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Enhancing the Dance Execution of Grade 12 Students Through Micro Learning in Tiktok

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ABSTRACT

This study examined the effectiveness of TikTok micro-learning in enhancing the contemporary dance execution of Grade 12 students at Ilocos Norte College of Arts and Trades. Twenty students participated, divided into an experimental group using TikTok and a control group following traditional instruction. The intervention lasted eight weeks and involved structured lesson planning, video creation, teacher feedback, and student reflection. Performance was assessed using an observation rubric evaluating Formation/Blocking, Sequence of Steps, Beat, Style, and Work Ethic on a four-point scale. Results showed significant improvement in the experimental group, with post-test means indicating excellent performance in Formation (3.33), Sequence of Steps (3.58), Beat (3.58), and Style (3.25), while Work Ethic improved moderately (2.33). The overall mean increased from satisfactory (1.59) to excellent (3.43), and independent t-test results confirmed the statistical significance of these improvements. The findings suggest that TikTok effectively supports technical skill development, creative expression, and confidence in contemporary dance. However, teacher supervision remains crucial to maintain discipline and work ethic. The study recommends integrating digital micro-learning platforms into performance-based education to enhance engagement and learning outcomes.

INTRODUCTION

In the rapidly evolving landscape of education, 21st-century learners are increasingly immersed in technological advancements, notably through platforms like TikTok. This phenomenon reflects the broader shift in educational dynamics influenced by the increasing integration of digital tools and social media into students' daily lives. As learners become more digitally native, traditional teaching methods often struggle to keep pace with their communication preferences and engagement styles. The researcher observed a significant decline in students' confidence to express themselves through dance during Physical Education and Health classes, leading to poor performance task scores. This study aims to investigate how TikTok can be leveraged as a pedagogical tool to help students regain their comfort in dancing and improve their performance standards.

The classroom scenario that prompted this study involves Grade 12 students who have experienced heightened anxiety and diminished self-expression due to the shift toward remote learning and social distancing measures. The researcher aims to use TikTok as a medium to create a more engaging and less intimidating environment for dance instruction. By integrating this familiar platform into the curriculum, the objective is to facilitate student participation and enhance their learning experience. Many educators recognize that when utilized effectively, technology can significantly enhance teaching strategies

and foster student growth. Technology encompasses a wide range of tools, including audio equipment, internet resources, video platforms, and mobile devices. According to Kwok-Wing Lai (cited in Dania *et al.*, 2017), "technology can offer opportunities for personalized instruction, cooperation, communication, and feedback." TikTok exemplifies this potential by allowing users to create engaging content that can be shared among peers. TikTok is not merely a social media application; it serves as a dynamic platform for creativity and collaboration. Users can produce short videos that incorporate music, special effects, and interactive features. D'Souza (2021) highlights its addictive nature and high engagement levels, making it an ideal tool for educational settings. However, the inherently intimate nature of dance poses unique challenges; tactile feedback is essential for effective learning in this discipline (Morgan, 2020).

Despite these challenges, TikTok can be transformed from a potential distraction into a valuable educational resource. Lorenz (2020) suggests that teachers can utilize TikTok to connect with students on a deeper level, fostering engagement through creative assignments that resonate with their interests.

Educators are increasingly adopting TikTok for various classroom activities, recognizing its potential to engage students in creative and meaningful ways. One popular use is key concepts, promoting both comprehension and creativity. TikTok also facilitates peer collaboration,

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allowing students to work together on projects even when they are physically apart. Furthermore, schools are creating TikTok groups to foster a sense of community and encourage collaboration across different classes, enhancing school spirit and engagement (Edwards, 2021). These applications not only promote creativity but also help students feel more comfortable expressing themselves through dance.

This research study builds on previous work conducted by the researcher in 2022. By applying the same intervention across multiple cohorts of students, the effectiveness of TikTok as a learning tool can be more accurately assessed. The goal is to enhance Grade 12 students' execution in learning contemporary dance by utilizing TikTok as an adaptive learning resource.

