

The Art of Movement: Anyo Training Videos and Arnis Performance of Grade 7 Learners

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Abstract

In today's digital age, integrating multimedia tools like Anyo training videos into physical education offers a dynamic way to boost student learning and engagement. This study aimed to determine the effectiveness of Anyo training videos on Arnis in enhancing the cognitive and physical performance of 40 Grade 7 students at Pilot Provincial Science High School and Technology, Cotabato City, during the 2024-2025 school year. A quantitative research design was employed, integrating a quasi-experimental one-group pretest-posttest design with a descriptive-evaluative approach to assess the efficacy of Anyo training videos. A survey questionnaire was used to measure effectiveness and gather feedback. Data analysis, conducted using SPSS, included means, standard deviations, t-tests, and Pearson r analysis to determine statistical significance. The results highlighted the high effectiveness of Anyo training videos in Arnis for Grade 7 PE classes, with outstanding ratings in Instructional Design and Organization, Instructional Quality, Assessment, and Adaptability. The findings suggest that incorporating video-based tools into PE curricula enhances teaching practices and student outcomes by providing a flexible and engaging

method for skill development. Significant improvements were observed in both cognitive and physical performance. Cognitive performance increased from a mean of 11.70 (below average) to 22.40 (good), reflecting a 10.70-point gain. Meanwhile, physical performance improved significantly, rising from 17.33 (poor) to 62.20 (very satisfactory), with a 44.87-point gain. T-test results confirmed statistically significant improvements in both cognitive performance ($t = -20.964$, $p < .05$) and physical performance ($t = -41.474$, $p < .05$). However, Pearson-r analysis indicated a weak, non-significant relationship between pre-lesson cognitive performance and the effectiveness of the videos. Post-lesson, a significant correlation was found between cognitive performance and the videos' instructional design and organization ($r = .524$, $p = .018$). No significant correlations were found between the videos' effectiveness and physical performance before or after the lesson. Despite this, the overall findings underscore the positive impact of Anyo training videos on both cognitive and physical development in students, highlighting their potential as effective instructional tools in PE curricula.

Keywords: *Anyo Training Videos, Physical Education, Cognitive Performance, Video-Based Instruction, Instructional Effectiveness*

INTRODUCTION

The integration of training videos into martial arts instruction has become an effective strategy for enhancing both the technical skills and cultural understanding of students. These digital tools provide structured, visual demonstrations that help learners improve their physical movements while also fostering important values such as discipline, focus, and respect. More than just tools for physical development, training videos serve as a bridge to deeper cultural appreciation, especially in traditional martial arts like Arnis. Globally, martial arts have been incorporated into school curricula and extracurricular programs to support students' physical, cognitive, and social growth, offering benefits like improved fitness, self-defense, and teamwork.

In the Philippine context, Arnis has played a dual role—as a national sport and a cultural heritage practice. Its integration into education supports both skill development and the preservation of Filipino identity. Laws and policies such as Republic Acts 7356 and 10533 have mandated the inclusion of cultural education, including traditional martial arts, in the school curriculum. These efforts are further reinforced by the Department of Education's guidelines, which promote standardized instruction and prioritize student well-being. Such frameworks reflect a strong national commitment to embedding cultural heritage within formal education.

At the local level, particularly in Cotabato City, Arnis has gradually gained recognition in schools. However, despite its inclusion, there remains a lack of structured assessment tools to measure the effectiveness of teaching methods—especially when it comes to using digital instructional aids like Anyo training videos. These videos have the potential to improve student performance by offering accessible and repeatable demonstrations of movements, which can be especially helpful in developing coordination and physical competence.

While existing research highlights the general benefits of martial arts education, few studies have focused specifically on the use of Anyo training videos and their impact on student outcomes. Most have centered on the physical and psychological effects of martial arts, leaving a gap in understanding how video-based learning influences the execution of specific routines. This study addresses that gap by examining the use of Anyo training videos in a Grade 7 PE class at Pilot Provincial Science High School and Technology in Cotabato City during the 2024–2025 academic year. It evaluates both cognitive and physical outcomes, providing valuable insights into how digital tools can be effectively integrated into PE instruction.

