

The Role of Teaching Strategies in Senior High Physical Education Performances

Allan Carl M. Arandia, LPT
 arandiaallancarl@gmail.com

Leyte Normal University, Tacloban City, Leyte, Philippines, 6500

Abstract

This study investigates the influence of contextualized video physical exercises on the performance of Senior High School students enrolled in Health and Fitness subjects. Physical Education (PE) is essential for promoting lifelong physical health, but students often show declining interest and performance. This study addresses that gap by exploring how video-based exercises, tailored to local culture and context, influence student motivation, engagement, and learning outcomes. Grounded in the Stimulus-Organism-Response (S-O-R) model and Self-Determination Theory (SDT), the research used a qualitative case study approach. The participants were ten (10) purposively selected students from one of the schools that offers Senior High School in Tacloban City, Philippines. They were chosen based on their interest and engagement in PE. The primary tools employed were pre-surveys, contextualized video-based exercises adapted from local health institutions, and semi-structured interviews. The data were analyzed using thematic analysis, which highlighted common experiences and insights among participants. Findings revealed three main themes: (1) *Enhanced motivation and engagement*, (2) *Enjoyment and satisfaction*, and (3) *Student-centric integration of video exercises*. Students reported improved understanding of techniques, increased motivation, and a positive shift in their attitude toward PE. They also appreciated the clarity of video demonstrations and the social interaction brought about by peer collaboration. The study suggests that integrating contextualized video exercises into the PE curriculum can transform learning experiences and improve student outcomes. It recommends that schools consider implementing these strategies to enhance both educational quality and student well-being.

Keywords: Contextualized video exercises; physical education; student engagement; health and fitness; qualitative research

1. Introduction

Physical Education (PE) was a core subject that promoted physical health, mental well-being, and social interaction among students. Traditionally, PE included activities designed to develop strength, endurance, flexibility, and coordination. However, over time, the relevance of PE in the school curriculum faced challenges due to increasing academic demands and outdated teaching strategies. International studies such as that by Bailey et al. (2014) reported a global decline in student interest and performance in PE, which affected their overall health and motivation. Locally, Jacklyn and Jonathan (2016) found that many Filipino students felt disengaged from traditional PE methods, citing repetitive routines and a lack of modern approaches. In response, educators began exploring innovative solutions like video-based exercises to make PE more appealing and effective.

This study aligned with the United Nations Sustainable Development Goal (SDG) 3, which aimed to ensure healthy lives and promote well-being for all. It also supported SDG 4, which focused on inclusive and equitable quality education. In the Philippines, Republic Act No. 5708 mandated the development and integration of a comprehensive physical education and sports program in schools. Furthermore, the Department of Education endorsed the use of digital platforms to promote active learning and health awareness, especially in response to challenges posed by the COVID-19 pandemic.

This study was guided by two theories: the Stimulus-Organism-Response (S-O-R) Model and Self-Determination Theory (SDT). The S-O-R model explained how an external stimulus, such as a video-based exercise, affected students' thoughts and emotions, which then led to improved behaviours like increased participation and better performance. Meanwhile, SDT, as proposed by Deci and Ryan (1985), highlighted that students were more engaged when they felt autonomous, competent, and connected. These theories helped explain how personalized and interactive video exercises boosted student motivation in PE. Cho et al. (2021) conducted a systematic review which highlighted that gamification elements (e.g., levels, rewards) in PE increased student engagement and motivation, particularly when combined thoughtfully with theoretical frameworks like Self-Determination Theory. This aligned with the emphasis on enjoyment and autonomy enabled by video-based exercises.

Several international and local studies reported recurring challenges in PE implementation. Internationally, lack of motivation, repetitive routines, and outdated teaching strategies caused declining student interest (Estrada & Méndez-Giménez, 2022; Riley et al., 2020). Locally, research in the Philippines by Palad et al. (2023) highlighted that many students felt disconnected from PE due to lack of access to engaging content and insufficient integration of digital tools. In Tacloban City, Tegero M. (2020) observed that although programs like the "Great Filipino Workout" existed, many remained underutilized due to limited innovation and context-specific delivery methods.

To address these challenges, educators and institutions turned to digital solutions, such as contextualized video exercises. International studies showed that video-based interventions significantly improved health and fitness, especially

when designed with cultural relevance (Riley et al., 2020). Locally, Palad et al. (2023) found that digital tools encouraged better participation among Filipino youth. Students responded more positively when exercises were fun, easy to follow, and flexible in delivery—features commonly associated with video content. Moreover, peer collaboration and the ability to learn at one's own pace helped reduce anxiety and increase motivation.

