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## Animating Oral Traditions: A Qualitative Evaluation of 2D Media for Preserving Sabah's Heritage

Azura Abd Mokmin  
azuraabdmokmin@ucsf.edu.my  
University College Sabah Foundation, Malaysia  
ORCID iD: 0009-0009-5068-2453  
(Corresponding Author)

Vimala Perumal  
vimala.perumal@mmu.edu.my  
Multimedia University, Malaysia  
ORCID iD: 0000-0002-9263-8049

Elyna Amir Sharji  
elyna.amir@mmu.edu.my  
Multimedia University, Malaysia  
ORCID iD: 0000-0001-8683-6893

### Abstract

The present article studies how 2D animation adaptations could preserve and communicate Sabah's indigenous narratives using qualitative data from written interviews and content analysis of five student-produced 2D films. The subject matter addresses the cultural significance, authenticity, and intergenerational reach of animated folktales, turning findings into production checklists and classroom-ready supplementary material. A qualitative design comprises written interviews with cultural participants and a content analysis of five short films: Susuzan Do Nulu Kinabalu (2024), Solungkoi (2023), Legend of Batu Luang (2024), The Tale of Kumokodong (2025), and Tales of Hantu Bubun (2024). These animated media are examined through reflexive theme analysis. The authors acknowledged that using written interviews has methodological drawbacks when compared to oral interviews, especially this methodology lacks the ability to capture nonverbal clues and the natural spontaneity that comes with face-to-face interaction. The findings revealed four themes: cultural identity and values, storytelling medium and reach, authenticity and portrayal, and intergenerational transmission. Participants described animation as accessible to youth and global audiences when symbols, language, and story integrity are protected through early and continuous collaboration with cultural custodians. For practical applications and significance, the study provides a five-criterion authenticity rubric, a four-step production pipeline, and contextual advice to help with authentic adaptation and cultural learning in classrooms and communities.

**Keywords:** 2D animation, Sabah heritage, Cultural transmission, Indigenous media, Intergenerational learning

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## Introduction

Sabah's folktales express social ideals, historical memory, and common identity. As traditional oral practices are under strain from migration, education patterns, and usage of media, new formats are emerging to carry these stories forward. When production is founded on collaboration and contextual integrity, 2D animation can transform story motifs and ethical values into an understandable visual language while maintaining room for local voices and perspectives (Finnegan, 2012; Cowan, 2021). This study investigates qualitative evidence gathered from written interviews with industry representatives and content analysis of five student-produced local 2D animated films to determine when and how animation promotes cultural transmission and intergenerational learning.

This article's purpose is to examine whether and how 2D animated adaptations can carry Sabah's indigenous narratives in ways that keep meaning intact. The scope remains focused on cultural significance, authenticity, and intergenerational reach, and the objectives stay exactly as stated: translate qualitative findings into a practical checklist for production teams and classroom-ready supporting material. The methodology is unchanged which consists of written interviews with cultural practitioners and content analysis of five University College Sabah Foundation (UCSF) student films named *Susuzan Do Nulu Kinabalu* (2024), *Solungkoi* (2023), *Legend of Batu Luang* (2024), *The Tale of Kumokodong* (2025), and *Tales of Hantu Bubu* (2024). The 2D animated films were analyzed using reflexive thematic analysis. Findings continue to cluster around the same four themes, and the practical contributions are still the rubric, the four-checkpoint pipeline, and guidance on paratexts.

**Problem Statement:** While 2D animation offers a very easily accessible medium for intergenerational storytelling, creators often lack structured, culturally sensitive guidelines to ensure that these adaptations retain contextual integrity rather than merely surface-level accuracy. To address this gap, the primary focus of this research is on developing a practice-based animation framework. Although the study uses qualitative cultural methodologies to gather foundational insights, its main contribution is translating those cultural findings into an actionable production pipeline and authenticity rubric which allows the media practitioners to responsibly adapt Sabah's Heritage without compromising its original meaning.

