

Audiovisual Angklung Learning Model

A model supporting musical, kinesthetic, and interpersonal intelligences, alongside digital literacy, among prospective primary school teachers.

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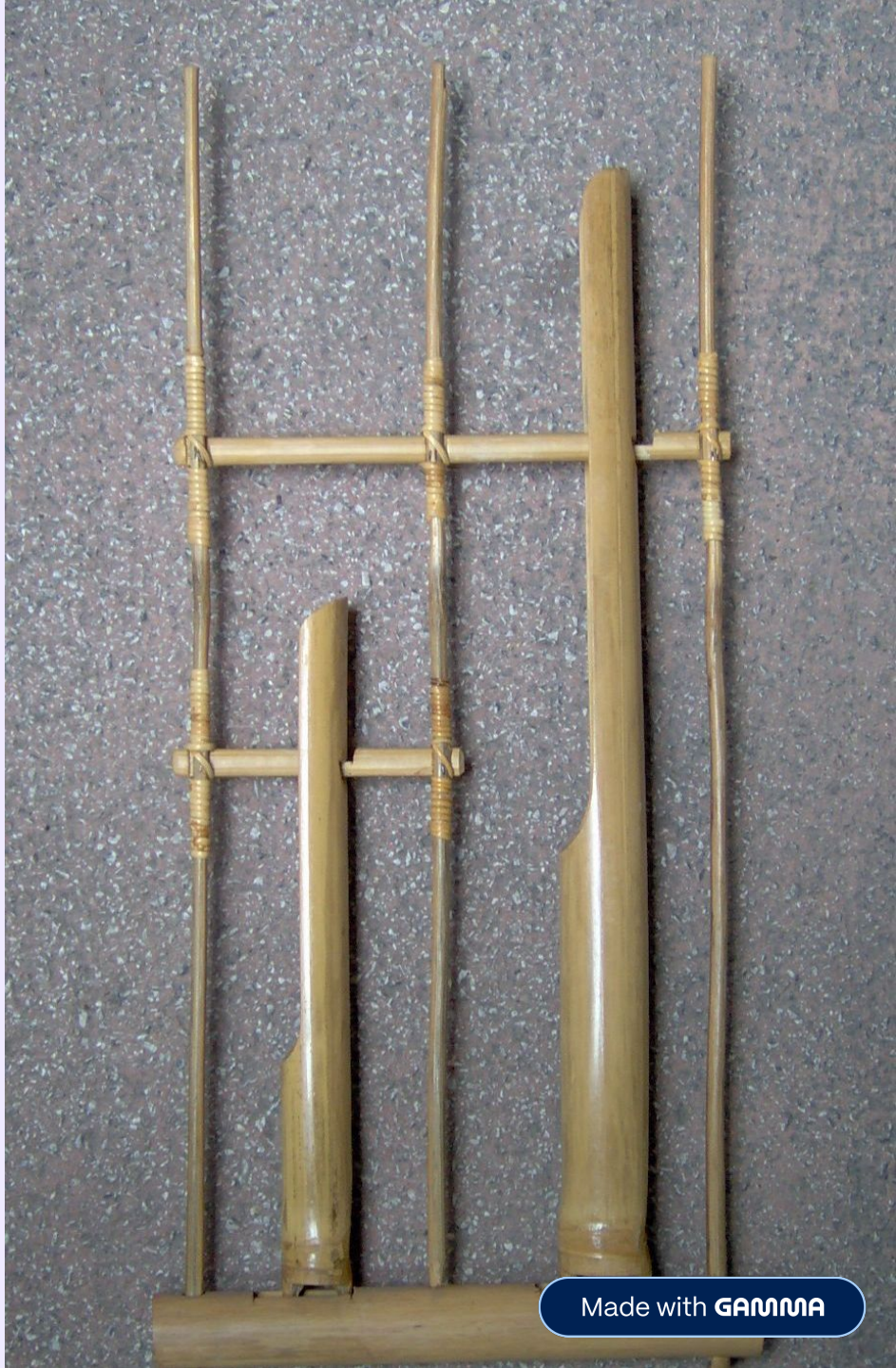
LEARNING CONTEXT

Angklung Teaches Music as Collective Work

- Each player holds a specific pitch part within the shared musical outcome.
- Learning angklung requires listening, managing timing, moving, cooperating, and mutual respect.
- Cultural heritage becomes a living learning context rather than merely a demonstration object.