A study by Culajara (2023) investigated the impact of video-based presentations (VBP) on secondary school students' learning performance in Physical Education. Using a sequential mixed method design involving pre-tests, post-tests, and focus groups, the study found significant improvements in student knowledge and participation—reflected in higher post-test scores—and identified themes such as independent learning and flexible instruction. This aligned with the findings on enhanced motivation and engagement, demonstrating the effectiveness of contextualized video formats for both cognitive outcomes and self-directed learner behaviour. Goh and Wong's (2023) review of technology-enhanced pedagogy in PE documented that digital tools—including wearable devices, gamification, VR, and video feedback—effectively improved student engagement, motor performance, and knowledge retention. Their findings underlined the importance of infrastructure, teacher training, and ethical data use—echoing the recommendations to support teachers and strengthen technology access.

Incorporating contextualized materials—videos that reflected local culture, environment, and needs—made the experience more relatable and meaningful for learners. The use of clear visual demonstrations helped students understand proper form and techniques, which enhanced confidence and reduced the risk of injury. These coping mechanisms, supported by proper implementation and teacher guidance, allowed for a more inclusive and engaging PE learning experience.

International and local researchers recommended integrating video-based programs into the PE curriculum. Patel and Singh (2022) emphasized that video-based PE promoted engagement and supported diverse learning styles. Smith and Jones (2021) highlighted the importance of aligning digital tools with educational standards to improve learning outcomes. Østerlie et al. (2023) examined flipped classroom methods in PE and found that pre-recorded instructional videos improved student preparedness, class engagement, and motivation. Their findings echoed the objective to empower students through contextualized learning and aligned with autonomy-supportive pedagogy. Hutcheon (2021) studied the combined use of video feedback and peer evaluation in IB PE contexts, showing that students improved gymnastic performance and intrinsic motivation. This strengthened the recommendation for group interactions and peer collaboration as part of video-based PE interventions. In the Philippine context, studies suggested providing teacher training, upgrading school infrastructure, and creating inclusive, easy-to-access content to ensure the success of such programs (Palad et al., 2023). Educational institutions were encouraged to embrace technology not only as a support tool but as a central component in transforming physical education delivery.

Given the decline in student interest and performance in PE, there was a strong need to explore innovative and contextualized methods. Video-based physical exercises offered a modern solution that combined convenience, relatability, and engagement. Despite the global success of such programs, limited research existed in the Philippine context, especially in areas like Tacloban City. This study sought to fill that gap by examining how contextualized video exercises affected student performance in Health and Fitness subjects.

This study was important for several stakeholders as it offered wide-ranging benefits. Students were expected to gain improved motivation and a deeper understanding of physical fitness through engaging and contextualized video exercises. Teachers benefited by acquiring new and effective teaching strategies that better suited the learning styles of modern students. Schools enhanced their Physical Education programs by adopting innovative and inclusive tools that fostered active participation. Researchers found this study valuable as it provided a foundation for further exploration into the use of digital tools in Physical Education. Lastly, the broader community benefited from the development of healthier, more active youth who were better equipped to maintain lifelong fitness habits.

The main objective of this research was to explore the impact of contextualized video physical exercises on the performance of students in Health and Fitness subjects. Specifically, it aimed to:

1. To assess students' attitudes and perceptions towards video-based PE exercises.
2. To compare student performance before and after using video exercises.
3. To gather suggestions from students for improving PE through video-based activities.

2. Methodology

2.1. Research Design

This study used a qualitative single case study design to understand how contextualized video physical exercises affected students' performance in Health and Fitness subjects. A case study was appropriate when the goal was to explore a specific situation or group in depth, especially when the focus was on real-life experiences (Shona McCombes, 2023). Following Lobo (2017), single case studies allowed researchers to collect rich and detailed data that helped explain how and

why certain interventions worked. This method was chosen to capture the unique insights and personal experiences of students who participated in the video exercise intervention.

2.2. Research Locale

The study was conducted in one of the schools that offered Senior High School in Tacloban City, Leyte, Philippines. This school was selected because it offered Senior High School Physical Education programs and supported innovative teaching strategies. The location was significant as it represented a local setting where physical health programs were often challenged by limited resources and varying student engagement. The school also served a diverse group of students, making it an appropriate site for exploring the effectiveness of contextualized learning tools.

2.3. Research Participants

The participants in this study were ten (10) Senior High School students enrolled in Health and Fitness subjects at one of the schools that offered Senior High School in Tacloban City during the Academic Year 2024–2025. These students were selected to provide insights into their experiences with contextualized video physical exercises. The participants came from different academic strands (STEM and HUMSS) and included both male and female students. All were 18 years old and had varying levels of interest and ability in physical education. They were chosen to represent a diverse group of learners, ensuring that different perspectives and experiences were included in the study. Participation was voluntary, students were allowed to speak in their preferred language (Waray, Tagalog, or English), and informed consent was obtained from each student, along with consent from their parents or guardians when necessary.