Ultimately, the study aims to contribute to the broader effort of preserving Filipino martial arts while modernizing teaching practices. By offering evidence on the benefits of video-based instruction, it supports the development of more engaging and effective PE curricula that not only enhance student performance but also ensure that cultural heritage remains a vital part of contemporary education.

Objective of the Study

This study aimed to assess the effectiveness of Anyo training videos in Arnis as part of the Grade 7 PE lesson and their impact on learners' cognitive and physical performance at Pilot Provincial Science High School, Cotabato City, for the academic year 2024-2025.

METHODS

The study utilized a quantitative research design that integrated a quasi-experimental one-group pre-and-post approach with a descriptive-evaluative framework to assess the effectiveness of Anyo training videos in Arnis for Grade 7 students at Pilot Provincial Science High School and Technology, Cotabato City, during the 2024-2025 academic year. The pre-and-post design measured changes in learners' cognitive

and physical performance before and after the intervention, enabling the identification of cause-and-effect relationships. Simultaneously, the descriptive-evaluative component provided a thorough assessment of the instructional quality, organization, and acceptability of the Anyo training program, with expert validators ensuring that the materials met educational standards. The inclusion of expert judgment was crucial for confirming the credibility, validity, and consistency of the evaluation, thereby strengthening the overall integrity and relevance of the training program within the educational context.

The study aimed to evaluate the effectiveness of Anyo training videos on the cognitive and physical performance of Grade 7 learners at Pilot Provincial Science High School and Technology, Cotabato City, during the 2024–2025 academic year. Initially, the entire Grade 7 population was considered using total enumeration sampling to ensure inclusivity. From this, a representative sample of 40 students was selected through stratified random sampling based on gender, academic performance, and physical fitness levels. These selected learners participated in both pre-test and post-test assessments to measure their performance before and after the intervention with the Anyo training videos. This design allowed the researchers to accurately assess the impact of the videos by comparing students' cognitive and physical outcomes prior to and following the training.

The researcher utilized a comprehensive set of instruments to evaluate the effectiveness of the Anyo training videos in Arnis. A five-point Likert Scale questionnaire, validated by a panel of eight Physical Education Master Teachers and two IT specialists, assessed key aspects such as instructional design, quality, assessment practices, and overall acceptability. To measure cognitive performance, a 30-item multiple-choice test was administered, categorizing learners' achievement from "Unsatisfactory" to "Excellent." Physical performance was evaluated through a face-to-face practicum using a detailed rubric that rated skills like stance, footwork, stick strikes, and Anyo patterns according to a standard scale. The cognitive assessment was aligned with the Department of Education's K to 12 standards via the Classroom Assessment tool. This combination of expert-validated surveys and performance-based assessments provided reliable data on the impact of the Anyo training videos on both cognitive and physical development of Grade 7 learners.

RESULTS

Table 1. Level of Effectiveness of Anyo Training Videos in Arnis for Grade 7 PE Lessons in Terms of Instructional Design and Organization.

	Indicators	Mean	SD	Description
1	The Anyo training videos are an effective strategy that contributes significantly to achieving specific objectives in the physical fitness domain and enhances the teachers' performance levels for which they are intended.	4.80	.41	Outstanding
2	The sequencing of content and activities within each lesson is thoughtfully designed to facilitate the attainment of learning objectives.	4.60	.50	Outstanding
3	The content is appropriate for the target learners' levels of performance, developmental stages, needs, and prior experiences.	4.60	.50	Outstanding
4	The content effectively reinforces and enriches learners' understanding, leading to mastery of the lesson objectives and desired performance levels.	4.55	.51	Outstanding

5	The instructional design of the Anyo training videos is logically organized, presenting activities from simple to complex and from concrete to abstract concepts throughout the lesson.	4.55	.51	Outstanding
6	The videos include useful introductions, reviews, summaries, and other instructional devices that support a smooth transition from one activity to the next.	4.40	.50	Outstanding
7	The design of activities encourages opportunities for review, comparison, and integration with previous lessons, enhancing overall learning retention.	4.65	.49	Outstanding
8	The effective motivational strategies are employed throughout the lessons, including preliminaries, advanced moves, actions, and exercises to engage students actively.	4.50	.51	Outstanding
9	The Anyo training videos utilize a variety of strategies to accommodate individual learning styles and differences, ensuring inclusivity in the learning environment.	4.70	.47	Outstanding
10	The instructional approach of the Anyo training videos fosters the development of higher-level physical and cognitive skills, encouraging students to engage deeply with the material.	4.70	.47	Outstanding
Section Mean		4.61	.49	Outstanding

