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Development of Audiovisual-Based Teaching Materials for the Paduppa Anida Dance: Traditional Dance Learning in Junior High School

Sitti Hariati¹, Nurlina Syahrir², Arifin Manggau³

^{1, 2, 3} Postgraduate Program in Arts Education, Universitas Negeri Makassar, Indonesia

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ABSTRACT

Culturally grounded teaching materials remain scarce in secondary school dance education, and the transmission of the *Paduppa Anida* dance – a signature Bugis-Makassar welcoming dance created in 1965 – has been undermined by inconsistent movement variants circulating across community dance studios. This study develops, validates, and evaluates the effectiveness of an audiovisual teaching resource that reconstructs the dance's original repertoire for classroom use. A research and development (R&D) design following Thiagarajan's Four-D model (Define, Design, Develop, Disseminate) was employed. Movement material was reconstructed using Hawkins' exploration–improvisation–composition choreographic method and produced as a 9-minute, 720p audiovisual module. The product was reviewed by a dance-content expert and a media expert, then field-tested with Grade VII students (n = 20) at Junior High School 1 Makassar, Indonesia, in a limited trial (n = 6) followed by an extended trial (n = 15). The finding indicated that the product satisfied the Four-D development stages and achieved a mean expert-validated feasibility score of 87% (“very good” category) across both content and media dimensions. The extended field trial yielded a mean student-response score of 3.49 out of 4 (total score 787/900, “very good”), indicating gains in movement accuracy, learner confidence, and self-directed engagement relative to conventional instruction. The validated module offers teachers a standardized, reusable reference for authentic movement vocabulary and has been disseminated via YouTube to extend access beyond the classroom, supporting both in-class demonstration and independent student practice.

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Corresponding Author:

Sitti Hariati,

Postgraduate Program in Arts Education, Universitas Negeri Makassar, Indonesia

Email: sittihariati2@gmail.com

1. INTRODUCTION

Arts and culture education occupies a strategic position in shaping the moral, intellectual, and cultural character of Indonesian learners (Putra et al., 2024; Samparadja et al., 2024; Sari & Wahyudi, 2026). Amid the rapid expansion of information technology, culturally grounded arts instruction functions as a counterbalance that filters

global influence without eroding national identity (Afiah et al., 2025; Hasdiana & Dangkoa, 2025); Indonesian Government Regulation No. 19/2005 explicitly situates arts education as inseparable from cultural preservation and intergenerational transmission (Kusumastuti et al., 2021).

Despite this mandate, classroom practice frequently privileges technical creativity over the philosophical and historical values embedded in traditional movement vocabularies, leaving a persistent gap between what curricula intend and what is delivered in practice (Samaniego et al., 2024). Closing this gap requires teaching materials that reconstruct traditional repertoires in forms compatible with contemporary pedagogy. Prior work has shown that locally grounded materials strengthen national identity and function as a form of local genius capable of absorbing external influence without loss of cultural distinctiveness (Hulu et al., 2025; Wahyudi et al., 2025) and that culturally embedded instruction supports character formation among adolescent learners (Martadi & Sampurno, 2025; Nurasiah et al., 2022; Umah, 2020).

The *Paduppa Anida* dance, created in 1965 by Andi Nurhani Sapada, exemplifies this challenge (Pramana et al., 2025). Historically rooted in the *Marellau Pammase Dewata* (“plea for the Creator’s blessing”) dance, it evolved into a welcoming dance performed for guests of honor; the name “Anida” itself derives from the *Institut Kesenian Sulawesi* (IKS), the arts organization the choreographer founded, underscoring the dance’s role as a symbol of hospitality and respect within South Sulawesi society (Khalik & Mustika, 2022). At Junior High School 1 Makassar, however, students confront ambiguity in the dance’s authentic movement vocabulary: divergent versions taught across community studios have eroded the *pakem* (authoritative movement standard), while the scarcity of digital tutorials depicting the original repertoire compounds the risk of further distortion—a pattern of intangible heritage erosion also documented for other regional dances.