2.4. Sampling Procedure

This study used purposive sampling, a technique where participants were chosen based on specific criteria related to the research goals. According to Crossman (2020), purposive sampling was useful when the researcher sought to gain a deeper understanding of a particular group. In this case, the criteria for inclusion were: (1) active enrollment in Health and Fitness subjects, (2) interest in physical education, (3) good physical health, and (4) willingness to participate in the study and video-based activities. Students with medical conditions that could prevent safe participation were excluded. This sampling method ensured that participants provided meaningful and relevant insights into how video exercises influenced their performance and motivation in PE.

2.5. Research Instrument

Three research tools were used in this study: a pre-survey, contextualized video physical exercises, and semi-structured interviews. The pre-survey helped identify qualified participants based on the inclusion criteria. The contextualized video exercises were modified and adopted from reputable sources such as *Exercise is Medicine Philippines* (2020) and the *University of the Philippines Manila* (2022). These exercises were validated by experts for cultural relevance and clarity. The semi-structured interview guide was created by the researcher and reviewed by three experts in the field to ensure content validity. Each interview session lasted around 20–30 minutes, which allowed participants to share detailed experiences.

2.6. Data Gathering Procedure

Before collecting data, the researcher submitted the necessary documents, including the consent forms and interview guide, to verify from experts. After receiving approval, the researcher oriented the participants on the purpose and process of the study. During the actual data gathering, each participant took part in video-based exercise sessions and was interviewed individually. The interviews were conducted in a quiet setting, audio recorded (with permission), and then transcribed for analysis. After all interviews were completed, the transcriptions were returned to the participants for verification, allowing them to check the accuracy of their statements. The researcher also facilitated a focus group discussion where students elaborated on their insights. Throughout the entire process, care was taken to ensure a comfortable and respectful environment that encouraged honest and open responses.

2.7. Data Analysis

The data were analyzed using thematic analysis, a method used to identify, group, and interpret patterns or themes in qualitative data (Wa-Mbaleka & Gladstone, 2018). The researcher followed six steps: familiarization with the data, initial coding, theme development, theme review, naming and defining themes, and final reporting. This process allowed the researcher to understand how students perceived and experienced video-based PE instruction. Codes and themes were organized according to common experiences, emotions, and suggested improvements.

2.8. Ethical Consideration

Ethical guidelines were strictly followed in this study. Participants signed an informed consent form and were informed that they could withdraw at any time without consequences. Privacy and confidentiality were ensured by assigning codes to participant names and securely storing all data. No physical or emotional risks were anticipated. The benefits of participation were explained clearly, and students were debriefed after their involvement. In compliance with Republic Act No. 10173, or the Data Privacy Act of 2012, all personal data were treated with the highest level of confidentiality. The collected data were used solely for academic purposes and were stored securely to prevent unauthorized access, in line with data protection policies.

2.9. Trustworthiness

To ensure the credibility and reliability of the data, the study followed four trustworthiness criteria: credibility, transferability, dependability, and confirmability. Credibility was supported through member checking, where participants confirmed the accuracy of the transcriptions. Triangulation was achieved by comparing interviews, observations, and feedback from PE teachers. Thick description was provided to present detailed context, and peer debriefing was employed to review the findings. These strategies verified that the results were based on honest and consistent data.

2.10. Reflexivity

The researcher acknowledged that their personal background, teaching experience in Physical Education, and interest in digital education tools might have influenced the research process. To maintain objectivity, efforts were made to minimize bias by using neutral language during interviews, encouraging honest and open responses, and involving expert validation throughout each stage of the study. By remaining aware of their own positionality and potential influence, the researcher ensured that the findings reflected the authentic voices of the student participants rather than personal expectations. This reflexive approach contributed to the credibility of the study and its relevance to the field of Physical Education.

3. Results and Discussion

This section presented the findings from the study on the use of contextualized video physical exercises in Health and Fitness education among Senior High School students. The data were gathered through interviews, direct observation, and group discussions with 10 student participants. The goal was to explore how students perceived video-based exercises and how these materials influenced their motivation, performance, and learning experiences. The results were discussed through key themes that emerged during the analysis, reflecting the responses to the Statement of the Problem (SOP). Each theme was supported by related literature and direct quotes from the participants to provide a deeper understanding.

