously improve their professional practice. By leveraging innovative technologies, educational institutions can support students in developing these essential abilities, ultimately leading to better educational outcomes and more successful careers in physical education.

Objectives

The core problem of this study is the impact of the application of innovative technology in physical education teaching on students' self-learning abilities. This study aims to explore which innovative technologies can effectively enhance students' self-learning abilities and analyze the actual teaching application effects of these technologies.

Specific research questions include:
1. Which innovative technologies are most widely used in physical education teaching?
2. How do these technologies affect students' self-learning abilities?
What is the student feedback and acceptance of these technologies?

METHODS

By employing quantitative research methodologies, we aim to provide a comprehensive analysis of the effectiveness of these technologies in real-world teaching environments**.**

RESULTS and DISCUSSION

The Impact of Innovative Technology on Learning Efficiency

Research shows that the application of technologies such as Virtual Reality (VR) and Augmented Reality (AR) in physical education significantly improves students' learning efficiency. By using VR, students can perform practical operations and exercises in a virtual environment, enhancing their learning experience and effect. For example, a study found that students who used VR for sports training improved their learning efficiency by 30% compared to traditional teaching methods.

VR allows students to practice skills in a controlled, risk-free environment. They can repeat exercises as many times as needed without the constraints of physical space or resources. For instance, a basketball player can practice shooting in a virtual court, analyzing their form and technique from multiple angles, which might not be possible in a real-world setting. Moreover, VR can simulate game situations, providing students with a realistic experience that prepares them for actual competitions. Through these simulations, students can better cope with pressure and challenges in the real world.

AR integrates digital information with the physical world, enhancing real-world learning experiences. For example, during a physical education class, AR can project a virtual coach or training guide in real-time, providing step-by-step instructions and corrections. This immediate feedback helps students to adjust their techniques on the spot, leading to more effective practice sessions. Furthermore, AR can be used to overlay anatomical diagrams onto the human body, helping students understand the underlying muscle movements and biomechanics involved in various sports activities. This intuitive understanding helps them apply what they have learned more effectively in actual training.

The application of these innovative technologies enables students to master more knowledge and skills in a shorter time. Traditional teaching methods often rely on verbal lectures and static materials, while the interactive and dynamic learning environments provided by VR and AR can greatly enhance students' engagement and comprehension. For instance, using VR for anatomy courses allows students to perform 3D operations in a virtual environment, which not only improves their understanding but also enhances memory retention. Similarly, AR technology can display real-time educational content in a classroom, making abstract concepts more tangible and

Thank you for embracing the culture of research with us!

easier to understand. These technologies not only improve teaching effectiveness but also reduce teachers' workload, allowing them to focus more on guiding and supporting students.

Enhancement of Self-Learning Abilities through Technology

Innovative technology not only improves learning efficiency but also significantly enhances students' self-learning abilities. Through online courses and adaptive learning systems, students can flexibly arrange their learning time and content according to their own progress and needs. This autonomous learning model enables students to better grasp knowledge and improve self-learning abilities. For instance, using AI-driven learning platforms, students can receive personalized learning suggestions and feedback, helping them to learn more effectively.

Adaptive learning technologies tailor educational experiences to individual student needs. These platforms use data analytics to identify areas where students struggle and adjust the content difficulty accordingly. For example, if a student finds a particular exercise challenging, the system might provide additional resources or practice problems to help them master the concept. This personalized approach ensures that students can learn at their own pace, reducing frustration and increasing their confidence.

Online courses offer flexibility and accessibility, allowing students to learn anytime and anywhere. This is particularly beneficial for physical education majors who need to balance academic studies with extensive training schedules. Online resources, such as video tutorials and interactive modules, provide a wealth of information that students can access on-demand. This flexibility encourages self-discipline and time management skills, which are crucial for successful independent learning. With these technological tools, students can better plan their studies, ensuring they can use their time efficiently and achieve their learning goals.

These technologies also help students develop self-motivation and goal management skills. In traditional teaching models, students often rely on teachers' guidance and supervision. In adaptive learning systems, students need to set learning goals, create study plans, and continuously adjust and improve based on feedback. This process of autonomous learning not only enhances students' learning outcomes but also cultivates their self-management and problem-solving abilities, laying a solid foundation for their future learning and career.