Audiovisual media has repeatedly been shown to support the teaching of traditional dance by enabling repeated, self-paced observation of fine motor detail (Budiarsa et al., 2024; Firdaus et al., 2025; Gillanders et al., 2019), and video-sharing platforms such as YouTube extend that access beyond the classroom (Nicolaou, 2021; Nicolaou et al., 2019; Tasir & Al-Dheleai, 2019). Several studies have applied the Four-D model to develop dance and cultural-arts materials (Nurul et al., 2025; Rochmahningtyas et al., 2025), and the model’s stepwise validation logic has proven effective for producing digitally packaged instructional content more broadly (Indaryanti et al., 2025; Syabila & Prasetyo, 2024). What remains underexplored, however, is the reconstruction of a specific, maestro-attributable repertoire—rather than a generic performance recording—into a validated pedagogical module that couples precise movement documentation with the philosophical meaning embedded in each sequence.

This study addresses that gap by digitizing and reconstructing the original repertoire of the *Paduppa Anida* dance into a systematic audiovisual teaching resource. Distinct from conventional performance footage, the module is purpose-built as a pedagogical guide that integrates the choreographer’s precise movement vocabulary with philosophical explanation, bridging the vulnerability of orally transmitted tradition with

the stability afforded by digital documentation. Grade VII students were selected as the target population because early adolescence is characterized by heightened curiosity, strong imitative capacity, and receptiveness to visual instruction, making this developmental stage well suited to internalizing both the technical and the value-based content of traditional dance.

Accordingly, this study aims to: (1) describe the process of developing audiovisual-based *Paduppa Anida* teaching materials using the Four-D model; (2) evaluate the feasibility of the product through expert validation; and (3) examine its practical effectiveness in improving students' dance skills and understanding of traditional movement vocabulary.

2. METHOD

This study used a research and development (R&D) design intended to produce a validated, practical, and effective teaching resource. The focus of development was the *Paduppa Anida* dance repertoire, packaged as audiovisual teaching material for secondary-level dance instruction. The study was conducted at Junior High School 1 Makassar, South Sulawesi, Indonesia, in October 2025. The target population comprised one Grade VII class (VII.5), from which 20 students participated as end-user trial subjects: 6 students in a limited trial and 15 students (including the original 6) in an extended trial. One arts-and-culture subject teacher participated as a classroom observer throughout both trial phases. Product development followed the Four-D model, comprising four stages: Define, Design, Develop, and Disseminate.

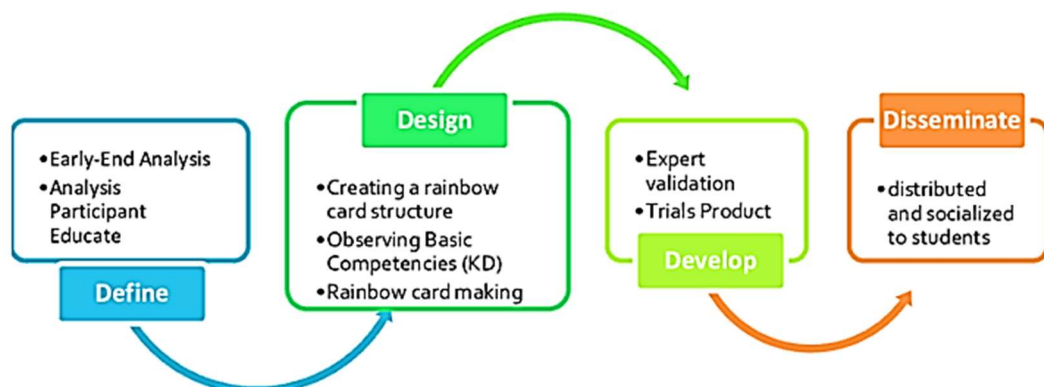


Figure 1. The Four-D development model

1. **In the Define stage**, a front-end analysis identified the instructional gap, a learner analysis characterized the target students, and a task/concept analysis aligned the material with the Kurikulum Merdeka core and basic competencies for Grade VII arts and culture.
2. **In the Design stage**, the choreographic method of Hawkins (1988) – comprising exploration, improvisation, and composition – was applied to reconstruct the dance's movement structure with reference to the choreographer's original repertoire. The resulting choreography was then encoded into a 9-minute, 720p

MP4 audiovisual module edited in Adobe Premiere Pro, using simple message design principles and language appropriate for junior-secondary learners.

3. **In the Development stage**, the draft product underwent expert validation by a dance-content expert (a lecturer in the Dance Education Department, Universitas Negeri Makassar) and a media expert, followed by revision based on validator feedback. The validated product then proceeded to field trials: a limited trial with 6 students and an extended trial with 15 students, both conducted with an in-class projector.
4. **In the Disseminate stage**, the finalized, revised product was uploaded to YouTube to extend access to teachers and students beyond the immediate research site, with attention to video title, description, thumbnail design, and content sequencing to support discoverability and navigation.

