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**Alma I Lanoza**  
Master in Physical Education  
and Sports, Bataan Peninsula  
State University, Bataan,  
Philippines

## Development and validation of a cheerdancing video lesson for grade 10 students

**Alma I Lanoza**

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### Abstract

This study aimed to develop and validate a video lesson on Cheerdance within the MAPEH curriculum. The evaluation of the instructional material focused on objectives, format, content, organization, and language, alongside the assessment of student performance before and after exposure to the lesson. Thirty-two MAPEH teachers from Limay District participated as evaluators, while students' learning outcomes were measured through pre- and post-tests. Data were analyzed using weighted means to determine the teachers' levels of satisfaction with the video lesson, and a paired-sample t-test to compare student performance. Results showed high teacher satisfaction across all evaluated areas. Student performance also improved significantly, confirming the video lesson's effectiveness as a supplementary instructional tool. However, the study was limited to a small number of teacher-evaluators and a localized sample of students, which may affect the generalizability of the findings. The results highlight the importance of integrating video lessons into the MAPEH curriculum and emphasize the need for ongoing teacher training and institutional support in developing innovative instructional materials. Future research should consider larger, more diverse populations and investigate the long-term impacts of video-based instruction engagement.

**Keywords:** Cheerdance, instructional materials, student performance, teacher evaluation, video lessons

### Introduction

Cheerleading is a spectator sport that combines performance and competitive aspects, blending elements of dance, gymnastics, and acrobatics. Globally, cheerleading has grown into a recognized competitive sport, with over 3.8 million participants in the United States alone as of 2021. In the Philippines, cheerleading and Cheerdance are consistently among the highlights of major sporting events, such as UAAP and NCAA competitions. These performances not only showcase athleticism and school spirit but also promote teamwork, discipline, and youth engagement in physical education (Reyes & Villanueva, 2020) <sup>[7]</sup>. Cheerleading is not only a fun and exciting activity but also one that requires teamwork, trust, and physical discipline. It channels athletes' energy into creative expression while uniting supporters and fostering team identity.

Research highlights that organized sports, such as cheerleading, significantly impact youth development in physical, cognitive, social, and emotional ways. According to the Aspen Institute's Project Play (2021), participation in structured sports improves memory, focus, and time management skills, all of which are necessary for mastering coordinated routines. Cheerleading relies heavily on movement and synchronization, both individually and collectively. Unlike other sports where verbal cues may guide play, cheerleaders must rely on memorization and spatial awareness to execute routines. A study by Sato *et al.* (2020) found that synchronized group activities enhance both cognitive recall and social cohesion, which explains why cheerleaders can effectively perform highly complex sequences without verbal communication.

The chapter defines a cheerleader as "an athlete who can leap, kick, throw, catch, stunt, tumble, and soar". Although these activities capture the physical requirements, research suggests that cheerleaders develop additional competencies.

### Corresponding Author:

**Alma I Lanoza**  
Master in Physical Education  
and Sports, Bataan Peninsula  
State University, Bataan,  
Philippines

For example, Lafleur *et al.* (2020) <sup>[9]</sup> found that cheerleaders reported higher resilience, adaptability, and self-confidence compared to non-participants. This finding emphasizes that a cheerleader's identity extends beyond physical ability. To further test public perceptions, asked individuals both within and outside the cheerleading community to describe cheerleaders in one word. The results demonstrate that cultural views on cheerleading vary and are shaped by both athletic and social elements.

The COVID-19 pandemic significantly reshaped the practice of cheerleading. In previous years, cheerleaders remembered to bring Pom Poms, spirit sticks, and mats; during the pandemic, face masks and physical distancing protocols became necessary. More than 80% of high school cheer programs in the U.S. reported restrictions on stunting in 2020 (National Federation of State High School Associations [NFHS], 2021). Samson (2017) <sup>[3]</sup> found out before COVID-19, cheerleading need for adaptability, noting how teams adjusted to shortened preparation times and stricter regulations. This global disruption parallels the challenges faced in the Philippines, where heerdance is integrated into the Department of Education's MAPEH curriculum. Normally allotted only one hour per week, the shift to modular distance learning further limited teachers' ability to provide hands-on instruction in stunting and synchronization (DepEd, 2021).