## Literature Review

Recent research highlights a paradigm shift in digital heritage preservation, moving away from static archival methods toward dynamic, practice-based animation frameworks. Habibie and Malik (2024) suggested that incorporating indigenous narratives into digital platforms via animation promotes cultural transmission, if established cultural procedures are followed. This performative adaptation is

increasingly acknowledged as vital for engaging younger generations while maintaining digital sovereignty over local literature.

Animation-based storytelling has emerged as a particularly effective medium for translating complex oral traditions into understandable visual grammar. A recent study focusing on Bornean cultural heritage by Lee, Zins, and Jimmie (2024) demonstrates that 2D animation can successfully bridge intergenerational divides, particularly within diaspora communities, by translating culturally specific motifs into universally understandable styles. However, this translation requires careful pedagogical design as noting that digital adaptations must retain the contextual clues and moral ambiguities that are present in the original oral performances to maintain their cultural validity.

Discussion about authenticity in digital media has also evolved, shifting from strict technical replication to a broader emphasis on contextual integrity. Allal-Chérif (2022) highlighted that successful digital folklore relies heavily on continuous collaboration with cultural knowledge-holders. This collaborative pipeline prevents cultural appropriation and the loss of performative nuance. Furthermore, authenticity is no longer defined by surface-level accuracy such as clothes or settings but by the proper sequencing of rituals and the preservation of linguistic registers that convey specific social hierarchies.

Methodologically, recent qualitative frameworks prioritise transparent, community-led evaluation processes over rigid, top-down analytical models. According to Braun and Clarke (2022), reflexive thematic analysis is an extremely useful lens for examining animated adaptations because it allows researchers to actively pattern meaning while remaining deeply receptive to indigenous epistemologies. This approach is consistent with broader ethical mandates in cultural research which emphasises the importance of documenting representational choices and keeping an audit trail of how community feedback directly shapes the final animated artifacts, ensuring long-term cultural stewardship.

Applying these modern frameworks to the rich narrative ecology of Sabah reveals both the potential and the challenges of animation-based preservation. The diversity of Sabah's ethnic traditions undermines any single, monolithic approach to digital adaptation. Instead, as identified by Rushdan and Nasir (2026), preservation models must avoid prioritizing rigid fixity, recognizing instead that folktales are dynamic, adaptive cultural practices. By documenting origins, mapping known variations, and allowing for interpretive tolerance, creators can successfully preserve the integrity of Sabahan Folktales. Ultimately, animation does not replace oral traditions but rather offers a necessary modern channel for their continuous evolution and survival, translating indigenous narratives into contemporary visual

forms while protecting their cultural core (Kong & Kimwah,2025). This ensures the preservation of unique indigenous cultural heritage.

Furthermore, the local talent prefers 2D animation due to the prohibitive costs and technical barriers associated with live-action filming and 3D animation. The specialised camera equipment, advanced rendering hardware and expansive production budgets required for those formats often present significant obstacles for students and independent producers. In contrast, 2D animation offers a very affordable and practical option for those with financial limitations. This economic reality is reflected in state-level digital development strategies. For example, to overcome financial barriers and develop local talent, the Sabah Science Technology and Innovation Ministry actively invests in 2D animation training through facilities such as the Toon Boom Training Animation Centre at the Sabah Creative Economy and Innovation Centre (SCENIC). By drastically decreasing the entrance hurdle, 2D animation enables local makers to transform culturally diverse patterns into an understandable visual language without the need for large funds or highly specialised professional resources.

### **Research Questions**

1. RQ1: How do stakeholders describe the cultural and educational value of animated folktales in written interviews?
2. RQ2: Which representational practices in student-produced 2D animations support authenticity and contextual fidelity?
3. RQ3: In what ways can animation facilitate intergenerational learning in families and classrooms?

## **Methodology and Approach**

Data analysis workflow (phases, inputs, actions, outputs, and reflexive checks).