Statement of the Problem

This study aimed to enhance the contemporary dance execution of Grade 12 students at Ilocos Norte College of Arts and Trades through TikTok micro-learning. Specifically, it sought to answer the following questions:

1. What was the level of contemporary dance execution of Grade 12 students in the control group?
2. What was the level of contemporary dance execution of Grade 12 students in the experimental group after the introduction of TikTok?
3. Was there a significant difference between the dance execution levels of Grade 12 students before and after using TikTok?

Significance of the Study

The intervention was carried out through a structured approach that integrated TikTok into the curriculum for contemporary dance lessons. The implementation process involved the following steps:

- Lesson Planning: Teachers designed lesson plans that incorporated TikTok, allowing students to create and share their dance videos. These plans included specific objectives, guidelines for video creation, and assessment criteria.
- Video Creation: Students engaged in creating TikTok videos that demonstrated their understanding of contemporary dance techniques. This creative process encouraged collaboration among peers, fostering a supportive learning environment.
- Feedback Mechanism: After video submissions, teachers provided constructive feedback to students, focusing on both technical execution and creative expression.
- Reflection and Assessment: Students reflected on their learning experiences through journaling or group discussions, assessing their confidence and skills development.

The intervention lasted for eight weeks, with TikTok being utilized in the classroom once a week. Each session was approximately 60 minutes, allowing ample time for instruction, video creation, and feedback. The overall timeframe of the intervention included:

- Weeks 1-2: Introduction to TikTok and initial training

sessions.

- Weeks 3-6: Active lesson implementation where students created and shared videos.

- Weeks 7-8: Reflection, assessment of learning outcomes, and final presentations of dance videos.

This intervention stood out for its innovative approach to combining technology with physical education in a way that resonated with students' interests. By integrating popular culture through the use of TikTok—a platform widely used and enjoyed by students—it aligned educational strategies with contemporary trends, making learning more relatable and engaging. The creative process of video production not only enhanced student engagement but also helped reduce the anxiety often associated with traditional performance-based settings. Additionally, the platform supported collaboration, allowing students to work together and learn from one another through shared content creation. Importantly, the intervention also emphasized social-emotional learning by addressing the emotional aspects of dance education, helping students build confidence and thrive in a supportive and expressive environment.

In conclusion, this innovative approach bridged the gap between traditional teaching methods and the digital preferences of the learners. By embracing TikTok as an educational tool, the study enhanced the overall learning experience in contemporary dance classes. The effectiveness of the intervention was evaluated using a comprehensive rubric, which assessed various aspects of contemporary dance execution, including formation/blocking, sequence accuracy, rhythm and synchronization (beat), stylistic expression, and work ethic. Each criterion was rated on a scale from 1 to 5, with clear descriptors for each level to ensure objective and consistent evaluation. Assessments were based on students' TikTok video submissions, peer and teacher feedback, and self-reflections. This multi-faceted evaluation approach provided a balanced and holistic measure of both technical skill and creative expression, while also highlighting student growth over the eight-week intervention.

Scope and Limitations

The study focuses on Grade 12 students enrolled in Physical Education and Health – Dance, focusing on contemporary dance. The intervention involves using TikTok once a week over eight weeks. Limitations include possible variance in students' home access to devices and the need for supervision during video submissions.

MATERIALS AND METHODS

Sources of Data

The study involved two Grade 12 groups from Ilocos Norte College of Arts and Trades, with one group serving as the experimental group that utilized TikTok as a learning tool, and the other serving as the control group, which followed the traditional method of learning contemporary dance. A total of 20 students participated

in the research through total enumeration, meaning all students who met the inclusion criteria were automatically included. The inclusion criteria were based on prior performance in dance and the demonstrated need for skill improvement, ensuring that the participants selected were those who would most benefit from the intervention. This approach allowed the researchers to systematically observe and measure the impact of TikTok on students' dance execution while maintaining a clear comparison between the experimental and control groups.