3.1. Students' perceptions & experiences using contextualized video of physical exercises

The first research objective aimed to examine the perceptions and experiences of students in using contextualized video physical exercises in Physical Education. This objective was reflected in Theme 1: Enhanced Motivation and Engagement, which captured how students responded emotionally and behaviorally to the integration of video-based instruction. The findings revealed that video exercises encouraged students to participate more actively, increased their internal motivation, and fostered a more positive attitude toward physical activity. The theme was further explained through sub-themes that highlighted students' self-driven participation and their shifting mindset about exercise.

Theme 1: Enhanced Motivation and Engagement

This theme presented how contextualized video physical exercises helped improve students' motivation and active participation in PE classes. Through their narratives, students expressed that the use of video exercises sparked greater interest, increased confidence, and provided a more comfortable learning environment. Two sub-themes emerged from this category: increased intrinsic motivation, which captured students' self-driven desire to participate actively in class; and positive attitudes toward exercise, which described the shift in students' perceptions of PE from being repetitive or boring to more engaging and meaningful.

Respondents shared that they felt more self-driven to participate in exercise programs when the activities aligned with their personal interests and goals. The sense of accomplishment and progress provided by these programs made them eager to continue without external pressure. Students reported a noticeable increase in their motivation to participate in physical activities after using contextualized video exercises. Many described feeling more confident, enthusiastic, and engaged during PE sessions. This finding was consistent with Deci and Ryan's (1985) Self-Determination Theory, which emphasized that students were more likely to engage in learning activities when their needs for autonomy, competence, and relatedness were met. The video format gave students control over the pace of their learning, allowed them to visualize proper techniques, and made the activities more relatable and fun. As supported by Chen et al. (2021), multimedia tools such as instructional videos significantly improved students' participation by making learning more enjoyable and accessible.

Significant Statement 1: "Uhm.. What I have noticed is that I learn fast without the hesitation to ask how to do a performance because I can replay the video exercises." (Uhm.. What I have noticed is that I learn fast without the hesitation to ask how to do a performance because I can replay the video exercises.) SP-2

Significant Statement 2: "It helped me stay active and understand proper exercise techniques." (It helped me stay active and understand proper exercise techniques.) SP-4

Significant Statement 3: "The technique that our teacher used made the exercises much easier to imitate knowing that we just have to watch the video for us to exercise as well." (The technique that our teacher used made the exercises much easier to imitate knowing that we just have to watch the video for us to exercise as well.) SP-5

The findings highlighted how students developed a more favorable view of physical activity after engaging with contextualized video exercises. The visual clarity, cultural relevance, and repeatable nature of the videos helped students feel more capable and less intimidated during PE sessions. This was consistent with White, Bennie, Vasconcellos, Cinelli, Hilland, Owen, and Lonsdale (2020), who emphasized that PE environments fulfilling students' basic psychological needs—autonomy, competence, and relatedness—encouraged positive emotions and increased participation. Their systematic review further underscored that when teachers incorporated autonomy-supportive and competence-building strategies, students not only became more motivated but also developed stronger, lasting attitudes toward physical engagement.

Significant Statement 1: "I noticed that it makes me active all throughout the day and I feel energized... because my I enjoy doing it even in long periods of time." (I noticed that it makes me active all throughout the day and I feel energized... because my I enjoy doing it even in long periods of time.) SP-1

Significant Statement 2: "I became more confident doing exercises" (I became more confident doing exercises) SP-4

Significant Statement 3: "One is that, I became more active every time we need to do exercise. Another one is whenever there is a video, we became participative knowing that it is more engaging." (One is that, I became more active every time we need to do exercise. Another one is whenever there is a video, we became participative knowing that it is more engaging.) SP-5

3.2. Changes in performance

Aligned with the second research objective, which sought to describe changes in students' motivation, engagement, and performance, Theme 2 explored how the use of video materials brought a greater sense of enjoyment and satisfaction to PE classes. Students shared that the content was more dynamic and enjoyable compared to traditional methods, which led to improved focus and greater involvement in activities. Two sub-themes emerged from this theme: the first highlighted the interactive and fun aspects of the video materials, while the second emphasized how shared activities and peer involvement further enhanced the overall learning experience.

Theme 2: Enjoyment and Satisfaction

The second theme highlights the enjoyable and satisfying learning experiences students encountered while using video-based exercises. Many participants emphasized that the video content made their PE classes more interactive and fun, helping them break away from the monotony of traditional routines. This theme is further explored through two sub-themes:

fun and interactive content, which captures how the videos made physical tasks feel lighter, easier, and more enjoyable; and engagement with peers, which illustrates how shared video exercises and collaborative participation fostered a more socially fulfilling learning experience.