Table 1. Data analysis workflow

Phase	Inputs	Actions	Outputs / artifacts	QA / reflexive checks
<b>Data sources</b>	Written interviews; five student films	Collect, log provenance, prepare viewing/coding templates	Corpus log, consent records, note templates	Ethics check, confirm permissions, scope clarity memo
<b>Familiarisation</b>	Transcripts, repeated film viewings	Read/view repeatedly, initial notes, memo emerging hunches	Familiarisation notes, early memos	Positionality memo, note uncertainties and assumptions
<b>Coding</b>	Transcripts, film notes	Generate flexible codes, update code descriptions as needed	Code list, coded segments, evolving code descriptions	Reflexive memo on coding moves, track divergences without forcing consensus
<b>Theme development</b>	Codes and memos	Cluster codes, articulate central organising concepts	Candidate themes with short summaries	Peer debriefs, check fit and boundaries, record decisions

<b>Review / refine</b>	Themes, coded data, and raw material	Test coherence, collapse/split themes, tighten scope	Refined themes, mapping of data to themes	Audit trail of changes, rationale for keep/split/merge
<b>Reporting</b>	Final themes, selected extracts, film references	Write up, integrate interview and film evidence, add paratext guidance	Results section, figures/tables, implications	Transparency statement, limitations, align claims with data

This table maps out the step-by-step data analysis process, and it is included to show exactly how the interview and films are coded to ensure the results are reliable and trustworthy.

A qualitative multi-source design combined written interviews with cultural practitioners and content analysis of five student-produced 2D animated local folktales. Reflexive thematic analysis guided coding and theme generation, with content-analytic notes documenting representational choices.

### ***Data Sources***

Data comprised:

1. Written interviews collected via physical form to enable reflective responses
2. Five student-produced 2D shorts based on Sabah folktales:
  - a. Susuzan Do Nulu Kinabalu (2024)
  - b. Solungkoi (2023)
  - c. Legend of Batu Luang (2024)
  - d. The Tale of Kumokodong (2025)
  - e. Tales of Hantu Bubu (2024).

### ***Film Selection Criteria***

To ensure cultural specificity and analytic comparability, the study intentionally focuses on non-professional, student-produced animations. Methodologically, this represents a strong analytical strategy as it rather than being a limitation, using these academic projects and animations provides an unfiltered version and authentic lens into how the younger demographic actively interprets and internalises their indigenous heritage, free from the commercial pressures and generic tropes found in professional studios. Driven by this rationale, films were selected based on the following inclusion criteria:

- Student-produced in an academic setting, to foreground the perspectives of youth learning animation in Sabah

- Explicit Sabahan cultural content (attire, language registers, motifs, setting, or rituals) to ensure relevance
- Availability for repeated viewing and documentation
- Recent works (2023–2025) to reflect current practice.

### ***Participant Selection Criteria***

To capture varied and comprehensive perspectives, recruitment purposefully targeted knowledge-holders, educators and emerging animators. The final sample comprised of 18 individuals, including 5 animation lecturers, 3 cultural specialists and 10 animation students. Inclusion criteria for these written-interview participants required:

1. Familiarity with Sabah folktales or cultural practices relevant to the selected films
2. Experienced in learning, teaching, curating, or producing related media
3. A willingness to provide written responses and review subsequent clarifications

Following the data collection phase, the participants' written responses were systematically evaluated using reflective thematic analysis. This rigorous coding process involved sequential phases of familiarisation, classification, topic development, refinement, and reporting. To ensure analytical consistency and triangulate the findings, the written interview samples and material notes from the student films were processed within a single project database and systematically compared using a cross-source matrix.

### ***Cultural Repository and Documentation (Five 2D Animations Based on Local Folktales)***

Each short was viewed repeatedly and documented using a structured note template that included narrative clarity and moral focus, symbolism and visual motifs, language use and speech levels, attire and setting, captioning and audio mix, and the presence of supplemental text. Notes included time stamps to facilitate cross-case comparisons. Specific examples are referenced narratively in the Results section using in-text film citations, such as (Susuzan Do Nulu Kinabalu, 2024; Solungkoi, 2023; Legend of Batu Luang, 2024; The Tale of Kumokodong, 2025; Tales of Hantu Bubu, 2024).