Cheerdance, a dynamic performance sport that combines synchronized dance routines, acrobatics, and vocal elements (Kassing & Kassing, 2017), demands not only physical strength but also precise teamwork and performance quality. Carrick (2018) emphasized that the traditional face-to-face learning environment plays a key role in developing kinesthetic awareness, rhythm, and peer support. However, with limited in-person sessions under the DepEd RMO No. 18, s. 2021, educators struggled to fully demonstrate and supervise routines. Recent studies confirm this challenge: Balderas & Dela Cruz (2021) <sup>[17]</sup> observed that only 43% of MAPEH teachers felt confident teaching Cheerdance effectively online due to limited resources and a lack of interactive modules.

The COVID-19 pandemic reshaped the practice of cheerleading and cheerdance, imposing restrictions on stunting, group formations, and in-person practices. In the U.S., over 80% of high school cheer programs reported limitations on physical contact in 2020 (NFHS, 2021) <sup>[13]</sup>. In the Philippines, where Cheerdance is integrated into the Department of Education's MAPEH curriculum, instructional time was reduced to just one hour per week under modular and limited face-to-face arrangements (DepEd, 2021). These constraints significantly hindered teachers' ability to demonstrate routines, supervise stunts, and provide real-time feedback.

Video lessons present a practical solution to these challenges. Unlike written modules, video-based instruction allows students to repeatedly watch and imitate proper techniques, ensuring accurate learning despite reduced teacher contact. Research supports this approach. Garcia *et al.* (2020) <sup>[10]</sup> found that students using video lessons for dance-based PE tasks performed with greater accuracy than those relying solely on text-based instruction. Additionally, Teng and Wong (2021) <sup>[14]</sup> showed that video-assisted learning boosted student motivation and confidence in performance subjects. By enabling flexible, self-paced, and visually guided practice, video lessons can bridge the instructional gaps caused by pandemic restrictions and strengthen the delivery of

Cheerdance in both remote and blended learning environments.

Given these constraints, innovative approaches became necessary. Studies show that video-based instruction can enhance learning in physical education by providing visual modeling, repetition, and self-paced learning opportunities. For example, Garcia *et al.* (2020) <sup>[10]</sup> found that students using video lessons for dance-based PE activities scored significantly higher in performance accuracy compared to those relying solely on written modules. Similarly, Teng & Wong (2021) <sup>[14]</sup> reported that video-assisted learning improved student motivation and reduced anxiety in performance-based subjects. These findings provide a strong rationale for testing whether cheerdancing can be effectively taught through video lessons in the Philippine setting.

With this, the purpose of the study is to determine whether cheerdancing can be taught effectively through the use of video lessons. If successful, this approach could provide remedial support for students needing reinforcement and enrichment for those seeking additional practice, particularly among Grade 10 learners. More importantly, it may fill a curricular gap by offering a replicable model of blended and remote instruction for performance-based subjects, ensuring both learning continuity and quality outcomes in the evolving educational landscape.