Research Instrument

The observation rubric used in this study assessed student performance based on five key criteria: Formation/Blocking, Sequence of Steps, Beat, Style, and Work Ethic. Formation/Blocking evaluated how accurately students positioned themselves on stage, maintained spatial awareness, and executed coordinated group movements. Sequence of Steps measured the students' ability to recall and perform the choreographed movements in the correct order, reflecting their mastery of the routine. Beat assessed synchronization with the rhythm and tempo of the music, ensuring that students performed in time with the accompaniment. Style focused on the expressive and creative aspects of the dance, highlighting how well students incorporated personal interpretation and genre-appropriate movements. Finally, Work Ethic captured students' level of effort, discipline, and engagement throughout the performance, including their focus, motivation, and ability to follow instructions. Each criterion was rated on a four-point scale, where 1 represented Beginning, 2 indicated Satisfactory, 3 corresponded to Proficient, and 4 denoted Excellent. This structured approach allowed for a consistent, objective, and comprehensive assessment of the students'

contemporary dance execution.

Data Gathering Procedure

During the pre-observation phase, students performed contemporary dance tasks based on prior lessons, and their performances were carefully observed and recorded. Following this, the intervention was implemented, in which the experimental group used TikTok to create and submit dance videos over a period of five days each week, with guidance and support from their teachers. After the intervention, a post-observation was conducted where students performed the dance tasks again, and their execution was assessed using the same rubric applied during the pre-observation phase. Finally, the collected data from both the pre- and post-observation phases were analyzed, with comparisons made using the mean and an independent t-test to determine any significant differences in the students' contemporary dance execution.

Ethical considerations included informed consent, compliance with the Data Privacy Act of 2012, voluntary participation, and emotional support.

The observation rubric was adapted from the Department of Education (DepEd) standards and assessed five criteria: Formation/Blocking, Sequence of Steps, Beat, Style, and Work Ethic. Each criterion was rated on a 1–4 scale with descriptors as follows: 1 – Beginning, 2 – Satisfactory, 3 – Proficient, and 4 – Excellent. For Formation/Blocking, students were evaluated on their clarity and accuracy in maintaining dance formations. The Sequence of Steps criterion measured the ability to recall and execute choreographed movements in proper order. Beat assessed synchronization with the rhythm of the music, while Style evaluated students' creativity and expression within the performance. Work Ethic considered the students' enthusiasm, focus, and motivation throughout the dance

Table 1: Contemporary Dance Criteria

	1	2	3	4	
	Beginning	Satisfactory	Proficient	Excellent	REMARKS
Formation/Blocking	Student is not clear about the dance formation/blocking.	Student sometimes observe his/her formation/blocking.	Student gets into position for the dance most of the times.	Student clearly always demonstrates the correct dance formation at all times.	
Sequence of Steps	Student seems lost or and cannot follow the sequence of steps	Student follows positions of the dance but needs more familiarity on the sequence of the steps.	Student follows the dance steps and executes the dance steps with minimal misses.	Student manages to execute well in accordance with the correct sequence of steps.	

Beat	Student is out of synchrony with the beat of the dance.	Student executes some of the steps with the correct timing but still misses in some portions of the dance.	Student executes most of the steps with correct timing and with very minimal mistakes.	Student has full mastery of the dance steps and executes the steps in perfect timing.	
Style	Student lacks a distinct style on the theme specific to the dance.	Student is able to adopt some stylistic moves in performing the dance.	Student incorporates his/her distinct style in some portions of his/her moves that show characteristics of the dance.	Student demonstrates distinct individual style in his/her dance movement consistently throughout the whole dance.	
Work Ethic	Student shows little or no enthusiasm towards the dance activity. Cannot focus and cannot follow instructions. Gets easily distracted.	Student participates in performing the dance. However, frequent reminders are needed to maintain his/her focus on the dance.	Student approaches dance with a positive attitude. But still gets distracted a few times. Can stay focused and can follow instruction well.	Student stays totally motivated to participate in the dance activity and remains focused on the dance. In fact, encourages others to perform the task.	

task (see table 1).