A strong sense of enjoyment was felt by students while using video-based exercises. Unlike traditional routines that students found repetitive and boring, the videos were described as fun, interactive, and easy to follow. This aligns with Finkelstein et al. (2015), who noted that engaging content leads to higher satisfaction and sustained involvement in physical activity. The participants expressed that the visually stimulating materials made exercises less tiring and more entertaining. The social aspect of doing activities with classmates or sharing them with family also enhanced their overall satisfaction. This is further supported by Vella et al. (2019), who emphasized the positive effects of group-based fitness on well-being and participation. Similarly, Jääskelä et al. (2020) examined how instructor-generated video content affects engagement in tertiary-level courses and found that clear video presentations enhanced student satisfaction and attentiveness.

Significant Statement 1: "I can do exercises even katapos na ng klase kahit paguwi at bakasyon makakapag exercise ako." (I can do exercises even after classes and even when I go home and even when on vacation I can exercise.) SP-2

Significant Statement 2: "One is that, I became more active every time we need to do exercise. Another one is whenever there is a video, we became participative knowing that it is more engaging." (One is that, I became more active every time we need to do exercise. Another one is whenever there is a video, we became participative knowing that it is more engaging.) SP-5

Significant Statement 3: "Before the video exercises, I struggled with form and stamina in workouts. After using them, my technique improved, and I can handle longer routines with better endurance. I also feel more confident in practical exams." (Before the video exercises, I struggled with form and stamina in workouts. After using them, my technique improved, and I can handle longer routines with better endurance. I also feel more confident in practical exams.) SP-7

This highlighted how video-based exercises fostered meaningful social interaction and collaboration among students in Physical Education classes. Participants indicated that working in pairs or small groups, such as synchronizing videos, offering feedback to one another, and exercising together, strengthened their sense of community and motivation. This observation aligned with findings from Valentini et al. (2024), whose multilevel study revealed that technology use in PE classes enhanced student engagement and positively influenced overall fitness outcomes. Notably, the incorporation of digital tools supported peer connections and promoted a collaborative learning environment. In this study, peer engagement through contextualized video activities not only contributed to increased motivation but also cultivated a more inclusive and socially supportive space where students felt more connected and actively involved in the learning process.

Significant Statement 1: "because the videos are interactive, shows real life execution, and help me understand exercises better, making it more interesting with my friends." (because the videos are interactive, shows real life execution, and help me understand exercises better, making it more interesting with my friends.) SP-3

Significant Statement 2: "I'm more interested in watching videos, watching my classmates enjoying the activity hypes me up." (I'm more interested in watching videos, watching my classmates enjoying the activity hypes me up.) SP-5

Significant Statement 3: "Contextualized video exercises makes it more interesting therefore engaging not only with me, but also to my classmates. Nag enjoy po kami." (Contextualized video exercises makes it more interesting therefore engaging not only with me, but also to my classmates. We really had fun.) SP-6

3.3. Suggestions for implementation

The third objective focused on identifying students' suggestions for improving PE instruction through contextualized video exercises. This was addressed in Theme 3, which highlighted students' appreciation for instructional videos that were clear, culturally relevant, and easy to follow. The findings emphasized the value of visual clarity in learning movements and supported students' recommendation to integrate such materials into the regular PE curriculum. The theme was explained through sub-themes on how visual demonstrations enhanced learning, and how consistent use of video tools could improve curriculum delivery.

Theme 3: Enhancing Student-Centered Video Programs

This theme discussed how students found the video materials to be effective and personalized, contributing positively to their learning outcomes in PE. The participants acknowledged the importance of structured, clear demonstrations and content that reflected their cultural and personal experiences. Two sub-themes supported this finding: clear demonstrations, which referred to how students were able to follow movements accurately through visual guidance; and integration into the curriculum, which reflected the students' suggestion that video-based instruction be included regularly in PE programs to maintain effectiveness and relevance.

It emphasized how students valued instructional clarity when learning through video exercises. Participants noted that contextually designed visual demonstrations reduced confusion and helped them learn proper form more efficiently. This

aligned with findings from a recent technology scoping review in the Philippines, where integrating video and digital tools such as motion capture and real-time feedback into PE enhanced students' understanding of techniques and decreased errors (Tolentino et al., 2024). These clear visual models allowed learners to focus on movement details, leading to better skill acquisition and cognitive processing. Such results supported the idea that well-designed video demonstrations were crucial for translating visual information into accurate physical performance.