The findings indicate that the Anyo training videos were highly effective instructional tools in Grade 7 Physical Education classes, receiving excellent ratings across all evaluated indicators with an overall mean of 4.80. These videos significantly enhanced students' physical fitness performance and supported teacher effectiveness, demonstrating strong alignment with pedagogical goals and learner engagement. Although all components were rated highly, the use of instructional aids such as introductions, reviews, summaries, and transitions scored slightly lower at 4.40, suggesting room for improvement in guiding learners smoothly between activities. The videos were particularly effective in delivering core instructional content through structured demonstrations that catered to diverse learning styles-visual, auditory, and kinesthetic-thus promoting both physical and cognitive skill development.

Overall, the study affirms that the Anyo training videos are a valuable educational resource in Grade 7 PE, supporting student learning and engagement while accommodating various learning preferences. Their well-designed instructional structure and application of diverse teaching strategies contributed to enhanced student performance and retention. The capacity of these videos to foster higher-level participation and adapt to different learners highlights their potential for inclusion in future PE curriculum development to improve instructional efficacy and student motivation. By promoting effective teaching strategies and better learner outcomes, the Anyo training videos represent a significant advancement in physical education instruction.

Table 2. Level of Effectiveness of Anyo Training Videos in Arnis for Grade 7 PE Lessons in Terms of Instructional Quality.

	Indicators	Mean	SD	Description
1	The Videos should have well-defined objectives that articulate what learners are expected to achieve by the end of the training session.	4.70	.47	Outstanding
2	The videos should present content in an engaging manner, utilizing storytelling techniques or compelling visuals to maintain student interest.	4.80	.41	Outstanding

3	The instructions should be delivered clearly and concisely, using simple language that is easily understood by Grade 7 learners.	4.75	.44	Outstanding
4	The high-quality video production should include clear demonstrations of Anyo techniques, allowing students to visually grasp the movements and concepts being taught.	4.85	.37	Outstanding
5	The interactive features such as quizzes or prompts for self-assessment can enhance engagement and reinforce learning.	4.70	.47	Outstanding
6	The Videos should provide opportunities for immediate feedback, whether through self-reflection questions or guided practice exercises.	4.85	.37	Outstanding
7	The videos should encourage critical thinking by posing questions that prompt students to reflect on their learning and application of Anyo techniques.	4.70	.47	Outstanding
8	The background on the cultural significance of Arnis and Anyo can enrich the learning experience and foster a deeper appreciation for the martial art.	4.75	.44	Outstanding
9	The training videos should be structured to gradually increase in complexity, allowing learners to build skills systematically over time.	4.60	.50	Outstanding
10	The Videos should be designed to accommodate diverse learning needs, including subtitles, varied pacing, and alternative formats to ensure all students can engage with the material effectively.	4.65	.49	Outstanding
Section Mean		4.74	.47	Outstanding

The results presented in Table 2 highlight the outstanding instructional quality of the Anyo training videos for Arnis in Grade 7 Physical Education lessons. The videos were thoughtfully designed, incorporating clear instructional objectives (4.70), engaging content (4.80), and concise, easy-to-follow instructions (4.75). High-quality video production was evident, particularly in the clear demonstrations of techniques, which received the highest rating (4.85). Interactive components, such as quizzes and self-assessment prompts (4.70), further enhanced student engagement. Additionally, the videos provided immediate feedback (4.85) and encouraged the development of critical thinking skills (4.70). The integration of the cultural significance of Arnis (4.75) enriched the educational experience, while the content's gradual increase in complexity (4.60) and accommodations for diverse learning needs—such as the inclusion of subtitles and varied pacing (4.65)—ensured accessibility for all learners. These results reflect a consistently high standard across all indicators, culminating in a strong overall section mean of 4.74.