### Significance of the study

**This study is expected to benefit the following stakeholders:**

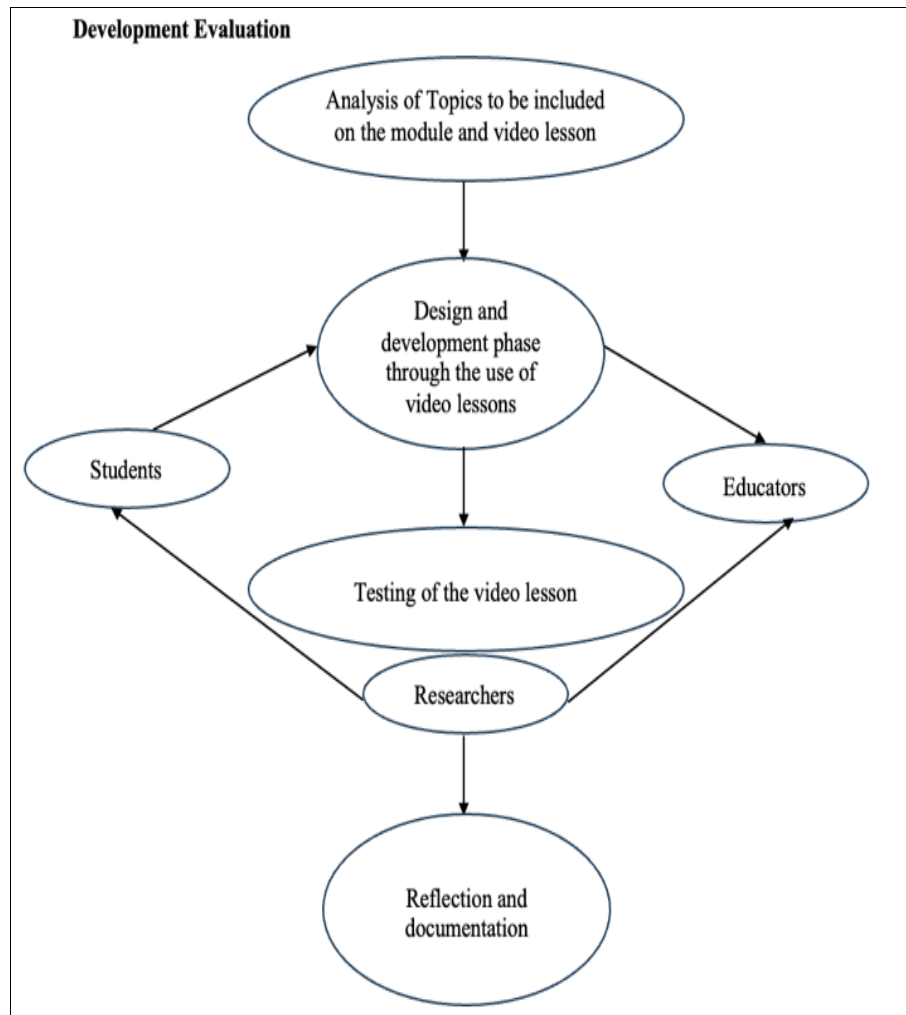
- **Students:** With most learners already owning smartphones, the validated video lesson now functions as a "virtual coach" that they can replay anytime. It may support self-paced practice, bridge missed class time, and reinforce kinesthetic memory, allowing students to master Cheerdance skills even outside school hours.
- **Teachers:** Teachers are among the busiest professionals, required to manage a variety of tasks, including paperwork, home visits, and student remediation. With the module and videos, instructors may reduce workload for demonstrations and remediation. The effective video lesson and accompanying module may allow teachers to spend class time providing higher-level feedback, correcting errors, and offering individualized support, thereby improving instructional efficiency.
- **Parents:** The ultimate responsibility lies with parents to supervise the amount of time their child spends on a smartphone. Once parents understand that the learning modules and videos have an educational purpose, they may feel more comfortable allowing their children to use Android phones, especially if video lessons are available. Knowing that the video lessons improve learning alleviates concerns about screen time. Parents may confidently permit and even schedule mobile-based practice sessions, recognizing the resource as a purposeful study aid that enhances their child's physical competence and discipline.
- **Department of Education:** This innovation provides DepEd with a clearer understanding of how to enhance various learning opportunities across subjects. The success of the digital Cheerdance module may offer a scalable template for other skill-based MAPEH topics. It demonstrates that well-designed asynchronous video resources may uphold curriculum standards despite limited face-to-face hours, informing future policy on blended and remote instruction.

- **Future Researchers:** The study may provide empirical evidence that structured video lessons may effectively transmit complex psychomotor skills. Subsequent researchers may replicate the model in other performance-oriented subjects, explore long-term retention, or compare different multimedia formats to further optimize distance skill acquisition.

The conceptual framework presented in Figure 1.1 illustrates the systematic process undertaken in the development and evaluation of video lessons as instructional materials. The

process begins with the analysis of topics to be included in the video lessons, ensuring that the content is relevant, appropriate, and aligned with the learning objectives. This stage establishes the foundation for instructional design, allowing the researcher to identify specific areas where video-based instruction can effectively enhance teaching and learning.

### Conceptual Framework



**Fig 1:** Paradigm of the study

Following the analysis, the design and development phase takes place, wherein the video lessons are created in response to the identified instructional needs. At this stage, both students and educators serve as vital contributors. Educators provide pedagogical insights, while students represent the target learners whose needs and learning preferences must be addressed. Once developed, the video lessons undergo testing to determine their effectiveness. This phase involves collecting feedback from both students and educators, with the researcher playing a central role in refining and improving the materials based on observations and responses.

The final stage of the process is reflection and documentation. Here, the effectiveness of the video lessons is assessed holistically, and insights gained from the testing phase are documented for continuous improvement. Reflection ensures that strengths and weaknesses are identified, while documentation provides a structured record that may guide future instructional design and research efforts. Overall, the

paradigm underscores the cyclical and collaborative nature of instructional materials development, emphasizing the importance of evaluation, participation, and iterative refinement in producing effective and meaningful video-based learning resources.