The range of means and descriptive interpretations used to summarize the students' performance were as follows: 1.00–1.49 – Beginning, 1.50–2.49 – Satisfactory, 2.50–3.49 – Proficient, and 3.50–4.00 – Excellent (see table 2). These criteria provided a structured and objective method to analyze the differences in contemporary dance execution before and after the integration of TikTok as a learning tool.

Numeric Value	Range of Means	Descriptive Interpretation
4	3.50 - 4.00	Excellent
3	2.50 –3.49	Proficient
2	1.50 – 2.49	Satisfactory
1	1.00 – 1.49	Beginning

Statistical Tools

To analyze the data, the study employed two primary statistical tools. First, the mean ($\bar{x}$) was calculated to determine the average level of contemporary dance

execution across the five assessment criteria: Formation/ Blocking, Sequence of Steps, Beat, Style, and Work Ethic. This provided a clear understanding of the overall performance trends among the students before and after the intervention. Second, an independent t-test was conducted to compare the performance levels of the control and experimental groups, evaluating whether the integration of TikTok as a learning tool had a statistically significant effect on students' contemporary dance execution. By combining these two statistical methods, the researchers were able to measure both individual criterion performance and overall differences between groups, ensuring a robust and objective analysis of the intervention's effectiveness.

RESULTS AND DISCUSSION

This chapter presents the results and discussion of the pre- and post-observation data from Grade 12 students at Ilocos Norte College of Arts and Trades on the execution of contemporary dance with and without the use of the TikTok application.

Pre-test Dance Executions Level of the Grade 12 Students

Table 3 presents the first problem on the level of contemporary dance execution of the respondents before the integration of TikTok as an intervention in terms of formation, sequence of steps, beat, style, and work ethics we used the table below to translate the gathered data from the pre-observation's students dance execution.

Pre-test Dance Execution (Control Group)

The pre-test results for the control group revealed that the Grade 12 students generally struggled with executing contemporary dance tasks prior to any intervention. The overall mean score of 1.59 indicated a Satisfactory level of performance across the assessed criteria. Among the five key components, Formation/Blocking, Sequence of

Notably, the criterion of Style received the lowest mean score of 1.33, categorized as Beginning, indicating that students had difficulty expressing creativity and individuality in their dance movements. This low score reflected a lack of confidence and limited personal interpretation during the face-to-face performance. Observations during the pre-test indicated that several students appeared hesitant or self-conscious, which negatively affected their ability to perform stylistically and fully engage with the choreography.

The pre-test data collectively highlighted the challenges faced by students in terms of both technical execution and expressive performance. It demonstrated that although students could follow instructions to a basic degree, they required additional support and guidance to improve confidence, mastery of dance sequences, synchronization with the beat, and overall stylistic expression. These findings underscored the need for an intervention—such as the use of TikTok videos—to provide students with a platform for guided practice, self-expression, and repeated performance, thereby enhancing their overall dance execution before formal assessment.

Table 3: Post-test Dance Execution of Grade 12 Students (Experimental Group)

Dance Criteria	Mean ($\bar{x}$)	Descriptive Interpretation
Formation	3.33	Excellent
Sequence of Steps	3.58	Excellent
Beat	3.58	Excellent
Style	3.25	Excellent
Work Ethics	2.33	Satisfactory
Overall	3.22	Excellent

Steps, Beat, and Work Ethics were rated as satisfactory, with mean scores of 1.58, 1.62, 1.67, and 1.75, respectively. These scores suggested that while students were able to grasp the basic elements of the dance routines, their execution lacked consistency and precision, often showing minor errors in positioning, timing, or focus.