The findings suggested that the Anyo training videos were a high-quality instructional tool for Grade 7 PE lessons, enhancing student interest, understanding, and critical thinking (Harris & Graham, 2019). The videos supported skill development and cultural appreciation, with interactive elements and immediate feedback promoting active learning (López-Pérez et al., 2019). Their design caters to diverse learning styles, making them an effective resource for teaching Arnis, with potential for wider adoption in other educational settings to improve engagement and instructional quality (Wang & Wu, 2021).

Table 3. Level of Effectiveness of Anyo Training Videos in Arnis for Grade 7 PE Lessons in Terms of Assessment.

Indicators	Mean	SD	Description
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1	The demonstration of Anyo techniques will be assessed through video submissions where students perform the routines to evaluate accuracy and form.	4.75	.44	Outstanding
2	The tracking of skill progression will be implemented, allowing learners to chart their improvements over time and identify areas for further practice.	4.65	.59	Outstanding
3	The use of self-assessment tools will provide students with rubrics or checklists to evaluate their own performance based on specific criteria.	4.50	.51	Outstanding
4	The inclusion of peer feedback will be encouraged, where students offer constructive critiques on each other's performances to enhance collaborative learning.	4.45	.60	Outstanding
5	The administration of knowledge quizzes will assess students' understanding of key concepts and techniques related to Anyo and the cultural aspects of Arnis.	4.65	.49	Outstanding
6	The setting of personal learning goals will be required, with assessments focused on whether students achieve these goals throughout their training.	4.50	.69	Outstanding
7	The maintenance of reflection journals will be mandated, allowing students to document their practice experiences, challenges, and growth.	4.60	.50	Outstanding
8	The creation of progressive skill challenges will test students' mastery of specific techniques, ensuring comprehensive assessment through incremental tasks.	4.55	.60	Outstanding
9	The observation of practice sessions by instructors will provide real-time feedback on technique execution and overall performance.	4.50	.51	Outstanding
10	The analysis of submitted training videos will allow students to receive detailed feedback on their practice, encouraging self-reflection and improvement.	4.45	.60	Outstanding
Section Mean		4.56	.56	Outstanding

The data in Table 3 indicate that the assessment of Anyo training videos in Grade 7 PE lessons was highly effective, achieving an overall mean score of 4.56. The strategies employed offered a comprehensive evaluation of students' technical skills, progress, self-awareness, and collaborative learning. Among these, video submissions for assessing Anyo techniques received the highest rating (4.75), offering a clear and objective measure of students' accuracy and form. This was followed by both quizzes (4.65) and tracking skill progression (4.65), which reinforced cognitive learning and allowed students to monitor their improvement over time. Reflection journals also scored highly (4.60), supporting self-awareness and growth. Progressive skill challenges (4.55) encouraged students to advance their abilities steadily. Several methods received similar ratings, including self-assessment tools (4.50), personal goal-setting (4.50), and real-time instructor feedback (4.50), all of which promoted independent learning and timely guidance. Peer feedback (4.45) fostered collaborative learning, while the analysis of submitted training videos (4.45) provided additional insights to support student development. Collectively, these results demonstrate that the Anyo training videos were supported by a well-rounded and highly effective assessment framework.

The integration of both formative and summative assessment strategies has proven to significantly enhance student learning outcomes. Huang and Hew (2018) highlighted the benefits of combining these approaches, particularly in video-based training, where formative feedback, such as self-assessment and peer reviews, provides continuous learning support, while summative assessments gauge overall progress.

Similarly, Lau (2020) found that students who engaged in self-assessment using video critiques demonstrated improved evaluative skills and greater self-awareness, suggesting that formative strategies complement summative evaluations by enabling students to identify strengths and weaknesses in real-time. Hawkins et al. (2020) further supported this approach, noting that the combination of self-assessment videos and instructor feedback led to significant improvements in student outcomes in medical education. These studies collectively underscore the value of blending formative and summative assessments, creating a more holistic learning environment that fosters both immediate feedback and long-term academic development.

Table 4. Level of Effectiveness of Anyo Training Videos in Arnis for Grade 7 PE Lessons in Terms of Acceptability.