### ***Analytic Approach***

Data was analyzed via reflexive thematic analysis (familiarisation, classification, topic development, refinement, and reporting) (Braun & Clarke, 2022). Written-interview samples and material notes were processed in a single project and compared utilizing a cross-source matrix. Content-analytic tools enabled a systematic description of representational choices across the five animations (Krippendorff,

2018). Themes were progressively revised to ensure that interview statements were based on tangible production choices when essential.

### ***Limitations of Instruments***

While the use of written physical forms allowed participants to provide deliberate and thoughtful responses, this instrument did not allow for immediate follow-up inquiries. As a result, this limitation altered the overall depth of the qualitative data by limiting spontaneous probing into complex cultural nuances or unexpected theoretical insights that normally emerge during live interviews. To address this data depth limitation, the study relied largely on rigorous triangulation of these written responses with the specific representational choices documented during the content analysis of the animation artifacts.

### ***Trustworthiness and Reflexivity***

A documented record of classification assessments, peer feedback on theme names, and opportunity for participants to clarify written affirmations all contributed to credibility. Transferability was achieved by detailed descriptions of locales, motifs, and production decisions. Dependability and confirmability were addressed via periodic memos showing alterations in topic boundaries and the researcher's reflective notes on positionality (Lincoln & Guba, 1985). Divergence in categorisation prompted reflexive inspection, which is compatible with the reflexive TA position.

### ***Ethics and Stewardship***

Ethical approval and informed consent procedures were implemented. To maintain confidentiality and protect respondent identities, all written interview participants were completely anonymised during the analysis and reporting phases. Consequently, throughout this manuscript, these individuals are cited using alphanumeric codes (e.g., P1, P2) alongside the year of data collection (e.g., P1,2025). Written interview responses were classified during analysis. Because the resources contain indigenous narratives, consultation with knowledge- holders prompted decisions about tale source material, visual themes, vocabulary, and usage comments, in accordance with culturally responsive evaluation (Mertens & Wilson, 2019). Artefact notes documented the consultation process and any restrictions on reuse.

## **Findings**

Themes with indicative interview and film evidence and resulting design implications.

Table 2. Summary of themes, indicative evidence, and design implications

<b>Theme</b>	<b>Interview evidence (indicative)</b>	<b>Film evidence (indicative)</b>	<b>Design implication</b>
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<b>Cultural identity and values</b>	P1: oral stories rehearse obligation/respect, P3: symbols anchor meaning P6: preserve function, not just look	Moral pause clarifies choice (*Susuzan Do Nulu Kinabalu*, 2024)	Foreground moral beats, retain function-bearing symbols
<b>Storytelling medium and reach</b>	P2/P5: clear dialogue, readable bilingual captions, P4: measured pacing P7: supportive soundscapes	Bilingual captions and careful pacing (*Solungkoi*, 2023)	Design for comprehension without simplification
<b>Authenticity and representation</b>	P8: greeting sequences signal hierarchy, P3: avoid generic attire, P5: place cues anchor identity	Ritual sequencing revised after consultation (*The Tale of Kumokodong*, 2025)	Consult before script and design lock, protect contextual fidelity
<b>Intergenerational transmission</b>	P2: end-card proverb sparks discussion, P6/P7: teacher sheets scaffold class, P1/P4: paratexts build confidence	Explanatory end- card, landscape anchors (*Tales of Hantu Bubu*, 2024, *Legend of Batu Luang*, 2024)	Include concise paratexts and educator aids

This table demonstrates how the raw data is processed until the final recommendations. It breaks down how specific quotes and film notes were turned directly into the five practical guidelines that are recommended for creators.

Analysis of written interviews and the five student films converged on four themes: (1) cultural identity and values, (2) storytelling medium and reach, (3) authenticity and representation, and (4) intergenerational transmission.