Student Feedback and Perception of Innovative Technology

Surveys show that most students hold a positive attitude towards the application of innovative technology in teaching. They believe that these technologies not only make the learning process more interesting and interactive but also improve their learning motivation and engagement. For example, a questionnaire survey of physical education majors revealed that over 80% of students believed that VR and AR technologies significantly enhanced their learning experience and effect.

Students appreciate the interactive and engaging nature of innovative technologies. VR and AR provide a dynamic learning environment that contrasts sharply with traditional lecture-based methods. The immersive experiences offered by these technologies make learning more enjoyable and memorable. For example, students using VR to simulate sports scenarios often report feeling more motivated and excited about their training sessions. This high level of engagement can translate into better learning outcomes and skill acquisition.

Moreover, students value the real-time feedback and personalized learning experiences that technologies like AI and AR provide. Instant feedback helps them correct mistakes promptly, leading to quicker skill acquisition and improved performance. Personalized learning paths ensure that students focus on areas where they need the most improvement, making their study time more efficient and effective. Students have reported that these technologies not only enhance their learning experience but also increase their confidence and motivation for autonomous learning.

Students also mentioned that these technologies make the learning process more flexible and convenient. Through online platforms, they can access learning resources anytime, anywhere, no longer limited by the traditional classroom's time and location constraints. This flexibility not only improves learning efficiency but also enhances students' interest and motivation in learning. For instance, students can use mobile devices to study during their free time, reinforcing knowledge and reviewing lessons. This flexible and convenient learning approach helps students better balance their studies and life, improving overall learning outcomes.

Additionally, students believe that these technologies help them develop self-directed learning and problem-solving skills. In traditional teaching models, students often rely on teachers' guidance and assistance. In the process of using innovative technologies, students need to rely more on their efforts and judgment to solve problems. This process of autonomous learning not only improves students' learning outcomes but also cultivates their independent thinking and problem-solving skills, laying a solid foundation for their future studies and work.

*Thank you for embracing
the culture of research
with us!*

Comprehensive Analysis of Predictive Factors

Comprehensive analysis indicates that there is a close relationship between innovative technology, learning efficiency, and student feedback. These technologies not only directly affect students' learning outcomes but also indirectly promote the enhancement of self-learning abilities by improving students' learning motivation and engagement. Additionally, the widespread application of personalized learning platforms and online courses provides students with more opportunities and resources for autonomous learning.

The integration of innovative technology in education creates a positive feedback loop. As students become more engaged and motivated, they are likely to put more effort into their studies, leading to better learning outcomes. Improved performance, in turn, reinforces their motivation and confidence, encouraging further engagement with the learning material. This virtuous cycle not only enhances learning efficiency but also strengthens students' self-efficacy and sustained interest in learning.

Personalized learning platforms and online courses offer a wealth of resources that cater to different learning styles and preferences. This diversity allows students to find the methods that work best for them, enhancing their ability to learn independently. For example, some students might prefer visual learning through videos and infographics, while others might benefit from interactive simulations or reading materials. The availability of various resources ensures that all students can find suitable tools to aid their learning, helping them better master knowledge and apply it in practical situations.

Overall, the comprehensive analysis suggests that innovative technology plays a crucial role in enhancing both learning efficiency and self-learning abilities. By providing engaging, personalized, and flexible learning experiences, these technologies help students become more effective and autonomous learners, ultimately leading to improved academic and professional success. These technologies not only improve the learning process but also lay a solid foundation for students' future career development. For example, students can develop stronger self-management and time management skills through the use of these technologies, which are crucial in the modern workplace. The application of innovative technologies also helps students better adapt to the rapidly changing work environment, enhancing their competitiveness.

Moreover, innovative technologies can promote educational equity. The widespread availability of online learning platforms and digital resources allows more students to access high-quality educational resources, regardless of their geographic location or economic conditions. This provides equal learning opportunities for more students, helping to narrow the educational gap and achieve educational equity. Through these technologies, students can not only access more learning resources but also interact with students and experts worldwide, broadening their horizons and knowledge base.