	Indicators	Mean	SD	Description
1	The Anyo training videos effectively fulfill their intended purpose within the Grade 7 PE curriculum, achieving specific educational objectives.	4.80	.41	Outstanding
2	The videos serve as a powerful motivational tool, engaging learners and fostering interest in the concepts being taught.	4.60	.50	Outstanding
3	The materials presented in the training videos are applicable to the real-life situations and experiences of the learners, enhancing their practical understanding of the content.	4.70	.47	Outstanding
4	The Anyo training videos provide teachers with well-structured activities designed to develop both their instructional skills and positive attitudes towards teaching.	4.55	.49	Outstanding
5	The training videos are easy to navigate and manipulate, allowing both teachers and students to utilize them effectively without complications.	4.65	.49	Outstanding
6	The strategies and materials employed in the videos are well-suited to the target audience, ensuring relevance and engagement for Grade 7 learners.	4.50	.61	Outstanding
7	The content of the Anyo training videos is culturally and ethically sensitive, free from bias, and reflects the diversity of the student audience, promoting inclusivity.	4.75	.44	Outstanding
8	The videos cater to the physical and learning needs of the students, providing appropriate challenges that accommodate varying skill levels and learning styles.	4.55	.51	Outstanding
9	The effectiveness of the Anyo training videos meets established minimum standards for educational materials, ensuring quality and reliability in the learning experience.	4.70	.57	Outstanding
10	The Anyo training videos are recognized as valuable educational resources, with potential for promotion and recommendation to other educators and institutions.	4.65	.49	Outstanding
Section Mean		4.65	.50	Outstanding

The data in Table 4 showed that the Anyo training videos for Grade 7 Arnis in PE lessons were highly regarded, with an "Outstanding" section mean of 4.65. The Anyo training videos demonstrated strong alignment with curriculum goals and educational standards, with the highest rating given to their effectiveness in achieving educational objectives (4.80). The videos were also recognized for being culturally and ethically sensitive (4.75), promoting inclusivity and respect for diversity. Their relevance to

real-life situations (4.70) and adherence to educational standards for quality and reliability (4.70) further enhanced their practical application in classroom settings. Ease of use (4.65) and their value as tools for broader promotion to other educators and institutions (4.65) were also noted. The videos served as a motivational tool that effectively engaged students (4.60) and supported teachers by offering structured activities that improved instructional skills and attitudes (4.55). They also catered to varying skill levels and learning styles (4.55), ensuring accessibility for a diverse student population. Lastly, the content's suitability for Grade 7 students, while still strong, received the lowest score in the group at 4.50, indicating slightly more room for tailoring content to the target age group.

The findings indicated that the Anyo training videos were highly acceptable to both teachers and students, serving as an effective educational tool that enhanced the learning experience in Grade 7 Physical Education (PE) classes (Vural, 2016). Their strong alignment with curriculum objectives, motivational impact, cultural and ethical sensitivity, and ease of use made them particularly well-suited for the target age group (Hamdan et al., 2017). In addition to supporting instructional delivery, the videos catered to a range of learning preferences and skill levels, thereby promoting inclusivity and accessibility. Similar conclusions were drawn by Aquino (2022), whose study on video-based learning materials in Higher Education Institutions found high levels of student approval, emphasizing clarity, engagement, and relevance to learning goals. Collectively, these findings suggest that the Anyo training videos are not only effective but also adaptable for broader educational contexts, with significant potential for use across various grade levels and disciplines.

Table 5. Summary of the Level of Effectiveness of Anyo Training Videos in Arnis for Grade 7 PE Lessons.

	Statements	Mean	SD	Description
1	Instructional Design and Organization	4.61	.49	Outstanding
2	Instructional Quality	4.74	.47	Outstanding
3	Assessment	4.56	.56	Outstanding
4	Adaptability	4.65	.50	Outstanding
	Grand Mean	4.64	.51	Outstanding