### Objectives of the study

#### The following are the objectives of the study:

- To develop a video lesson on Cheerdancing that covers basic hand positions, basic hand movements, and cheer stunts and cheerleading moves.
- To validate the developed video lesson through teacher evaluation in terms of objectives, format, content, organization, and language.
- To determine the significant difference between the pre-test and post-test results of the respondents after exposure to the developed video lesson.



- To identify the implications of the study findings for the teaching and learning of MAPEH.

### Research Methodology

The researcher employed a descriptive-evaluative design to construct and assess a video lesson on Cheerdancing within the MAPEH curriculum. This approach, as supported by Harris (2026) <sup>[16]</sup>, was appropriate for examining the development, validation, and effectiveness of instructional materials designed to enhance Cheerdance instruction. The study systematically assessed the stages of creating and validating the module to ensure content accuracy, clarity of delivery, and learner engagement. Thirty-two (32) MAPEH teachers from Limay National High School, Lamao National High School, and St. Francis National High School, as well as fifty (50) students from Limay National High School, participated in the study, with the total population serving as respondents through a universal sampling technique. Data were gathered using two primary instruments a validated questionnaire and a teacher-made pre-test and post-test which allowed the researcher to measure teachers' evaluations and students' learning outcomes. The questionnaire was carefully developed, pre-tested, and refined to ensure relevance, clarity, and brevity, while the pre- and post-tests were administered to establish a baseline and determine the effectiveness of the instructional intervention. Prior to data collection, the researcher sought permission from the Bataan Peninsula State University Graduate Studies and the respective school heads in the Limay District to administer the instruments. Data collection was conducted over one week, involving the distribution and retrieval of questionnaires and the administration of tests. Upon collection, data were tabulated and analyzed using descriptive and inferential statistics, particularly the weighted mean and paired sample t-test, to determine teachers' evaluations of the video lessons and the significance of differences between pre-test and post-test results. A significance level of 0.05 was used to test the hypotheses, where a p-value lower than 0.05 indicated a significant improvement in students' performance. The weighted mean was used to interpret teachers' assessments of the video lessons in terms of objectives, format, content, organization, and language, while the paired t-test determined the instructional impact of the materials. The comprehensive process of data collection, validation, and statistical analysis ensured the study's reliability and provided meaningful insights into the use of video-based instruction in MAPEH. The results contributed to evidence-based conclusions on the module's quality and effectiveness, guiding future instructional material development and supporting teachers' adaptation to both face-to-face and remote learning contexts.

### Results and Discussion

#### To develop a video lesson on Cheerdancing that covers basic hand positions, basic hand movements, and cheer stunts and cheerleading moves

This part shows the content of the video lesson on cheer dance. It includes the following topics: basic concept of Cheerdance, basic hand movements in Cheerdance, basic hand movements in Cheerdance, cheer stunts, and cheerleading moves. The Most Essential Learning Competencies (MELCs) set by the Department of Education (DepEd) in the Philippines outline the key competencies that students should achieve in various subjects. For cheer dance, which is typically part of the MAPEH (Music, Arts, Physical Education, and Health) curriculum, the MELCs focus on

various skills and knowledge areas.

The MELCs for cheer dance aimed to provide students with a comprehensive understanding of the sport, fostering skills in physical fitness, teamwork, creativity, and cultural appreciation. Sample activities include the following: practicing basic movements (students perform and practice basic cheerleading motions and jumps), creating a routine (students work in groups to choreograph a simple cheer dance routine), conditioning drills (implementing exercises that enhance flexibility, strength, and endurance specific to cheer dance), and performance critique (students perform their routines and provide constructive feedback to peers). The assessment methods include the following: performance tasks (evaluating students' cheer dance routines based on predefined criteria), written tests (assessing knowledge of cheer dance history, terminology, and safety procedures), and self and peer assessment (encouraging students to reflect on their performance and give feedback to others).

#### To validate the developed video lesson through teacher evaluation in terms of objectives, format, content, organization, and language

Criteria	Mean	Descriptive Equivalent
Objective	3.84	Very Satisfactory
Format	4.14	Very Satisfactory
Content	4.29	Very Satisfactory
Organization	4.34	Very Satisfactory
Language	4.34	Very Satisfactory
Overall	4.19	Very Satisfactory

As evident in the table, the respondents expressed high overall satisfaction with the video lessons in Cheerdance, reflected in an overall mean of 4.19. The highest ratings were given to organization and language, each receiving a mean of 4.61, while the lowest rating was observed in objectives, with a mean of 3.84. It is also noted that the teachers did not implement the video lessons in their actual teaching, and only students from Limay district were exposed to the lessons, as presented in the proposed instructional material.