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PROBLEM FOCUS

The Problem Is Not Digital Access but Musical Accuracy

Initial Capital

Students are relatively proficient at searching for musical references online.

Core Challenge

Translating sound, notation, and movement into accurate pitch patterns.

Design Implications

The model needs to connect on-screen content with observable musical actions.

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STUDY SCOPE

This Study Develops a Model Rather Than Claiming Causal Effects

ADDIE Framework

The R&D employs the ADDIE framework: Analysis, Design, Development, Implementation, Evaluation.

A descriptive survey complements the qualitative explanation of learning needs and processes.

313

complete student responses, aged 19–24 years

This dataset includes no pre-test/post-test design or control group.

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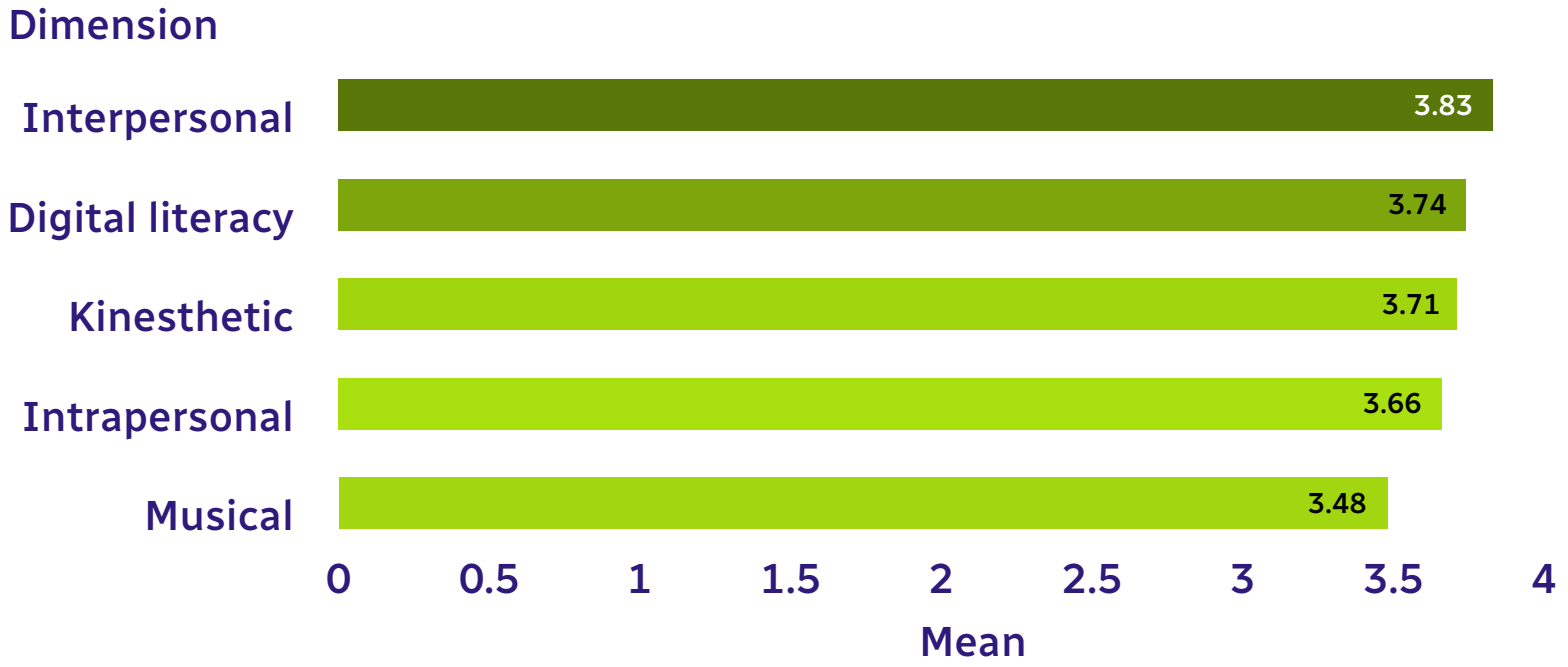
INTELLIGENCE PROFILE

Interpersonal Is the Core Strength; Musical Intelligence Is the Priority for Support

Overall mean of 3.68 on a five-point scale.