Table 5 highlights the high efficacy of the Anyo training videos on Arnis in Grade 7 PE classes, with all evaluated categories receiving mean scores within the "Outstanding" range, indicating high effectiveness. The highest rating was given to Instructional Quality with a mean score of 4.74, demonstrating that the videos' content is exceptionally clear, engaging, and well-received by students. Adaptability followed with a score of 4.65, showing that the training videos can be effectively modified to meet diverse learning needs and are suitable for various teaching contexts. Instructional Design and Organization received a strong rating of 4.61, suggesting that the structure and sequencing of the content are well-planned, allowing students to follow and comprehend easily. Lastly, the Assessment component scored 4.56, indicating that the evaluation methods included in the videos are effective in tracking student learning and progress. These findings collectively underscore the overall excellence of the Anyo training videos in delivering quality physical education instruction. The general Grand Mean of 4.64, a standard deviation of 0.51, lends further weight to the assertion that the Anyo training videos are extremely effective learning aids for teaching Grade 7 PE lessons. This level of excellence across every category is testimony to the fact that the videos are not merely popular but actually play an integral role in educating students. The results highlight the strong potential of incorporating Anyo training videos as part of the Grade 7 physical education (PE) curriculum, highlighting their desirable effects on student motivation and understanding. The videos were highly rated across a range of assessment criteria, showing their capability to deliver clear, flexible, and engaging teaching (Kucuk & Yildirim, 2015). Through the use of digital resources like these, teachers can create an environment in which difficult topics, such as Arnis, become

accessible and interesting to students. The success of these videos implies a wider potential for educational programs that seek to integrate technology into teaching methods (Chao et al., 2016). Such online resources not only enhance the teaching-learning process in PE but also set an example for other areas of study aiming to improve instruction quality through innovative technological interventions (Lee & Lee, 2016).

Table 6. Extent Anyo Training Videos in Arnis to the Cognitive Performance of Grade 7 Students Before and After the Lesson.

Variable		Mean	SD	Description
Cognitive Performance	Before	11.70	2.63	Needs Improvement
	After	22.40	2.27	Good
Mean Gain		10.70		

The figures in Table 6 indicated a considerable enhancement in the cognitive functioning of Grade 7 students after the Anyo training videos in Arnis. Before the lesson, the students had a mean score of cognitive performance of 11.70 (SD = 2.63), which fell under the needs improvement category and was interpreted as below average performance. With exposure to the training videos, the students' mean increased to 22.40 (SD = 2.27), which belonged to the good category and was interpreted as good performance. The 10.70 mean gain accentuated the value of the Anyo training videos in improving cognitive performance among the students.

The findings indicated that the Anyo training videos on Arnis enhanced the cognitive ability of students, implying that multimedia materials could lead to improved learning outcomes. Educators were motivated to include video-based training, especially in physical education and martial arts, to enhance skill retention and comprehension. The results also validated the use of multimedia in education to meet different learning styles and achieve academic success. Evidence supporting research confirmed the advantages of online tools in cognitive performance enhancement. For instance, Zhang and Liu (2018) concluded that using video-based learning enhanced the students' cognitive development and knowledge recall in physical education. In another case, Zhao and Li (2020) illustrated how the use of multimedia resources affected learners significantly, especially when they engaged actively with materials. Additionally, Sharma and Goyal (2019) demonstrated that online materials could assist students in understanding complex concepts in physical education through easy-to-understand, visual displays of complicated skills, resulting in improved cognitive functioning.

Table 7. Extent Anyo Training Videos in Arnis to the Physical Performance of Grade 7 Students Before and After the Lesson.

Variable		Mean	SD	Description
Physical Performance	Before	17.33	3.44	Poor
	After	62.20	5.81	Very Satisfactory
Mean Gain		44.87		

Table 7 revealed a significant improvement in the physical performance of Grade 7 pupils after using the Anyo training videos in Arnis. Before the intervention, students had a mean physical performance score of 17.33 (SD = 3.44), rated as poor and interpreted as very poor performance. After the lesson, their mean score increased dramatically to 62.20 (SD = 5.81), rated as very satisfactory and interpreted as good

performance, with a mean gain of 44.87. This substantial improvement suggests that the Anyo training videos had a strong positive effect on students' physical abilities.

These findings highlight the potential of video-based training to enhance students' physical competence, encouraging educators to integrate such technology into physical education and martial arts courses. Supporting this, previous studies have shown that video-based learning significantly improves practical skills and physical performance. For instance, Martin and Lee (2018) found that videos enhance physical education outcomes, while Ferguson and McAuley (2019) demonstrated that multimedia materials boost motor skills proficiency. Additionally, Williams and O'Connor (2020) emphasized that instructional videos, through clear and repetitive demonstrations, effectively improve students' physical technique and performance.