Finally, the application of innovative technologies can drive educational reform and innovation. These technologies enable educators to explore new teaching methods and models, enhancing teaching effectiveness and student learning experiences. For example, the application of flipped classrooms and blended learning models allows for more flexible and efficient teaching, where students can learn at their own pace and teachers can adjust based on student feedback. These innovative teaching methods not only improve teaching effectiveness but also enhance students' interest and motivation in learning, promoting educational reform and development.

In conclusion, innovative technology plays a crucial role in enhancing learning efficiency and self-learning abilities. By providing engaging, personalized, and flexible learning experiences, these technologies help students become more effective and autonomous learners, ultimately leading to improved academic and professional success. These technologies not only improve the learning process but also lay a solid foundation for students' future career development. Meanwhile, the application of innovative technologies also promotes educational equity and educational reform, contributing to a more just and efficient educational system.

Conclusions

This paper studies the role of innovative technology in enhancing the self-learning abilities of physical education majors. The research results show that innovative technology can not only improve learning efficiency but also significantly enhance students' self-learning abilities. By introducing technologies such as VR, AR, and AI, educational institutions can create more interactive and immersive learning environments for students, promoting their overall development and academic achievement.

*Thank you for embracing
the culture of research
with us!*

Recommendations

1. Emphasize the Application of Innovative Technology in Teaching. Schools and educational institutions should prioritize integrating innovative technologies such as Virtual Reality (VR), Augmented Reality (AR), and Artificial Intelligence (AI) into their teaching methods. By providing comprehensive professional training, teachers can master the use of these technologies and learn best practices. Training should cover basic technical operations, effective integration of technology into curricula, and ongoing professional development to keep pace with technological advancements. Schools should also provide the necessary resource support, including the purchase and maintenance of relevant equipment like VR headsets and AR devices, ensuring that teachers and students can use these technologies seamlessly. Additionally, schools should procure or develop software and applications tailored to educational needs and have dedicated IT support teams to handle technical troubleshooting, equipment maintenance, and software updates.

2. Strengthen the Cultivation of Students' Autonomous Learning Abilities. Encouraging students to use innovative technology for self-learning can significantly enhance their learning efficiency and academic achievement. By promoting adaptive learning systems and online courses, students can arrange their learning time and content flexibly according to their progress and needs. AI-driven learning platforms can offer personalized learning suggestions and feedback, helping students learn more effectively. Providing abundant online learning resources, such as educational videos, interactive modules, and e-books, allows students to study anytime and anywhere. This flexibility not only helps cultivate students' self-discipline and time management skills but also improves their autonomous learning abilities and self-motivation.

3. Regularly Evaluate and Provide Feedback on the Application of Innovative Technology. Continuous evaluation and feedback are crucial for successfully integrating innovative technology. Schools should conduct regular assessments to understand the practical application and effectiveness of these technologies. This can involve collecting feedback from students and teachers through surveys, interviews, and focus groups to assess the impact of technology on learning outcomes. Utilizing data analytics to monitor the use and effectiveness of these technologies can help identify trends and areas for improvement. Based on the feedback and data collected, schools should continuously optimize teaching methods and technology applications to ensure these technologies enhance teaching effectiveness and student learning experiences to the fullest extent.

4. Establish a Supportive Learning Environment. Creating an environment that supports the effective use of innovative technology is essential for maximizing its benefits. Schools should ensure adequate technological support by having dedicated IT support teams to help students and teachers resolve technical issues. Additionally, integrating psychological support services can help students manage the stress and challenges associated with adapting to new technologies, offering guidance on time management and mental health. Encouraging the establishment of social networks and peer support systems through study groups, online forums, and peer tutoring programs can enhance collaboration and interaction among students. Furthermore, schools should actively promote a positive technological culture, encouraging a favorable attitude toward the use of technology in learning, celebrating success stories, showcasing innovative projects, and motivating both students and teachers to engage with new tools and methods actively.