The methods section continues to ask the original three research questions and to describe the same qualitative design. Written interviews allowed participants to answer thoughtfully in their own time and language, and the five student films provided concrete artefacts for systematic description. The analytic approach still combines reflexive thematic analysis for patterning meaning with content-analytic description of representational choices. Crucially, this analytical process was used to directly extract the ‘five-criterion rubric’ from the raw interview data. Initial codes for cultural motifs and ritual accuracy were combined to form the authenticity accuracy and contextual authenticity criteria such as codes for dialogue and pacing shaped the choice of languages and comprehension design metrics, and participant requests for supplementary educator notes formed the paragraph completeness criterion. Trustworthiness procedures such as audit trail, peer debriefs, thick description, reflexive memos are reiterated, not altered. Ethics and stewardship remain focused on consent, collaboration with knowledge-holders, and appropriate notes about provenance and use.

## Theme 1: Cultural Identity and Values



Figure 1. A Screenshot of SDNK Animated Scene  
Source: Jackson,C.(2024). Susuzan Do Nulu Kinabalu

This screenshot shows how animations can visually highlight moral lessons. Instead of just rushing the story forward, the characters pause here, which helps the audience reflect on the ethical choice being made.

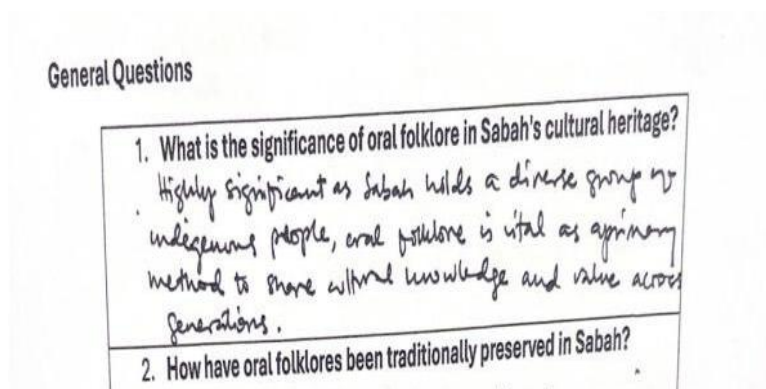


Figure 2. Written Interviewees Highlighted Oral Stories as Everyday Rehearsals of Obligation and Respect  
Source: P1,2025

This interview quote is a key piece of evidence showing that local experts don't just see folktales as entertainment. Instead, they view these stories as important everyday tools for teaching respect and social duties.

Folktales have been expressed in written interviews as tools for communal association and ethical guidance. Participants highlighted that stories convey dedication, respect for interpersonal relationships, and ecological information that ought to be legible in adaptation. Content analysis revealed that animations were most effective when moral impulses were visually foregrounded and symbolic items retained their narrative role rather than serving as decoration (for example, the cautious pause before a protagonist's decision in Susuzan Do Nulu Kinabalu, 2024). Across cases, sticking to the

moral focus lowered the risk of narrative-driven retellings. Written interviews reinforced this point: P1 described oral stories as everyday rehearsals of obligation and respect, P3 noted that familiar symbols act as anchors that help younger viewers connect values to situations, and P6 cautioned that removing such symbols can leave a tale looking similar yet ethically thinner because meaning often lies in how an action is performed rather than in the object itself. This emphasis on moral beats also aligned with observed pacing choices in Susuzan Do Nulu Kinabalu (2024).

**Theme 2: Storytelling Medium and Reach**



Figure 3. A Screenshot of Solungkoi Animated Scene  
Source: Kay, M. A. (2023). Solungkoi

This screenshot highlights the use of bilingual captions. It proves that adding clear, readable text is a simple but effective way to help younger viewers and overseas families understand the story better.