3.83

Interpersonal

3.48

Musical

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INITIAL MODES

Data reveal two initial modes that can be leveraged

4,14

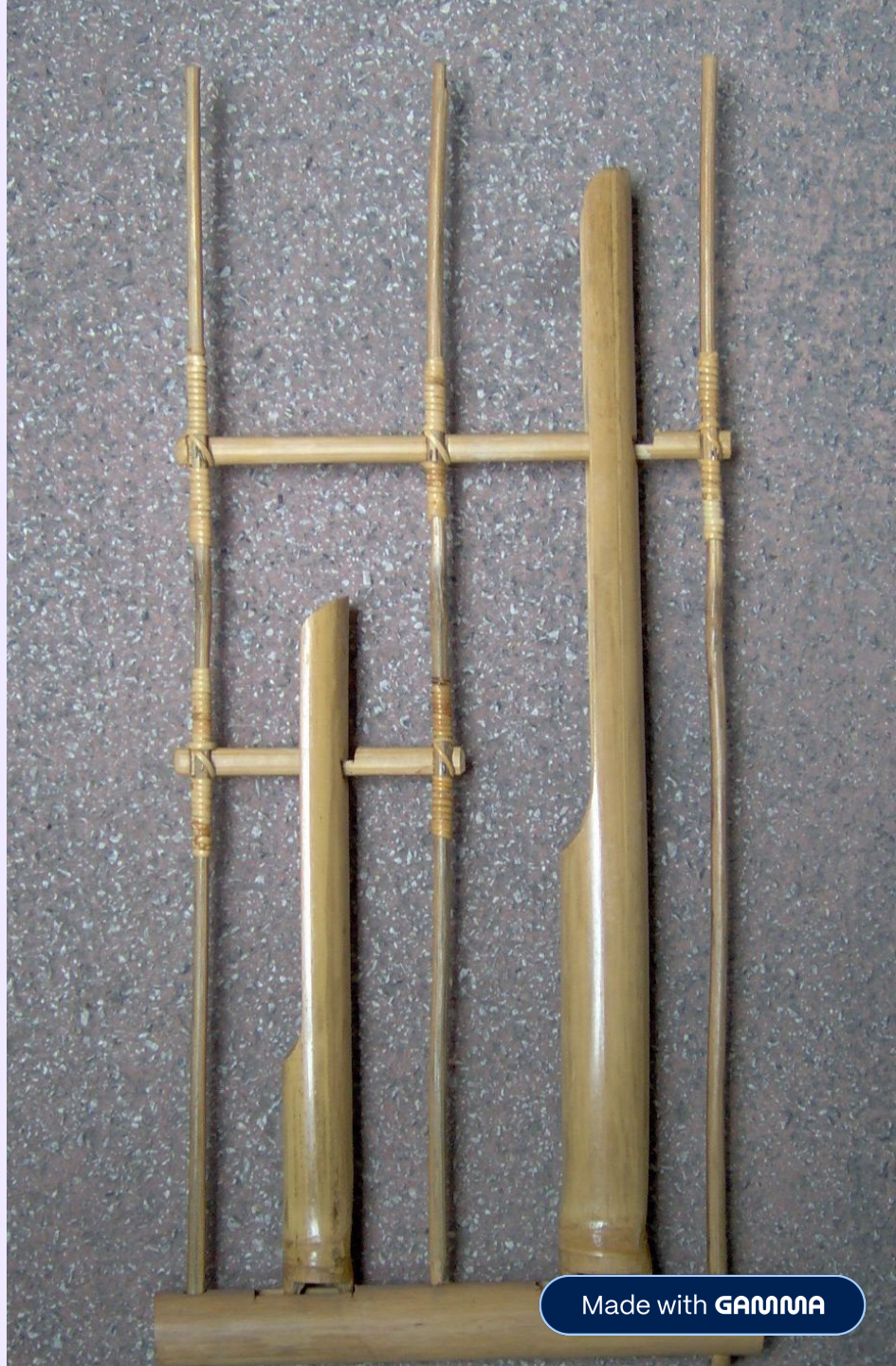
Sense of togetherness through angklung

4,23

Ability to search for music references online

85.6% rated 4–5.