Data was collected through observation, interviews, documentation, and questionnaires. Observation and interviews were used during the Define stage to map the instructional problem; documentation (photographic and video records) captured the implementation process; and structured feasibility questionnaires were administered to the two validators and to the participating teacher and students to capture practicality, comprehensibility, and user satisfaction.

Data were analyzed through three complementary strands: (1) content analysis, verifying the accuracy of the reconstructed movement vocabulary against expert validation; (2) media analysis, evaluating the technical adequacy of the audio and visual components; and (3) user-perspective analysis, in which quantitative questionnaire scores from the teacher and students were computed as mean scores and converted to categorical feasibility levels. All data were synthesized descriptively to determine the product's overall feasibility and instructional success.

3. RESULTS AND DISCUSSION

Results

The development process aimed to produce *Paduppa Anida* dance teaching material, packaged as a video-based learning resource, to strengthen the dance skills of Grade VII students at SMP Negeri 1 Makassar in line with the Grade VII arts-and-culture core and basic competencies, while introducing students to the local cultural wisdom of South Sulawesi.

Define Stage

Front-end analysis confirmed the dominance of cognitive over practice-based instruction in arts-and-culture learning, together with a documented distortion of the *Paduppa Anida* movement vocabulary across generations, which had eroded the dance's authoritative pakem in the community. This finding established the rationale for reconstructing a standardized reference version for use in formal education.

Learner analysis characterized Grade VII students as early adolescents with high curiosity, a preference for practice-based learning, strong movement-imitation ability, and marked adaptability to digital media – characteristics that support an audiovisual

instructional format as a means of facilitating dynamic, self-paced internalization of both movement detail and philosophical meaning.

Task and concept analysis aligned the material with the *Kurikulum Merdeka* core and basic competencies for Grade VII, targeting students' conceptual understanding, technique, and aesthetic appreciation of traditional dance, and their ability to perform the repertoire in time with its accompaniment. *Paduppa Anida* was selected for its age-appropriate structural complexity and its philosophical depth – including the symbolism of the bowing gesture of respect and the ritual scattering of rice (benno) – positioning the material as both a motor-skill resource and a vehicle for cultural-identity reinforcement.

Design Stage

The instructional design integrated systematic audiovisual production with Hawkins' exploration–improvisation–composition method to ensure movement accuracy for junior-secondary learners. The exploration phase calibrated the dancer's spatial range to the camera's field of view to preserve visual precision; the improvisation phase simplified the floor pattern during the Mangampo Benno (scattering) sequence so that student attention remained focused on authentic hand technique; and the composition phase consolidated these elements into a staged video structure in which visual and audio components were aligned with the intended learning outcomes, serving simultaneously as a self-directed learning guide and an instrument for preserving the dance's original interpretive form. Table 1 presents the interpretive structure underlying the video content, and Table 2 summarizes the resulting scene-by-scene video design.

Table 1. Interpretation of the Presentation Form

Scene	Interpretation of the Presentation Form
1	Interprets the origin of the name <i>Paduppa Anida</i> , formerly derived from the Marellau Pammase Dewata (“plea for the Creator's blessing”) welcoming dance. The dance was later renamed Paduppa by the Institut Kesenian Sulawesi (IKS), the arts organization founded by Andi Nurhani Sapada (“Anida”) in 1962 in Sidenreng Rappang Regency (Imran & Ali, 2013).
2	Interprets the first movement sequence: a gesture of respect performed for guests of honor or, in wedding contexts, for the bridal couple.
3	Interprets the second sequence, Ammula Gau' (opening movement), performed by the dancer while guests are being seated, prior to the invocation.
4	Interprets the third sequence, Marellau Doang (supplication), in which the dancer lowers into a seated position, places the duppa vessel down, and closes both palms in a gesture of invocation for a blessed and smoothly running event.
5	Interprets the fourth sequence, Mangampo Benno (scattering of rice), symbolizing a wish for prosperity for the guests, as rice represents the source of human sustenance.
6	Interprets the fifth and closing sequence, Assukkurukeng (expression of gratitude), performed after the invocation and the scattering of rice, expressing thanks to the Creator and to the guests for their presence.