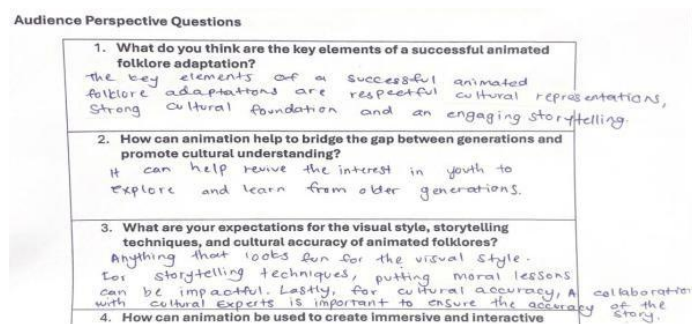


Figure 4. Written Interviewees Highlighted Artefact Comprehension.  
Source: P2,2025

This quote supports the argument that animations need to be easy to follow. It shows that audiences really depend on clear dialogue and good pacing to actually learn from the adaptation.

Participants identified 2D animation as being accessible to youth and international audiences when comprehension is made easier by measured tempo, clear dialogue, and easily understood captions. Bilingual captions and careful pacing increased artefact comprehension, especially where important terms lacked straightforward analogues in lingua franca contexts (e.g., Solungkoi, 2023). Sequences that combined caption overlays with familiar soundscapes (village atmosphere, musical cues) were identified as classroom friendly. Interviewees characterised 2D animation as accessible when craft decisions support comprehension: P2 and P5 pointed to dialogue clarity and caption readability as primary hurdles for youth and diaspora viewers, P4

### Theme 3: Authenticity and Representation



Figure 5. A Screenshot of Tales of Kumokodong Scene.  
Source: Juantin, J., & Ronnie, J. (2025). Tales of Kumokodong

This scene is a great example of why talking to cultural experts early on matters. The creators changed how this scene was shown after getting feedback, which helped keep the story's true meaning intact.

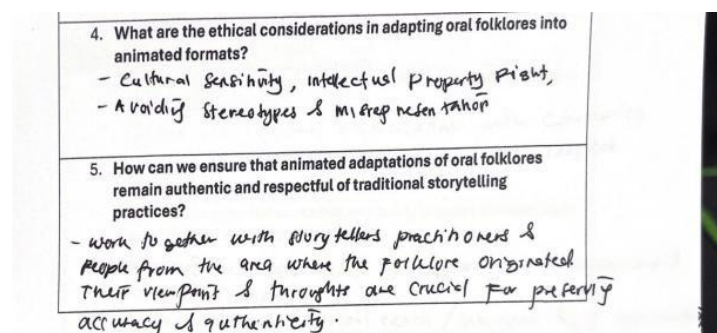


Figure 6. Written Interviewees Highlighted Checks with Custodians  
Source: P3,2025.

This image highlights how much experts' value teamwork in these projects. It shows that for them, being authentic isn't just about getting the costumes right but also getting the deep, cultural context right.

Authenticity in written interviews was defined as contextual integrity rather than just surface accuracy. Participants prioritised communication volumes, greeting sequences, attire, and landscape traits that represent social relationships. The research discovered that improperly sequenced practices or generic vocabulary affected a story's moral logic even when the costume and location appeared 'correct.' Productions that established consultation checkpoints before script lock and visual design lock avoided misalignments (for example, in *The Tale of Kumokodong*, 2025, ritual sequencing had been modified after consultation). Participants treated authenticity as contextual fidelity rather than surface match. P8 stressed that greeting sequences and speech levels signal social relations, so trimming them for speed can invert intent; P3 warned against generic attire across ethnic groups and recommended pre-visual checks with custodians before design lock; P5 highlighted place cues such as landscape features and seasonal details as identity anchors beyond costume. Similar concerns informed revisions to ritual sequencing in *The Tale of Kumokodong* (2025).

**Theme 4: Intergenerational Transmission**



Figure 7. A Screenshot of Tales of Hantu Bubu Scene  
Source: Maikon, J.O (2024). Tales of Hantu Bubu.

This screenshot shows what recommended "extra scenes" look like in production. Having an explanatory screen at the end of the video is an easy way to spark conversations in classrooms or at home.