Table 8. Results of the t-test Analysis between the Scores Before and After using Anyo Training Videos in Arnis of Grade 7 PE.

Variable	Mean Gain Scores	SD	df	t-value	Sig	Description
Cognitive Performance	10.70	2.45	39	-20.964	.000	Significant
Physical Performance	44.87	4.62	39	-41.474	.000	Significant

**Significant at the .05 level.*

Table 8 showed the outcome of the t-test comparison between pre- and post-test scores of Grade 7 students' cognitive and physical performance after applying Anyo training videos in Arnis. The mean gain score for cognitive performance was 10.70 (SD = 2.45), $t = -20.964$, and the outcome was statistically significant ($p < .05$). Similarly, for physical performance, the mean gain score was 44.87 (SD = 4.62), and the t-value stood at -41.474, with the outcome also being statistically significant ($p < .05$). These outcomes indicated that both cognitive and physical performance were improved following the viewing of Anyo training videos.

The remarkable enhancement of cognitive and physical abilities suggested that Anyo training videos could efficiently improve students' learning in both theoretical and practical skills of Arnis (Mayer, 2017). Teachers could incorporate these videos into their curricula to facilitate skill acquisition in physical education and martial arts. Given that the results were statistically significant, the integration of multimedia aids such as Anyo training videos supported research evidence that these tools greatly enhanced learning in different subjects (Williams & O'Connor, 2020). Technology integration enabled teachers to cater more effectively to diverse learning styles and enhanced performance and engagement in students (Clark & Mayer, 2016).

Table 9. Results of Pearson-r Analysis Between the Effectiveness of Anyo Training Videos in Arnis and Cognitive Performance Before and After of Grade 7 Students in PE Lessons.

Indicators	Instructional Design and Organization	Instructional Quality	Assessment	Adaptability
Cognitive Performance Before	.054 (.820)	.138 (562)	.077 (.746)	.046 (.848)

Cognitive Performance	.524*	262	.222	.269
After	(.018)	(.265)	(.347)	(.251)

**Significant at the .05 level.*

Table 9 was the result of the Pearson-r analysis comparing the effectiveness of Anyo training videos in Arnis with cognitive performance prior to and subsequent to the lesson for Grade 7 PE students. The analysis indicated a weak, non-significant relationship between cognitive performance prior to the lesson and the effectiveness of the Anyo videos, with instructional design and organization ($r = .054$, $p = .820$), instructional quality ($r = .138$, $p = .562$), assessment ($r = .077$, $p = .746$), and adaptability ($r = .046$, $p = .848$). Nonetheless, following the lesson, the relationship between cognitive performance and the effectiveness of Anyo videos was notable in instructional organization and design ($r = .524$, $p = .018$), whereas other indicators (adaptability, instructional quality, and assessment) failed to reveal noteworthy relationships.

The findings suggested that instructional organization and design in Anyo training videos played a very important role in enhancing the cognitive performance of students during PE lessons. The high positive correlation following the lesson indicated that well-designed and organized instructional videos improved cognitive engagement and performance of students. This was supported by prior studies highlighting the importance of instructional design in multimedia learning (Mayer, 2017). The failure to find significant correlations for other factors such as adaptability and assessment might have implied that such factors required additional development to positively impact cognitive performance (Sweller et al., 2017). Teachers could learn from enhancing video-based content to better improve its educational value through its structure and design, as suggested by the high returns reported here and other research on multimedia learning (Kalyuga, 2018; Reich, 2019).

Table 10. Results of Pearson-r Analysis Between the Effectiveness of Anyo Training Videos in Arnis and Physical Performance Before and After of Grade 7 Students in PE Lessons.