The movements generated through the improvisation phase initially remained unembellished; the choreographer, who also performed as the dancer in the final video, therefore refined these movements through iterative rehearsal so that the interpreted

repertoire remained faithful to the source material while staying accessible to junior-secondary learners. The composition phase then consolidated the explored and improvised material into the final scene sequence summarized below.

Table 2. Scene-by-Scene Design of the *Paduppa Anida* Instructional Video

Scene	Video Content
1	Historical narration of the <i>Paduppa Anida</i> dance, illustrated with images of the dance and accompanied by voice-over narration.
2	The first movement sequence: the dancer enters with a light tiptoe step while carrying the duppa vessel, followed by a gesture of respect.
3	The second movement sequence: a rotating right-wrist gesture performed simultaneously with a dragging rotation of the right foot (the “lock” movement), repeated for 4×8 counts.
4	The third movement sequence (supplication): the dancer, in a seated position, extends the right hand before the chest with fingertips raised while the left hand moves to the left for 2×8 counts, followed by a locking hand gesture above the duppa for 1×8 count and a final upward sweep of both arms.
5	The fourth movement sequence: a fourfold scattering gesture performed across 4×8 counts plus an additional 3×4 wrist-rotation sequence.
6	The fifth, closing movement sequence: the dancer places the duppa on the floor, rises, and steps left and right around it twice (3×8 counts) before exiting.



Figure 2. Video Content and Packaging

Development Stage

The Development stage refined the draft product through two sequential processes: (1) expert validation of the content and media components, and (2) limited and extended field trials, the outcomes of which determined the product's overall quality and effectiveness.

Dance-Content Product

The content component – comprising both conceptual and practical movement material – was synthesized from prior journal articles, undergraduate theses, and graduate theses documenting the *Paduppa Anida* repertoire, then submitted for validation to a dance-content expert (a lecturer in the Dance Education Department, Universitas Negeri Makassar) for review and revision guidance.

Instructional Video Product

The instructional video was produced collaboratively by the researcher (who also performed as the dancer), a camera operator, and a video editor to balance content and visual composition. The final module was produced in Adobe Premiere Pro as a 720p HD MP4 file with a runtime of 9 minutes and was submitted to a media expert for validation. Table 3 summarizes the revision notes provided by the two validators, and Table 4 documents the corresponding product revisions.

Table 3. Expert Validator Revision Notes

Validator	Revision Notes
Media expert	(1) Replace the illustration at 0:42–2:00 with an image of the Paduppa dancer; (2) improve image quality at 2:00–3:02 for clearer dancer visibility; (3) reposition the on-screen text captions at 4:47–5:40 and 7:27–7:57 so they do not obscure the dancer's properties.
Content expert	(1) Synchronize the tempo of the front-facing and rear-facing dancers during the closing Assukkurukeng sequence (7:58–8:03); (2) replace the AI-generated narration with a human voice-over to preserve the authentic South Sulawesi articulation.

The validation notes indicated weaknesses in visual polish (image clarity), textual placement relative to the dancer's movement, and narration clarity. Following revision, the product was re-evaluated by both validators and received an overall rating of feasible for use without further revision.

Table 4. Product Revisions Implemented

No.	Revision
1	Replaced the illustration at 0:42–2:00 with an image of the Paduppa dancer.
2	Improved image quality at 2:00–3:02 for clearer visibility of the dancer's form.
3	Repositioned the on-screen movement-description text at 4:47–5:40 and 7:27–7:57 to avoid obscuring the dancer's properties.
4	Adjusted the timing of the front-facing dancer's closing (Assukkurukeng) movement at 7:58–8:03 to match the pace of the rear-facing dancer.
5	Replaced the narration with the researcher's own voice to preserve authentic South Sulawesi articulation.

Field Trial Process

Field trials were conducted with class VII.5 at Junior High School 1 Makassar in two phases – a limited trial and an extended trial – with the participating arts-and-culture

teacher observing both sessions using a school-provided projector. The trialed material was the revised draft incorporating validator feedback.

Limited trial ($n = 6$). Six students, selected heterogeneously by interest and academic ability, viewed the instructional video, engaged in interactive discussion, and practiced imitating the movements. Observation focused on engagement, comprehension, and technical difficulties, supplemented by a student-response questionnaire covering visual presentation, content clarity, and instructional usefulness.