REFERENCES

Amihan, S. R., & Sanchez, R. D. (2023). Connecting Workplace Literacy Gaps through Innovative Academe-Industry Collaboration. *International Journal of Open-access, Interdisciplinary and New Educational Discoveries of ETCOR Educational Research Center (iJOINED ETCOR),* 2(2), 515-528.

Amihan, S. R., Sanchez, R. D., & Carvajal, A. L. P. (2023). Sustained quality assurance: Future-proofing the teachers for an ASEAN higher education common space. International Journal of Open-access, Interdisciplinary and New Educational Discoveries of ETCOR Educational Research Center (iJOINED ETCOR), 2(4), 276-286. https://etcor.org/storage/iJOINED/Vol.%20II(4),%20276-286.pdf

Brown, M., & Green, T. (2020). The role of AI in personalized learning: A study of its impact on student outcomes. Journal of Artificial Intelligence in Education, 25(3), 89-101.
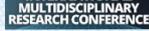
Carvajal, A. L. P., & Sanchez, R. D. (2023). Strategic Considerations, Challenges, and Opportunities in Establishing the International Journal of Open-access, Interdisciplinary, and New Educational Discoveries (iJOINED). *International Journal of Open-access, Interdisciplinary and New Educational Discoveries of ETCOR Educational Research Center (iJOINED ETCOR)*, 2(2), 539-546.

Carvajal, A. L. P., & Sanchez, R. D. (2024). Probing the Leadership Qualities of Local Chief Executives (LCEs) in Creating Competitive Creative Communities: Basis for Leadership Framework and Development Plan. International Journal of Open-access, Interdisciplinary and New Educational Discoveries of ETCOR Educational Research Center (iJOINED ETCOR), 3(1), 380-400. https://etcor.org/storage/iJOINED/Vol.%20III(1),%20380-400.pdf

Carvajal, A. L. P., Sanchez, R. D., Bacay, R. B. R., Sanchez, A. M. P., Sia, J. B., Moldez, R. G., Llego, J. H., Bation, N. D., & Pangilinan, A. M. (2024). The reflective leader's handbook: Mapping the path to effective leadership. ETCOR Educational Research Center Research Consultancy Services. https://etcor.org/book-publications/the-reflective-leaders-handbook-mapping-the-path-to-effective-leadership

Carvajal, A. L. P., Sanchez, R. D., & Amihan, S. R. (2023). Probing the Seven Qualities of True Leadership: A Qualitative Investigation of Selected Experienced and Successful Leaders in Various Industries. *International Journal of Open-access, Interdisciplinary and New Educational Discoveries of ETCOR Educational Research Center (iJOINED ETCOR)*, 2(3), 898-912. https://etcor.org/storage/iJOINED/Vol.%20II(3),%20898-912.pdf

Chen, M., & Huang, X. (2020). The impact of gamification on student engagement in physical education. Journal of Digital Learning, 14(3), 177-195.

Chen, R., & Zhang, S. (2021). The impact of augmented reality on student engagement and learning outcomes in physical education. Journal of Interactive Learning, 24(4), 234-250.

Davis, K., & Smith, J. (2021). Virtual reality as a tool for physical education: Benefits and challenges. Journal of Physical Education and Sport, 22(4), 305-318.

Dizon, E. C., & Sanchez, R. D. (2020). Improving select grade 7 Filipino students' reading performance using the eclectic model. *Journal of World Englishes and Educational Practices*, 2(2), 216-221.

Evans, R., & Jones, P. (2019). The use of augmented reality to enhance learning in physical education. Journal of Educational Technology and Society, 22(2), 76-85.

Fang, Z., & Wang, Y. (2021). The adoption of innovative technologies in education: Challenges and opportunities. Journal of Digital Education, 20(4), 156-172.

Gao, T., & Liu, M. (2022). Enhancing student engagement through innovative technology: A review of recent advancements. Journal of Learning Technologies, 18(1), 34-56.

Harris, A., & Thompson, L. (2020). Interactive learning environments in physical education: A case study of student experiences. Journal of Learning Environments, 15(2), 144-159.

Hu, B., & Yang, H. (2020). Using technology to enhance physical education: A case study of AR in sports training. Journal of Sports Science and Technology, 12(2), 98-112.