Significant Statements 1: "Dati I'm not really interested because the person who leads the exercise sometimes do it impromptu and it gives inconsistency, that make it confusing... Now that there's a video para ha exercise, it's easy for me to follow smoothly" (Before I'm not really interested because the person who leads the exercise sometimes do it impromptu and it gives inconsistency, that make it confusing... Now that there's a video for the exercise, it's easy for me to follow smoothly) SP-1

Significant Statements 2: After implementing the video exercises, most highlight here is the improved technique when exercising since visual aids and demonstrations enhance understanding of proper form and execution." (After implementing the video exercises, most highlight here is the improved technique when exercising since visual aids and demonstrations enhance understanding of proper form and execution.) SP-5

Significant Statements 3: "Because they're easy to follow, and the visual demonstration makes it easier for me and helps me understand it better." (Because they're easy to follow, and the visual demonstration makes it easier for me and helps me understand it better.) SP-9

This highlighted students' suggestions to make video exercises a regular part of PE lessons rather than a one-time activity. Participants believed that integrating video materials into the curriculum would ensure consistency, accessibility, and relevance. This was supported by recent research in PE technology integration, which found that when video lessons, app-based instructions, and feedback tools were embedded within lesson planning, student engagement and learning outcomes improved significantly—especially when accompanied by teacher preparedness and institution-level support (Rahayu et al., 2025). Such research confirmed that curriculum-level video incorporation allowed technology-enhanced methods to thrive and sustain long-term learning benefits.

Significant Statements 1: "I would say yes, because it helps both the teacher and the students to be more engaging, and the teachers can also join the students in doing the exercises." (I would say yes, because it helps both the teacher and the students to be more engaging, and the teachers can also join the students in doing the exercises.) SP-1

Significant Statements 2: "Yes, because of the ever-changing society, di natin alam what tomorrow will brings us. Example yung pandemic. We can use video exercises as our guide for a better health and improve fitness" (Yes, because of the ever-changing society, we don't know what tomorrow will bring us. For example the pandemic. We can use video exercises as our guide for better health and improved fitness) SP-2

Significant Statements 3: "Yes, it can be highly beneficial because unlike passive lectures like what we have been doing, video exercises often include interactive elements such as step-by-step demonstrations, and challenges." (Yes, it can be highly beneficial because unlike passive lectures like what we have been doing, video exercises often include interactive elements such as step-by-step demonstrations, and challenges.) SP-5

Conclusion

This study explored the impact of contextualized video physical exercises on the performance of Senior High School students in Health and Fitness subjects. The results showed that the use of culturally relevant and easy-to-follow video materials significantly improved students' motivation, engagement, and understanding of PE content. Participants shared that the videos had helped boost their confidence, made the learning process more enjoyable, and allowed them to follow and repeat exercises at their own pace. Three major themes emerged from the data: enhanced motivation and engagement, enjoyment and satisfaction, and the importance of student-centered video programs.

These findings demonstrated that integrating video exercises could make PE more meaningful and student-focused. The study also confirmed the relevance of the Stimulus-Organism-Response (S-O-R) Model and Self-Determination Theory (SDT) in understanding how digital tools shaped student behavior and learning. Lee and Chang (2024) found that video modeling and feedback improved self-efficacy, motivation, and movement accuracy—supporting this study's findings on student engagement and skill improvement. Likewise, H'mida et al. (2020) showed that continuous video instruction resulted in better motor performance and retention compared to static visuals, reinforcing the benefits of visual demonstrations for learning complex physical skills. Overall, contextualized video exercises were a valuable teaching strategy that could enhance Physical Education programs, especially in contexts that required accessible and engaging learning interventions.

Recommendations

Based on the findings of this study, it was recommended that contextualized video exercises be integrated into the Physical Education (PE) curriculum to make lessons more engaging and relatable for students. Teachers were advised to receive proper training in creating and using digital instructional materials to enhance the quality of teaching and learning outcomes. Group-based video activities were encouraged to promote peer interaction, collaboration, and shared motivation. To support the implementation of such tools, schools were advised to improve their technology infrastructure by providing access to basic equipment such as projectors, computers, and tablets. Extending the program duration was also recommended to observe long-term effects on students' fitness habits and academic performance. Lastly, future research was recommended to focus on different age groups, rural school settings, or apply quantitative methods to further validate the effectiveness of video-based PE instruction.

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Author's Bionote

Allan Carl M. Arandia is a graduate of Bachelor of Physical Education, magna cum laude, and a Licensed Professional Teacher from Leyte Normal University, Tacloban City, Philippines. He is currently pursuing his master's degree at Leyte Normal University Graduate School, specializing in research on physical education, student performance, and digital learning tools. He has actively participated in academic, cultural, and leadership activities, including serving as Vice President of the LNU Dance Company and representing Region 8 in the SUC Fair 2022. His professional interests include classroom management, digital instruction, and youth physical engagement. Beyond academics, he is also involved in community initiatives such as Gawad Kalinga: Bayani Challenge and youth e-sports development in Eastern Visayas.