Results showed a positive trend: most students reported greater enthusiasm and easier comprehension of movement coordination and transitions compared with conventional instruction, although some required repeated viewing to master precise movement detail. Feedback regarding the minimalist black costume of the demonstrator was addressed by clarifying that this choice was intended to preserve students' visual objectivity, keeping attention centered on the movement *pakem* rather than on distracting costume elements – an explanation that students accepted as part of the material's instructional strategy.

Extended trial ($n = 15$). Fifteen students, including the original six, participated in a trial designed to approximate authentic classroom conditions, with the teacher using the video as a demonstration aid for group-based movement practice. Observation focused on engagement, imitation accuracy, and peer interaction. The extended trial confirmed significant gains in motor skill and self-confidence in performing the *Paduppa Anida* repertoire, with most students achieving precise coordination, smoother transitions, and deeper expressive internalization relative to the limited-trial baseline. Questionnaire responses indicated that the material's flexibility – enabling independent enrichment outside class hours through an interactive, enjoyable learning experience – was a key driver of its perceived effectiveness in reducing learner fatigue with traditional dance content.



Figure 3. Students practicing the *Paduppa Anida* repertoire during the extended field trial.

Analysis of the Development Outcomes

Across expert validation and both trial phases, the audiovisual-based *Paduppa Anida* teaching material met the criteria for feasibility, practicality, and effectiveness for use in dance instruction. Table 5 reports the extended-trial ($n = 15$) student-response scores on a four-point scale (1 = strongly disagree to 4 = strongly agree), assessed across three aspects (each with a maximum score of 20).

Table 5. Extended-Trial Student Response Scores (n = 15)

No.	Student (code)	Aspect 1 (Max. 20)	Aspect 2 (Max. 20)	Aspect 3 (Max. 20)	Total
1	S1	20	15	18	53
2	S2	20	18	18	56
3	S3	20	20	19	59
4	S4	18	17	18	53
5	S5	18	19	17	54
6	S6	18	19	17	54
7	S7	18	16	16	50
8	S8	18	19	19	56
9	S9	15	18	19	52
10	S10	15	15	16	46
11	S11	20	18	15	53
12	S12	16	17	16	49
13	S13	18	17	14	49
14	S14	18	16	17	51
15	S15	20	16	16	52

The 15 respondents produced a total score of 787 out of a maximum possible 900, corresponding to a mean score of 3.49 – placing the product in the “very good” category on the conversion interval scale. This indicates that the audiovisual medium was significantly effective in helping students articulate practically and visually oriented dance content, supporting self-paced learning aligned with individual comprehension speed and reinforcing a shift toward student-centered instruction at SMP Negeri 1 Makassar.

Taken together with expert validation, the Four-D-based *Paduppa Anida* material achieved an overall feasibility level of 87%, indicating that the product is highly suitable and effective for implementation in Grade VII dance instruction. Both trial phases showed that the audiovisual medium significantly enhanced learning interest, depth of content comprehension, and technical proficiency in performing the traditional movement repertoire, while also supporting independent practice outside class hours and building student confidence and enthusiasm during instruction.

Disseminate Stage

The Disseminate stage – the final phase of the Four-D model – distributed the validated product to a wider audience. YouTube was selected as the primary dissemination platform for its unrestricted reach, operational simplicity, and alignment with Grade VII students' status as digital natives, enabling flexible, repeated access both as a classroom demonstration aid and as an independent enrichment resource.

Dissemination followed product finalization based on expert validation and field-trial refinement. The uploaded video was optimized for visual resolution, audio clarity, and duration matched to typical student concentration spans, and was accompanied by an informative title, a comprehensive description, an aesthetically designed thumbnail, and a systematically sequenced structure to enhance discoverability and navigability for both students and fellow arts-and-culture educators.

Discussion

Development of the *Paduppa Anida* teaching material through the four Four-D stages addressed a documented instructional gap: an over-reliance on cognitive content at the expense of practice-based learning, compounded by the progressive distortion of the dance's movement vocabulary within the community. This finding is consistent with prior reports that formal arts instruction often underemphasizes the philosophical dimension of traditional movement (Zheng, 2024), and it extends that literature by demonstrating that a maestro-traceable reconstruction—rather than a generic performance recording—can directly counteract vocabulary drift at the classroom level. Embedding Hawkins' exploration-improvisation-composition method within the design stage ensured that the reconstructed repertoire retained cultural authenticity while remaining adaptable to the technical constraints of audiovisual production, corroborating earlier findings that structured choreographic methods support the fidelity of digitized dance content (Bolu et al., 2025; Robledo et al., 2021).