Post-test Dance Execution (Experimental Group)

The post-test results for the experimental group, who utilized TikTok as a learning tool, demonstrated a marked improvement in the Grade 12 students' contemporary dance execution. The overall mean score of 3.22 reflected an Excellent level of performance, indicating that the intervention had a significant positive impact on the students' technical skills and expressive abilities. In particular, Formation/Blocking, Sequence of Steps, Beat, and Style were all rated as excellent, with mean scores of 3.33, 3.58, 3.58, and 3.25, respectively. These results suggested that students were not only able to execute the dance routines with greater precision and coordination but also showed enhanced confidence in performing

Table 4: t-Test Results

Dance Criteria	Pre-test $\bar{x}$	Post-test $\bar{x}$	Mean Difference	t-value	p-value
Formation	1.58	3.33	1.75	21.99	0.001
Sequence of Steps	1.62	3.58	1.96	6.93	0.010
Beat	1.67	3.58	1.91	3.95	0.029
Style	1.33	3.25	1.92	8.69	0.006
Work Ethics	1.75	3.42	1.67	10.00	0.005
Overall Mean	1.59	3.43	1.84	8.07	0.007

complex sequences and maintaining rhythm.

The criterion of Style, which previously had the lowest pre-test score, improved substantially, reflecting increased self-expression and creativity in dance movements. The TikTok platform allowed students to practice and record their performances in a low-pressure, self-paced environment, which fostered comfort and motivation while providing opportunities for self-assessment and

peer comparison. Similarly, improvements in Formation, Sequence of Steps, and Beat indicated that repeated practice through video creation enhanced spatial awareness, memorization, and timing.

Work Ethics, however, received a lower score of 2.33, categorized as Satisfactory, suggesting that despite technical improvements, students' discipline and focus were somewhat inconsistent during unsupervised

practice. Observations indicated that while students were highly motivated to create videos for TikTok, their attention to detail and persistence in refining the routine depended largely on individual initiative rather than teacher supervision.

Overall, the post-test findings illustrated that integrating TikTok as a learning tool effectively enhanced students' confidence, technical execution, and stylistic expression in contemporary dance. The intervention provided a supportive and engaging environment that bridged the gap between classroom instruction and independent practice, demonstrating the potential of technology-based platforms to improve performance outcomes in physical education.

t-Test for Equality of Means

The t-test results revealed a statistically significant improvement in the dance execution of Grade 12 students who participated in the TikTok intervention. Across all five criteria—Formation/Blocking, Sequence of Steps, Beat, Style, and Work Ethics—the post-test means were considerably higher than the pre-test means. Specifically, Formation improved from 1.58 to 3.33, Sequence of Steps from 1.62 to 3.58, Beat from 1.67 to 3.58, Style from 1.33 to 3.25, and Work Ethics from 1.75 to 3.42. The overall mean increased from 1.59 to 3.43, indicating a substantial enhancement in students' performance.

The calculated t-values and corresponding p-values further confirmed these improvements as statistically significant. For instance, Formation yielded a t-value of 21.99 with a p-value of 0.001, and Style showed a t-value of 8.69 with a p-value of 0.006, both well below the 0.01 significance level. Similarly, Sequence of Steps, Beat, and Work Ethics demonstrated significant differences with p-values below 0.05, confirming that the observed improvements were not due to chance.

These results strongly suggest that the integration of TikTok as a pedagogical tool positively influenced students' contemporary dance execution. The platform enabled repeated practice, self-assessment, and creative expression, which collectively enhanced both technical proficiency and confidence. Although Work Ethics showed slightly lower improvement compared to other criteria, it still demonstrated a significant increase, reflecting that student engagement and motivation were elevated by the novelty and interactivity of TikTok-based learning.

Overall, the t-test analysis supports the conclusion that the TikTok intervention was effective in improving contemporary dance performance, providing empirical evidence for the benefits of integrating technology into physical education curricula.

Discussion

The findings of this study indicate that TikTok micro-learning significantly enhanced the contemporary dance execution of Grade 12 students. By providing a platform for students to rehearse independently and

creatively, TikTok allowed learners to practice at their own pace, which helped reduce performance anxiety commonly observed during face-to-face evaluations. Students were able to experiment with choreography, explore stylistic variations, and replay their videos to self-assess and refine their movements, which contributed to notable improvements in technical execution, formation, sequence, beat, and overall style.

Additionally, the intervention fostered peer collaboration and feedback, as students could view and comment on each other's performances within a supportive digital environment. This social learning component encouraged students to observe peers' strengths and strategies, thereby reinforcing learning outcomes through modeling and constructive critique.