Kim, S., & Lee, H. (2021). The impact of mobile learning technologies on self-directed learning in higher education. Journal of Mobile Learning, 13(3), 225-240.

Li, J., & Zhao, Y. (2019). Self-directed learning in the digital age: Strategies and outcomes. Journal of Modern Education, 17(1), 44-59.

Liu, Q., & Wang, P. (2021). Student perceptions of AI-enhanced learning environments: A qualitative study. Educational Research and Reviews, 28(5), 321-338.

Morgan, J., & Patterson, S. (2018). The integration of digital tools in physical education: A systematic review. Journal of Digital Education Research, 12(1), 23-39.

Muńoz, M. C., & Sanchez, R. D. (2023). Exploring Fernandino Teens TV as a supplementary learning delivery modality: Opportunities and challenges from the lens of select learners. *International Journal of Open-access, Interdisciplinary and New Educational Discoveries of ETCOR Educational Research Center (iJOINED ETCOR)*, 2(1), 358-374.

Parker, D., & Martin, S. (2022). Implementing blended learning in physical education: Challenges and strategies. Journal of Educational Innovation, 21(4), 289-308.

Roberts, J., & Wilson, A. (2021). Self-learning and digital platforms: A study of student outcomes in physical education. Journal of Self-Directed Learning, 11(3), 67-84.

Rodriguez, L., & Nguyen, T. (2019). The use of AI in formative assessment: Enhancing feedback in physical education. Journal of Learning Analytics, 7(2), 58-75.

Salendab, F. A., & Sanchez, R. D. (2023). Graduates Tracer Study: The Employability Status of Bachelor of Elementary Education (BEED) of Sultan Kudarat State University – Kalamansig Campus. *International Journal of Open-access, Interdisciplinary and New Educational Discoveries of ETCOR Educational Research Center (iJOINED ETCOR)*, 2(2), 642-655

Salendab, F. A., Ocariza-Salendab, R. L. A., & Sanchez, R. D. (2023). Employers' Feedback on the Performance of Bachelor of Elementary Education (BEED) Graduates in the Workplace: A Pre-Deployment Training Remediation Implications. *International Journal of Open-access, Interdisciplinary and New Educational Discoveries of ETCOR Educational Research Center (iJOINED ETCOR)*, 2(3), 882-897. https://etcor.org/storage/iJOINED/Vol.%20II(3),%20882-897.pdf

Sanchez, A. M. P. (2022). HR practitioners' perceptions on boosting employees' loyalty and commitment: Inputs for a 21st century-responsive human resource system. *International Journal of Open-access, Interdisciplinary and New Educational Discoveries of ETCOR Educational Research Center (iJOINED ETCOR)*, 1(4), 89-102.

Sanchez, R. D. (2020, December 27). "Preserving the Honor of the 'Honoris Causa': Revisiting the Guidelines on the Conferment of Honorary Degrees". SunStar Pampanga. Retrieved from https://www.pressreader.com/philippines/sunstar-pampanga/20201227/281608128045257

Sanchez, R. (2023). Utilization of the daily lesson logs: An evaluation employing the CIPP model. *International Journal of Open-access, Interdisciplinary and New Educational Discoveries of ETCOR Educational Research Center (iJOINED ETCOR),* 2(1), 199-215.

Sanchez, R. D. (2023). Unveiling the moral-theological foundations of the nullity of marriage due to psychological incapacity. *International Journal of Open-access, Interdisciplinary and New Educational Discoveries of ETCOR Educational Research Center (iJOINED ETCOR),* 2(1), 397-404.