The product's quality was substantiated through expert validation of both content and media dimensions. Although initial review identified deficiencies in visual clarity, text placement, and voice-over quality, systematic revision—most notably the replacement of AI-generated narration with the researcher's own voice to preserve authentic South Sulawesi articulation—raised the product to a fully feasible standard without further revision. This detail illustrates that, beyond serving as a visual aid, the medium also functions as a custodian of local linguistic and cultural identity, a dimension that general-purpose audiovisual dance research has not typically foregrounded (Herrow & Azraai, 2021; Liu et al., 2024). The resulting 87% feasibility score situates the product within the “very good” category, comparable to feasibility outcomes reported for other Four-D-developed cultural teaching materials.

Both the limited and extended field trials indicated significant gains in students' motor skill and confidence. The extended-trial questionnaire (n = 15) yielded a total score of 787 and a mean of 3.49 (“very good”), suggesting that the audiovisual format allowed students to observe fine movement detail repeatedly until achieving accurate coordination—an advantage over conventional verbal instruction that is well documented in the dance-education literature (Chen, 2025; Grosso Laguna & Shifres, 2024) and consistent with findings that digital-native learners respond more strongly to dynamic video instruction than to static verbal explanation (Adler et al., 2025; Xu et al., 2025). The minimalist costume choice for the demonstrator, initially raised as a point of feedback during the limited trial, was shown to serve a pedagogically deliberate function: minimizing artistic distraction so that student attention remained centered on the authoritative movement pakem, a strategy that merits consideration in future audiovisual dance productions.

By uploading the finalized module to YouTube during the disseminate stage, the study extended the product beyond a classroom aid into a resource supporting independent, self-paced learning—consistent with prior evidence that YouTube-hosted instructional content enhances flexibility and learner autonomy in arts education

(Suryani et al., 2025) and reflects a broader shift toward student-centered learning models (Shoufan & Mohamed, 2022; Suryani et al., 2025).

More broadly, the reconstruction of a standardized *Paduppa Anida* repertoire contributes to the preservation of intangible cultural heritage within formal education, aligning with calls to safeguard local wisdom through structured, technology-mediated pedagogy. Rather than transmitting motor skills alone, the material embeds philosophical meaning—such as the ritual scattering of rice as a symbol of blessing—reinforcing cultural identity among South Sulawesi's younger generation. Collectively, these findings suggest that the integration of local wisdom with Four-D-guided audiovisual production offers a replicable model for developing accessible, effective, and culturally authentic teaching materials for other endangered regional dance repertoires.

This study is not without limitations. The field trial was confined to a single class at one school, which constrains the generalizability of the effectiveness findings, and the evaluation relied primarily on self-report questionnaires rather than direct, criterion-referenced assessment of movement accuracy. Future research should extend the trial to larger, multi-school samples and incorporate objective performance-based measures to corroborate the self-reported gains observed here.

4. CONCLUSION

This study developed audiovisual-based teaching material for the *Paduppa Anida* dance by integrating the Four-D model with Hawkins' choreographic method, yielding a product with a high expert-validated feasibility level of 87% across content and media dimensions. Product quality was strengthened through HD visual standardization, ergonomic text placement, and the use of an authentic human voice-over to preserve regional articulation. Implementation with Grade VII students at Junior High School 1 Makassar demonstrated significant effectiveness, with a mean student-response score of 3.49 (“very good”), reflected in improved learning interest, self-confidence, and precision in performing the traditional movement repertoire. Dissemination via YouTube further extended flexible access for independent enrichment while reinforcing digital efforts to preserve local cultural wisdom.

Arts-and-culture educators are encouraged to integrate validated audiovisual media as a primary reference to minimize distortion of traditional movement vocabularies and to foster more interactive instruction. School-level investment in digital infrastructure, such as projectors and internet access, is essential to optimizing the use of such technology-based teaching materials. Students, in turn, are encouraged to use accessible digital platforms for independent practice to deepen both technical skill and philosophical understanding. Future research should extend field trials to larger and more diverse populations, incorporate objective movement-assessment measures, and apply this development approach to other South Sulawesi traditional dance repertoires to enrich the digital preservation of local cultural wisdom.

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