References

- Bailey, R., Armour, K., Kirk, D., Jess, M., Pickup, I., & Sandford, R. (2009). The educational benefits claimed for physical education and school sport: An academic review. *Research Papers in Education*, 24(1), 1–27. <https://doi.org/10.1080/02671520701809817>
- Chen, W., Hammond-Bennett, A., Hypnar, A., & Mason, S. (2019). Health-related physical fitness and physical activity in elementary school students. *BMC Public Health*, 19(1), 1–8. <https://doi.org/10.1186/s12889-019-6820-8>
- Cho, O., Choi, W., & Shin, Y. (2021). Gamification in physical education: A systematic review. *Education Sciences*, 12(8), 540. <https://doi.org/10.3390/educsci12080540>
- Crossman, A. (2020). *Purposive sampling*. In *SAGE research methods*. SAGE. <https://dx.doi.org/10.4135/9781529709056.n113>
- Culajara, C. J. (2023). Improving learning performance in Physical Education through video-based presentations (VBP) approach. *Physical Education and Sport Studies and Research*, 2(2), 100–115. <https://doi.org/10.56003/pessr.v2i2.251>
- Deci, E. L., & Ryan, R. M. (2000). The “what” and “why” of goal pursuits: Human needs and the self-determination of behavior. *Psychological Inquiry*, 11(4), 227–268. https://doi.org/10.1207/S15327965PLI1104_01
- Estrada, J., & Méndez-Giménez, A. (2022). Students' performance in physical education: The role of differential achievement goals and self-regulated learning. *Educational Sciences*, 12(2), 142. <https://files.eric.ed.gov/fulltext/EJ1362761.pdf>
- Exercise is Medicine Philippines. (2020). *Exercise is Medicine Philippines – A new twist to an old habit*. Philippine College of Endocrinology Diabetes and Metabolism. Retrieved November 24, 2024, from <https://endo-society.org.ph/exercise-medicine-ph-old-habit/>
- Finkelstein, S. R., Ferris, K. A., Weston, S. J., et al. (2015). Enjoyment of technology-based exercises in older adults: Fitness video games as a tool for home exercises. *Journal of Aging and Health*, 27(3), 355–370. <https://doi.org/10.1177/0898264314541699>
- Goh, Y. W., & Wong, F. K. (2023). Technology-enhanced pedagogy in physical education: A critical review. *Education Sciences*, 15(4), 409. <https://doi.org/10.3390/educsci15040409>
- H'mida, C., Degrenne, O., Souissi, N., Rekik, G., Jarraya, M., Bragazzi, N. L., & Khacharem, A. (2020). Learning a motor skill from video and static pictures in physical education students—Effects on technical performances, motivation and cognitive load. *International Journal of Environmental Research and Public Health*, 17(23), Article 8975. <https://doi.org/10.3390/ijerph17238975>
- Hutcheon, A. (2021). Impact of technology-enhanced video feedback and peer evaluation on gymnastic performance in MYP PE. *ACPES Journal of Physical Education, Sport, and Health*, 1(1), Article 46294. <https://doi.org/10.15294/ajpesh.v1i1.46294>
- Jacklyn Judith B. Junio & Liwag, J. A. (2016). Factors affecting students' performance in physical education class in Lyceum of the Philippines University–Laguna. *LPU–Laguna Journal of Multidisciplinary Research*, 4(4), Article.
- Lee, S., & Chang, M. (2024). The effect of using video in teaching to acquire content knowledge in physical education: A systematic review. *International Journal of Academic Research in Business and Social Sciences*, 14(10), 1332–1348. <https://doi.org/10.6007/IJARBS/v14-i10/22954>