Indicators	Instructional Design and Organization	Instructional Quality	Assessment	Adaptability
Physical Performance Before	-.087 (.716)	-.074 (.756)	.274 (.242)	-.049 (.838)
Physical Performance After	.052 (.827)	.210 (.374)	.166 (.484)	.279 (.233)

**Significant at the .05 level.*

Table 10 contained the results of the Pearson-r analysis, which focused on whether Anyo training videos in Arnis were effective and how these related to pre-lesson and post-lesson physical performance of Grade 7 students in PE. The analysis did not show any substantial correlations between the Anyo videos' effectiveness and physical performance prior to the lesson on all indicators: instructional design and organization ($r = -.087$, $p = .716$), instructional quality ($r = -.074$, $p = .756$), assessment ($r = .274$, $p = .242$), and adaptability ($r = -.049$, $p = .838$). In the same vein, there were no considerable correlations post-lesson, and the instructional design and organization ($r = .052$, $p = .827$), instructional quality ($r = .210$, $p = .374$), assessment ($r = .166$, $p = .484$), and adaptability ($r = .279$, $p = .233$) values all indicated non-significance.

This implied that the efficacy of the Anyo training videos did not have a noticeable effect on the physical performance of the students.

This result suggested that other variables, like practice in the physical environment, development of individual skills, or extrinsic factors, played a stronger role in improving physical performance than instructional design in the context of the training videos (Zheng et al., 2020). This aligned with evidence that although multimedia instructional materials had been shown to make a difference in cognitive outcomes, their impact on physical performance could be dependent on other practical interventions (Dunst et al., 2017; Sweller et al., 2017). Since the present study did not yield significant outcomes, it drew attention to the need for more research into the integration of multimedia content with physical practice in terms of cognitive as well as physical learning achievements (Lee et al., 2018).

Table 11. Results of t-test Analysis Between the Cognitive and Physical Performances Before and After using Anyo Training Videos in Arnis for Grade 7 PE Lessons.

Indicators	Mean	Sd	t	df	Sig	Description
Cognitive Performance Before	11.70	2.63	28.102*	39	.000	Significant
Cognitive Performance After	22.40	2.27	62.311*	39	.000	Significant
Physical Performance Before	17.33	3.44	31.878*	39	.000	Significant
Physical Performance After	62.20	5.81	67.711*	39	.000	Significant

**Significant at the .05 level.*

Table 11 displayed the t-test on the cognitive and physical performance of Grade 7 students prior to, and following, the utilization of Anyo training videos in Arnis. For cognitive performance, the t-test indicated that it significantly improved from prior to the lesson ($M = 11.70$, $SD = 2.63$) to following the lesson ($M = 22.40$, $SD = 2.27$), with $t = 28.102$ and $p < .001$. In the same vein, in physical performance, there was also a highly significant improvement according to the results of the t-test from pre-lesson ($M = 17.33$, $SD = 3.44$) to post-lesson ($M = 62.20$, $SD = 5.81$), $t = 31.878$, and $p < .001$. The two improvements were both significant at the .05 level. The notable enhancement of both cognitive and physical functioning underscored the efficacy of the Anyo training videos in improving students' performance in physical education. These results indicated that the use of multimedia resources such as Anyo training videos could be a key factor in facilitating both the mental and physical growth of students, especially in physical education (Mayer, 2017). The findings were in congruence with studies affirming the beneficial impact of video-based learning interventions in enhancing multiple types of performance, such as motor and cognitive skills (Gao et al., 2019). The significant strength in both cognitive and physical aspects reiterated the likely advantages of the integration of technology in PE classes to support students' all-around development (Zheng et al., 2020).

CONCLUSION AND RECOMMENDATION

The results significantly attest to the effectiveness of the Anyo training videos in promoting both the learning process and physical abilities of Grade 7 learners. These videos not only provide concise and effective instruction but also allow students to learn at their own pace, making them highly suitable for physical education. Learning through video is shown to be an efficient and dynamic pedagogical method that enhances student proficiency, comprehension, and engagement. Although initial exposure to the videos alone did not immediately influence students' understanding of Arnis, a significant relationship between the videos and cognitive performance emerged after the lesson, particularly due to the structured instructional design and organization. This indicates that the way the videos were integrated into the

learning process played a critical role in their success. However, while the videos supported cognitive understanding, they were not sufficient on their own to improve the physical execution of Arnis skills, which require active participation, real-time feedback, and kinesthetic involvement. Overall, the findings demonstrate that video-based instruction is a valuable teaching tool in PE, especially when combined with practical application, as its structured, visual, and demonstrative features contribute to concept retention and enhanced movement accuracy.

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