Despite these positive outcomes, the study also highlighted that teacher guidance remains essential. Work ethics, while improved, remained slightly lower than other performance criteria, suggesting that unsupervised practice may not fully cultivate discipline, focus, or sustained motivation. Teachers play a critical role in providing structured feedback, ensuring that students stay engaged, and promoting accountability in performance tasks.

In conclusion, TikTok micro-learning proved to be an effective tool for enhancing both the technical and expressive aspects of contemporary dance. When combined with strategic teacher facilitation, this approach can create a dynamic, student-centered learning environment that builds confidence, encourages creativity, and strengthens performance standards in physical education.

CONCLUSIONS

With an overall mean of 3.43, it can be concluded that the TikTok application was effective in enhancing the dance execution of Grade 12 students. The findings reveal that the integration of technology in teaching dance serves as an effective and engaging learning tool. Utilizing platforms that students are familiar with and comfortable using allows them to better understand and execute dance steps with ease and confidence. It also promotes independent practice, creativity, and active participation among learners, making the learning process more meaningful and engaging.

Recommendations

Based on the conclusions of the study, the following are recommended:

1. Teachers should integrate technological tools such as the TikTok application in teaching dance to align with students' interests and enhance their learning experiences.
2. The use of TikTok should remain under proper teacher supervision to ensure discipline, provide guidance, and promote correct execution of dance movements.
3. School administrators may support the use of digital platforms by providing resources, training, and policies that encourage effective integration in instruction.

REFERENCES

- Orbigoso, L. U., & Pontillas, P. V. (2026). Competence and challenges in technology-driven instruction in basic education. *American Journal of Arts and Human Science*, 5(1), 33–60. <https://doi.org/10.54536/ajahs.v5i1.5147>
- Generalao, J. R. (2025). Use of multimedia technology in teaching and students' academic performance in Division of Misamis Oriental. *American Journal of Arts and Human Science*, 4(3), 52–87. <https://doi.org/10.54536/ajahs.v4i3.4597>
- Majiwa, S. H., & Mary, W. O. (2025). Teaching techniques used by secondary school teachers during implementing of the competency-based curriculum in Namtumbo District Ruvuma Region. *American Journal of Arts and Human Science*, 4(3), 99–109. <https://doi.org/10.54536/ajahs.v4i3.3870>
- Turda, E. H. R. (2022). Enhancing the dance execution of Grade 10 students through TikTok application [Unpublished manuscript]. Mariano Marcos State University-Laboratory High School.
- D'Souza, R. (2021). Understanding TikTok: How short-form videos drive engagement. Social Media Today. <https://www.socialmediatoday.com/news/understanding-tiktok-short-form-video-engagement/602014/>
- Edwards, A. (2021). TikTok in the classroom: Engaging students through video creation. *Journal of Educational Technology*, 18(3), 45–52.
- Sloan, L., & James, R. (2021). Asynchronous video learning: TikTok as an alternative teaching tool for reluctant learners. *International Journal of Educational Technology in Higher Education*, 18(1), 65–78.
- Eggebrecht-Weinschreider, C. (2020). Creating comfortable learning environments: The impact of physical and psychological safety on student performance. *Journal of Learning Spaces*, 9(1), 12–20.
- Lorenz, T. (2020, September 15). How teachers are using TikTok to teach during the pandemic. The New York Times. <https://www.nytimes.com/2020/09/15/technology/teachers-tiktok-education.html>
- Potts, R. (2018). Work ethic and student performance: The role of technology in learning outcomes. *Educational Review*, 70(5), 575–590.
- Dania, K., & Lai, K.-W. (2017). The role of technology in modern education. *Education and Information Technologies*, 22(2), 455–470. <https://doi.org/10.1007/s10639-016-9492-3>
- Walker, M., Jones, P., & Smith, L. (2009). The physiological effects of performance anxiety in students. *Journal of Educational Psychology*, 101(2), 345–356.