The high satisfaction in organization and language indicates that the video lessons were well-structured, visually clear, and easy to understand. The lower rating for objectives may suggest that more explicit alignment between lesson objectives and observable student outcomes is needed. These findings imply that the video lessons have strong potential to support skill development, motivation, and confidence in students, even if direct classroom implementation by teachers did not occur.

These findings align with prior studies showing that video-based instruction enhances procedural learning, skill retention, and learner confidence in physical education and performance-based subjects (Garcia *et al.*, 2020; Martínez-Martínez *et al.*, 2024) <sup>[10, 15]</sup>. While previous research often focuses on general PE or dance, this study contributes to the literature by addressing Cheerdance specifically, highlighting the importance of structured organization and clear instructional language in video lessons. Limitations include the teachers' lack of actual implementation of the video lessons and the fact that only one district of students experienced the intervention. Future studies should involve multiple districts, a larger teacher sample, and direct assessment of student performance. Practical recommendations include refining lesson objectives, enhancing procedural clarity, maintaining consistent design and format, and training teachers on effective integration of

video lessons into the MAPEH curriculum.

### To determine the significant difference between the pre-test and post-test results of the respondents after exposure to the developed video lesson

Results of Student's t-Test for Pre-test and Post-test Scores						
Test Type	N	Mean	SD	T-Test	Sig	Decision
Pre-test	50	10.2	3.03	4.029	0.000	Reject Ho
Post-test	50	32.14	3.96	—	—	—

The analysis revealed a significant improvement between pre-test and post-test scores, with mean scores increasing from 10.2 to 32.14 and a p-value of 0.000, indicating that the instructional materials used were highly effective. Constantino (2015) <sup>[1]</sup> confirmed the reliability of the developed instrument through the Pearson r correlation, while the t-value of 2.57 established its dependability in measuring performance. However, validity tests suggested further refinement of the materials for enhanced educational value. Similarly, Amoin (2017) <sup>[2]</sup> found that instructional materials were highly acceptable based on clarity, design, and learning activities, with significant t-values supporting their effectiveness. Gravoso *et al.* (2018) <sup>[6]</sup> emphasized the impact of integrating learner-centered educational technology in improving comprehension and engagement. Tennyson (2020) <sup>[11]</sup> underscored the need for clear theoretical frameworks and institutional support for teachers developing instructional materials, noting challenges such as time constraints, limited technology access, and insufficient funding. Collectively, these studies highlight that effective, well-evaluated instructional materials and continuous teacher development are vital to improving student learning outcomes.

### To identify the implications of the study findings for the teaching and learning of MAP

The incorporation of video tutorials in cheerdancing has significant potential to enhance Physical Education (PE) programs, especially in relation to Department of Education (DepEd) guidelines concerning heat index and class suspension.

Through the creation and assessment of the suggested educational resources in Physical Education, PE teachers now have a selection of instructional materials to utilize when teaching Junior High School students. The themes are organized in accordance with the most essential learning competency specified by the department of education. This learning experience combines physical education and real-life events to promote the progress of the learners. Additionally, the video lesson has been suggested as a means to facilitate the process of education and acquisition of knowledge. This material can also be utilized for self-directed education to cater to the requirements of the intended users. The technique can also be implemented by other educators in different teaching domains, particularly in physical education, where there appears to be a scarcity of instructional resources in certain areas. In order to accommodate the students' demands, teachers can create instructional resources such as video lessons, considering that many students possess personal devices that can be utilized to address the requirements of the teaching and learning process. Furthermore, administrators should prioritize the creation of instructional resources to motivate and assist the faculty. This may be achieved by organizing seminars and trainings to promote the use of such materials and achieve the desired goal. Nevertheless, one may

still opt to get additional reference books available in the market that are suitable for learning Cheerdance and improving the instructional materials employed.