However, ensemble coordination stands at 3.51: positive attitudes do not automatically translate into precise coordination.



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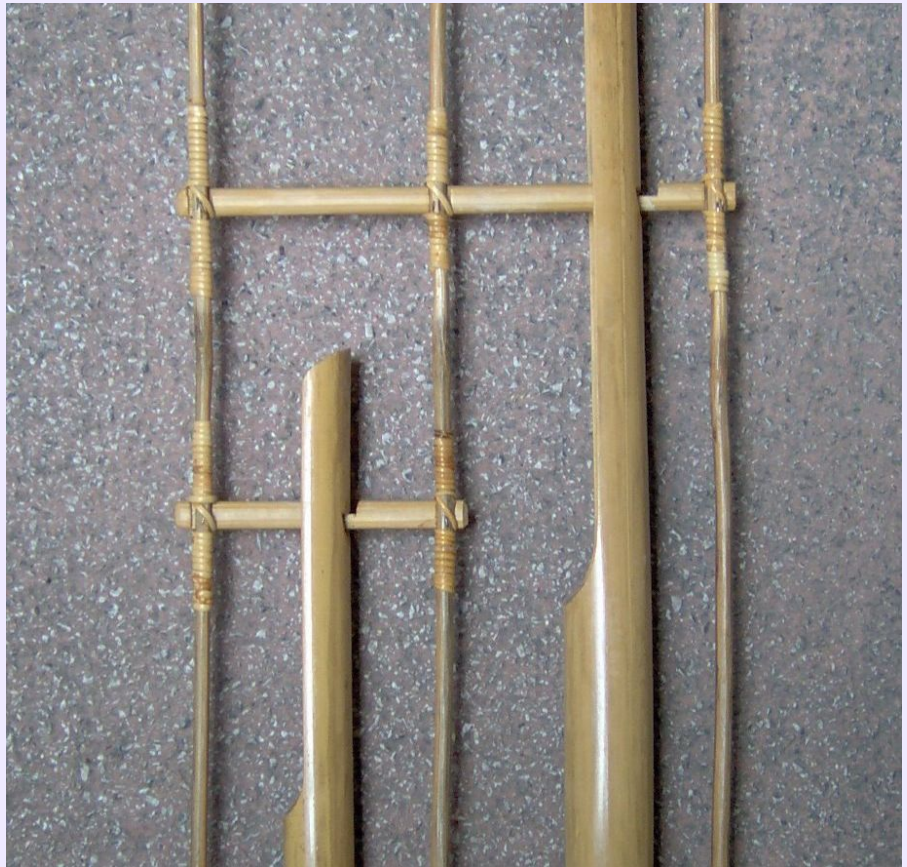
INTERVENTION POINT

Accurate pitch patterns are the clearest point of intervention



3,23

Accuracy in playing angklung pitch patterns

3,37

Simple melodic variation

Design response

Close-up demonstration, slowed audio, targeted repetition, and teacher feedback.

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LEARNING MODEL

Seven stages transform representation into participation

1. **Observe** — attend to posture, grip, instrument parts, and cues.
2. **Listen** — recognize pulse, rhythm, and melody.
3. **Imitate** — replicate short patterns.
4. **Practice** — repeat with scaffolding.
5. **Collaborate** — coordinate roles and listen to peers.
6. **Perform** — present the ensemble work.
7. **Reflect** — review evidence and set the next goals.

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MODEL LOGIC

Each stage activates different intelligences



Observe–Listen

Digital literacy, visual attention, and musical sensitivity.



Imitate–Practice

Musical and kinesthetic intelligence through repeated action.



Collaborate–Perform

Interpersonal intelligence through roles, cues, and shared responsibility.



Reflect

Intrapersonal and digital literacy through review of recordings and goal setting.

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MODEL ASSESSMENT

Assessment must capture process, not only the final performance

Dimension	Observed evidence	Relation to media
Musical	Accuracy of rhythm, pitch, tempo, and melodic sequence.	Audio, notation, repetition.
Kinesthetic	Posture, grip, movement coordination, and synchronization.	Close-up demonstration and replay.
Interpersonal	Response to cues, communication, peer support, and role responsibility.	Recordings of ensemble process.
Intrapersonal and digital	Reflection, motivation, source searching, replay, and evaluation of media use.	Review of evidence and next goals.

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