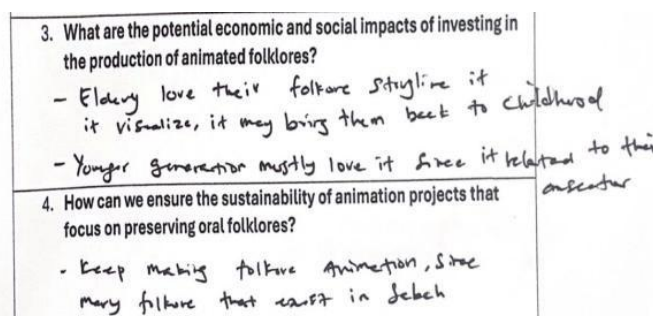


Figure 8. Written Interviewees Animation’s Role  
Source: P4,2025

This participant's feedback proves the main argument that animation really works for all ages. It shows that these videos can engage young people while still bringing back fond memories for the elders.

Written interviewees highlighted animation's role as a bridge between elders and younger viewers in diaspora households and classrooms. Cultural objects including supplementary material, such as end-cards with proverb explanations or brief cultural remarks, consistently stimulated post-viewing conversation and teacher engagement (for example, an explanatory end-card in *Tales of Hantu Bubu*, 2024). Where contextual texts were missing, educators reported additional prep work to introduce vocabulary and context. Interview evidence likewise framed animation as a bridge for families and classrooms: P2 reported that a brief end-card proverb or glossary often catalyzes conversation at home, while P6 and P7 described teacher prompt sheets turning short screenings into structured discussions. P1 and P4 linked such paratexts to confidence among educators and families who are not fluent in specific registers but want to engage respectfully, a pattern illustrated by the explanatory end-card in *Tales of Hantu Bubu* (2024) and the use of landscape anchors in *Legend of Batu Luang* (2024).

### *Illustrative Vignettes Integrating Both Sources*



Figure 9. A Screenshot of Legend of Batu Luang Scene  
Source: Jifrin, E. C. (2024)

This animation shot was chosen to show why keeping traditional greetings in the script is so important. It visually proves that these small cultural habits are key to showing respect and keeping the original story's values alive.

A greeting sequence was initially cut to speed the scene, but a custodian noted in a written interview that this moment signals respect and rank (P8). The creator restored the sequence and added brief captions in review and the exchange read as a respectful request realigning the scene's moral logic (Legend of Batu Luang, 2024). The change exemplifies contextual fidelity in which small formalities carry the story's ethics.

### ***Results: Framework Mapping Themes to Production Checkpoints***

To translate themes into practice, the subthemes were mapped to production checkpoints. For cultural identity and values, checkpoints occur during story selection and early scripting to verify moral focus and identify core symbols with custodians. For storytelling medium and reach, checkpoints occur in animatic reviews to test pacing, dialogue clarity, and caption readability with youth viewers. For authenticity and representation, checkpoints precede visual design lock: attire, setting, language registers, and ritual sequencing are reviewed against locally verified references. For intergenerational transmission, checkpoints include end-card paratexts and teacher aides drafted alongside final edits to scaffold discussion.

## **Discussions**

Based on a deliberately limited dataset, the findings point to two possible conditions for adaptation success which are accessibility and authenticity. Accessibility factors appear to guide decisions that promote understanding and participation among youth and ethnic populations. Authenticity involves continuous collaboration with custodians, careful contextual use of symbols, and opposition to generic aesthetic changes. Taken together, these characteristics outline a targeted production pipeline focused on narrative integrity rather than proposing a universal standard for all indigenous preservation efforts across different cultural context.

The four core themes such as cultural identity, storytelling medium, authenticity and intergenerational transmission remain contextually bound to this study. While this analysis does not provide extensive new examples, it cautions that individuals in this sample saw folktales as important transmitter of collective meaning or as vital carriers of communal meaning. Furthermore, it indicates that 2D animation can be accessible when comprehension aids are utilised and that authenticity is dependent on contextual integrity rather than superficial clothing matching and that lightweight paratexts can effectively encourage intergenerational family and classroom conversations.