### Conclusion

The conclusion was drawn based on the findings of the study

- The study result showed that the content in Cheerdance which consists of basic hand positions, basic hand movements, cheer stunts, and cheerleading moves, was notably developed into a complete and organized video lesson. Practically, the video made the "how" part of the student-teacher interaction visible, thus allowing students to both see and perform the skills. This is the proof that even very difficult physical skills can be efficiently taught through digital media, which is a perfect solution for students of Junior High School if they are in need of a flexible and accessible instructional tool. Besides, the organized material progression of the content enables sequential skills acquisition, which is very important in Physical Education, as the mastering of the most basic techniques comes first before the more advanced ones.
- Teachers' evaluations backed up the fact that the Cheerdance video lesson was of high quality and effectiveness. The lesson was very compatible with DepEd standards and curriculum requirements and was very clear in presenting the intended learning outcomes. The format was visually and functionally engaging, thus supporting participation, while some small changes could make the content easier to read. The content was logical, consistent, and relevant, which helped the learners to understand and retain the techniques. The organization showed that there was a relationship between coherence and unity, but smoother transitions may have allowed the flow to be better. From a linguistic point, the instructions were clear and accurate, and hence, there was no room for misinterpretation. All in all, the video lesson is a great teaching tool and can empower both the teaching process and the student's learning outcomes in Physical Education.
- Students' performance was improved significantly after they were exposed to the video lesson, which was clear from the analysis. The pre-test results showed that the students had very limited skills in Cheerdance, while the posttest scores indicated considerable increases in both knowledge and the correct performance of the movements. The above improvement underlines the efficiency of the video lesson in students' involvement, comprehension, and procedural skills. The results imply that watching a demonstration can have a big effect on students' acquisition of physical skills if the demonstration is combined with a clear explanation, hence meeting different learning styles and encouraging practice by oneself.
- Statistical analysis using the t-test for dependent samples revealed a significant difference between pre-test and posttest scores ( $P=0.000 < 0.05$ ). This result confirms that the observed improvement in students' performance was not due to chance but directly attributable to the instructional intervention provided by the Cheerdance video lesson. This evidence supports the use of multimedia resources as an effective method for teaching physical skills and underscores the importance of evaluating instructional strategies through rigorous, data-driven approaches to ensure measurable learning

outcomes.

- The study highlights the benefits of using video lessons in Physical Education to enhance learning, engagement, and skill mastery. Video tutorials offer flexible, repeatable, and independent learning opportunities, complementing traditional teaching. Findings suggest that educators and administrators should prioritize multimedia resources to improve instruction, support curriculum alignment, and promote competency-based learning. Such resources can address material gaps, motivate teachers and students, and enhance overall educational outcomes in Physical Education.

### Recommendations

**In the light of the findings and conclusions of the study, the researcher proposed the following recommendations:-**

- The study revealed relatively lower mean scores under the “Procedure” component, particularly in areas such as stating specific skills to be acquired and addressing technical procedures. To address this, it is recommended that video lesson developers incorporate explicit procedural demonstrations with step-by-step instructional breakdowns using clear visuals and narration. Activities that promote higher-order thinking skills (HOTS), such as analysis, evaluation, and application, should be embedded to elevate cognitive demand, particularly in physical tasks. Moreover, lesson design should be informed by factors that strongly correlate with learner understanding and engagement.
- Although “Consistency” and “Logical Presentation” scored well, further reinforcement of curriculum alignment is necessary. Teachers and curriculum developers should collaborate to ensure that video lessons consistently reflect curriculum objectives. This involves explicitly linking lesson objectives to DepEd standards, integrating prerequisite knowledge, and providing clear summaries at the end of each video to consolidate learning.
- Weaknesses identified in instructional “Procedure” and certain aspects of “Nature” suggest the need for targeted professional development. Teacher training programs should emphasize instructional design, lesson sequencing, and procedural clarity in multimedia materials. Training should also address coherent structuring, appropriate pacing, and audience-specific language while leveraging strengths in visual and language use to compensate for weaker domains.
- School administrators play a critical role in facilitating effective video-based instruction. It is recommended that they provide teachers with access to multimedia tools, instructional design workshops, and protected time for material creation. In addition, administrators should implement monitoring and feedback systems to ensure continuous improvement of teaching materials, particularly those used in video-based instruction.
- Teachers are encouraged to design instructional modules not only for physical education but across various disciplines, ensuring that materials accommodate diverse learning styles and abilities. Real-life applications and individualized activities should be prioritized, especially to support students with differing performance levels, guided by findings from the quality and emphasis domains.
- To validate and further improve the effectiveness of instructional video materials, future researchers are

encouraged to conduct experimental or quasi-experimental studies involving larger and more diverse samples. Research should focus on investigating the impact of video lesson components, such as coherence, emphasis, and communicative clarity, on actual learning outcomes in cheerleading and other physical education domains.

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