- Lobo, J., & Dimalanta, G. (2024). Individual interest of students in physical education and school engagement in fostering physical culture inside the campus: The case of two prominent local colleges in Pampanga, Philippines. *Journal on Efficiency and Responsibility in Education and Science*, 17(1), 78–90. <https://doi.org/10.7160/eriesj.2024.170107>
- Mehrabian, A., & Russell, J. A. (1974). *An approach to environmental psychology*. MIT Press.
- Möding, M., Woll, A., & Wagner, I. (2022). Video-based visual feedback to enhance motor learning in physical education—A systematic review. *German Journal of Exercise and Sport Research*, 52(3), 447–460. <https://doi.org/10.1007/s12662-021-00782-y>
- Østerlie, O., Sargent, J., Killian, C. M., García-Jaén, M., García-Martínez, S., & Ferriz-Valero, A. (2023). Flipped learning in physical education: A scoping review. *European Physical Education Review*, 29(1), 5–25. <https://doi.org/10.1177/1356336X221120939>
- Palad, Y. Y., Guisihan, R. M., Aguila, M. E. R., Ramos, R. A. A., & Cagas, J. Y. (2023). An evaluation of policies promoting physical activity among Filipino youth. *International Journal of Environmental Research and Public Health*, 20(4), 2865. <https://doi.org/10.3390/ijerph20042865>
- Palao, J. M., Hastie, P. A., Guerrero Cruz, P., & Ortega, E. (2015). The impact of video technology on student performance in physical education. *Technology, Pedagogy and Education*, 24(1), 51–63. <https://doi.org/10.1080/1475939X.2013.813404>
- Patel, K., & Singh, R. (2022). Blended learning strategies in physical education: Incorporating video-based instruction. *Contemporary Education Journal*, 28(3), 195–210.
- Patel, R., & Singh, A. (2022). Digital tools in physical education: A study on blended learning approaches. *Journal of Educational Technology*, 18(3), 45–56.
- Rahayu, E. T., Setiawan, E., Afrinaldi, R., Prihandani, K., Syafrida, R., Al Raffi, M. I., Tannoubi, A., Sharipov, A., Suherman, A., & Konukman, F. (2025). Integrating smartphone apps during differentiated teaching: Promoting increased student engagement and performance in team sports activities in middle school physical education. *Physical Activity and Health*, 9(1), 110–123. <https://doi.org/10.5334/paah.442>
- Riley, C. C., Coombes, J. S., Jungbluth Rodriguez, K., Hickman, I. J., & Keating, S. E. (2020). Effectiveness of exercise via telehealth for chronic disease: A systematic review and meta-analysis of exercise interventions delivered via videoconferencing. *British Journal of Sports Medicine*, 56(18), 1042–1052. <https://doi.org/10.1136/bjsports-2020-102740>
- Ryan, R. M., & Deci, E. L. (2000). Self-determination theory and the facilitation of intrinsic motivation, social development, and well-being. *American Psychologist*, 55(1), 68–78. <https://doi.org/10.1037/0003-066X.55.1.68>
- Ryan, R. M., & Deci, E. L. (2014). Self-Determination Theory. In A. C. Michalos (Ed.), *Encyclopedia of Quality of Life and Well-Being Research* (pp. 1–8). Springer. https://doi.org/10.1007/978-94-007-0753-5_2630
- Shona McCombes, S. (2023). What is a case study? Definition, examples and methods. *Scribbr*. <https://www.scribbr.com/methodology/case-study/>
- Smith, J., & Jones, A. (2021). Integrating video exercises into health and fitness education: A curriculum-aligned approach. *Educational Perspectives*, 19(4), 203–217.
- Tegero, M. (2022). Skill acquisition challenges of Bachelor of Physical Education students in flexible learning amidst the COVID-19 pandemic. *International Journal of Research Publications*, 101(1), 30–39. <https://doi.org/10.47119/IJRP1001011520223169>
- Tolentino, J. C. G., Campo, J. C., Licup, T. O., Lumba, E. G., & Lingat, E. G. (2024). Technology integration in physical education curriculum implementation in the Philippines: A scoping review. *International Journal of Multidisciplinary: Applied Business and Education Research*, 5(7), Article 1840. <https://doi.org/10.11594/ijmaber.05.07.37>
- Truss, L. (2022). Learner engagement with instructor-generated video. *British Journal of Educational Technology*, 53(5), 1152–1167. <https://doi.org/10.1111/bjet.13450>
- United Nations. (2024). *Sustainable Development Goals: Goal 3 – Good health and well-being*. Retrieved from <https://sdgs.un.org/goals/goal3>
- Valentini, N. C., Lopes, F., da Silva, J. G., Rodrigues, L. P., & Bastos, F. H. (2024). Multilevel analysis of schoolchildren's perceived quality of physical education classes, physical activity level, and cardiorespiratory fitness. *Frontiers in Psychology*, 15, 1458899. <https://doi.org/10.3389/fpsyg.2024.1458899>
- White, R. L., Bennie, A., Vasconcellos, D., Cinelli, R., Hilland, T., Owen, K. B., & Lonsdale, C. (2020). Self-determination theory in physical education: A systematic review of qualitative studies. *Teaching and Teacher Education*, 99, Article 103247. <https://doi.org/10.1016/j.tate.2020.103247>