### ***Practice Framework and Educator Integration***

To put the research findings into practice, this study suggests that a clear four-step process for producing the animation:

1. Discuss the story with cultural experts to make sure it is authentic
2. Checking the script and the storyboards to keep the core moral lessons intact
3. Reviewing the visual and audio designs
4. Showing the draft to the community before the final release

Separate from the animation process are the additional educational materials that were designed for classrooms. For example, creating short teacher guide sheets with complete vocabulary and cultural notes which can turn a quick eight-minute folklore into a ready to use lesson. Additionally, adding bilingual captions is a practical output that helps diverse classrooms and communities living abroad to easily understand the stories.

### ***Evaluation of Rubric and Operational Checklist***

A five-criterion rubric assists in review: (1) authenticity accuracy (origin, variants, consultation notes), (2) contextual authenticity (functions and sequences, not just appearance), (3) choice of languages (speech levels, greetings, bilingual supports), (4) comprehension design (pacing, audio mix, captioning), and (5) paragraph completeness (synopsis, controlled keywords, language tags, usage guidance). An operational checklist integrates these objectives into step- by-step procedures for pre-production, animatic, design lock, and final delivery.

### ***Limitations and Future Work***

The written interview sample is small, and the materials are student-created, limiting breadth and generalizability. Nonetheless, triangulation among sources, an explicit reflexive stance, and convergence on actionable checkpoints improve credibility. Future research could examine professional studio pipelines that use the checkpoint rubric and compare classroom outcomes across paratext in addition to animation and animation-only conditions over time.

## **Conclusions**

2D animation can serve as a legitimate conduit for Sabah's folktales when it retains narrative integrity and fosters collaboration with knowledge holders. Production strategies that preserve authenticity while promoting youth participation appear to be the most promising for intergenerational learning and heritage transfer. Publishing simple paratexts that specify authenticity, symbols, and usage instructions allows educators and curators to promote responsible reuse. The five student films examined here demonstrate both common pitfalls and achievable solutions when contextual fidelity and comprehension design are prioritised as core production values (Susuzan Do Nulu Kinabalu, 2024;

Solungkoi, 2023; Legend of Batu Luang, 2024; The Tale of Kumokodong, 2025; Tales of Hantu Bubu, 2024).

The discussion keeps the existing interpretation that successful animation for heritage requires balancing accessibility with authenticity. The four-checkpoint pipeline presented in the paper is unchanged, as is the accompanying five-criterion rubric and the suggestion to prepare short teacher materials.

The conclusion continues to assert that 2D animation can responsibly support the transmission of Sabah's folktales when narrative integrity is preserved and collaboration with custodians is embedded. The contribution of concise paratexts is reiterated to make reuse responsible in classrooms and community events. The examples drawn from the five student films are acknowledged as illustrations of pitfalls and workable solutions, not as generalised statistics.

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Limited use of generative AI (OpenAI's ChatGPT) supported language clarity and formatting. All AI-assisted outputs were critically reviewed and validated by the author, who assumes full responsibility for the content.

## **Authors' Bio**

*Azura Abd Mokmin* is an Animation Lecturer at the Faculty of Arts and Creative Media, University College Sabah Foundation(UCSF), Malaysia. Her primary contributions to this manuscript include conceptualisation, methodology, formal analysis, investigation, and original draft preparation.

*Ts. Dr. Vimala Perumal* is an Assistant Professor and Deputy Dean of Postgraduate & Collaborations at the Faculty of Creative Multimedia, Multimedia University (MMU), Malaysia. As an academic and

award-winning filmmaker, her contributions to this study include reviewing and editing the manuscript.

*Dr. Elyna Amir Sharji* is a Senior Lecturer and Deputy Dean of Student Affairs and Alumni at the Faculty of Creative Multimedia, Multimedia University (MMU), Malaysia. Her contributions to this research involve reviewing and editing the manuscript.