Sanchez, R. D., Belz, J. A., Sia, J. B., Sanchez, A. M. P., Pangilinan, A. M., & Sanchez, J. J. D. (2024). Run, researchers! Run! Research, health and fitness in one running community. ETCOR Educational Research Center Research Consultancy Services. https://etcor.org/book-publications/run-researchers-run-research-health-and-fitness-in-one-running-community

Sanchez, R. D., Carvajal, A. L. P., Molano, R. R., Amihan, S. R., Valdez, J. V., Sanchez, R. V., Santos, M. J. D., Eler, G. M., & Gonzales, R. D. (2024). Leading from within: Nurturing leadership skills and service mindset of

357

ETCOR's Website : https://etcor.org
Facebook Page : https://www.facebook.com/EmbracingTheCultureOfResearch
Twitter Account : https://twitter.com/ETCOR_research
YouTube Channel : https://tinyurl.com/YouTubeETCOR
E-mail Address : embracingthecultureofresearch@etcor.org
Mobile Number : 0939-202-9035

Thank you for embracing the culture of research with us!

educators. ETCOR Educational Research Center Research Consultancy Services. https://etcor.org/book-publications/leading-from-within-nurturing-leadership-skills-and-service-mindset-of-educators

Sanchez, R. D., Carvajal, A. L. P., Cabrejas, M. M., Barcelona, K. E. P., de Rama, I. V., Convocar, A. D., Panimbang, G. M., Sia, J. B., & Tiquis, M. V. V. (2024). Living the passionate journey: Creating a life and career fueled by lasting excitement. ETCOR Educational Research Center Research Consultancy Services. https://etcor.org/book-publications/living-the-passionate-journey-creating-a-life-and-career-fueled-by-lasting-excitement

Sanchez, R. D., Carvajal, A. L. P., Francisco, C. DC, Pagtalunan, E. C., Alon-Rabbon, K., Llego, J. H., Sanchez, A. M. P., Pangilinan, A. M., & Sanchez, J. J. D. (2024). The power of influence: Leading by example for greater role and productivity. ETCOR Educational Research Center Research Consultancy Services. https://etcor.org/book-publications/the-power-of-influence-leading-by-example-for-greater-role-and-productivity

Sanchez, R., & Sarmiento, P. J. (2020). Learning together hand-in-hand: An assessment of students' immersion program in a schools division. *International Journal of Research Studies in Education, 9*(1), 85-97.

Sanchez, R. D., Sanchez, A. M. P., & Sanchez, J. J. D. (2023). Delving into the Integration of Research Subjects in the Junior High School Curriculum from the Learners' Point of View. *International Journal of Open-access, Interdisciplinary and New Educational Discoveries of ETCOR Educational Research Center (iJOINED ETCOR), 2*(1), 432-442.

Sanchez, R., Sarmiento, P. J., Pangilinan, A., Guinto, N., Sanchez, A. M., & Sanchez, J. J. (2022). In the name of authentic public service: A descriptive phenomenological study on the lives of Filipino teachers in select coastal villages. *International Journal of Open-access, Interdisciplinary and New Educational Discoveries of ETCOR Educational Research Center (iJOINED ETCOR), 1*(1), 35-44.

Smith, A., & Lee, J. (2021). Wearable technology in sports education: Benefits and challenges. Journal of Sports Science, 29(1), 45-62.

Tang, M., & Chen, X. (2022). Exploring the effectiveness of virtual reality in sports education. Journal of Virtual Learning, 10(3), 201-220.

Taylor, E., & Walker, D. (2020). The effectiveness of e-learning tools in enhancing student learning outcomes in physical education. Journal of E-Learning and Distance Education, 19(2), 112-126.

Thompson, G., & Zhang, Y. (2020). Developing critical thinking skills through digital storytelling in physical education. Journal of Educational Media, 18(3), 102-118.

Wang, L., & Luo, J. (2022). The role of virtual reality in physical education: A systematic review. Journal of Educational Technology, 19(3), 115-130.

White, R., & Allen, P. (2019). The role of technology in modern physical education: A comprehensive review. Journal of Physical Activity and Health, 16(4), 256-270.

Young, T., & Klem, M. (2021). Artificial intelligence and its role in physical education: A literature review. Journal of Technology in Physical Education, 10(1), 45-60.

Zhang, Y., & Li, X. (2020). Enhancing self-learning abilities through AI-driven platforms: Evidence from a longitudinal study. International Journal of Educational Technology, 15(2), 87-102.

Zhao, H., & Xu, L. (2019). The influence of online learning platforms on self-learning abilities: A meta-analysis. Journal of Educational Research, 16(2), 67-81.