



Kolintang Minahasa: from Cultural Heritage to A Global Instrument in Inclusive Music Education and Cultural Diplomacy

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Abstract

Kolintang, a wooden percussion instrument from Minahasa, North Sulawesi, has evolved from a sacred ritual object into UNESCO-recognized intangible cultural heritage in 2024. Despite this recognition, scholarship has not sufficiently examined how this transformation reshapes educational practice or how the instrument's physical properties support inclusive music learning. This study examines Kolintang's trajectory through an analytic autoethnographic approach grounded in five decades of direct practice within the pedagogical lineage of Petrus Kaseke, triangulated with interviews of fifteen key figures, including descendants of innovators Nelwan Katuuk and Petrus Kaseke, and empirical data from a 2024 training program for Deaf participants in Jakarta. The research documents Kolintang's technical development from pentatonic to chromatic tuning, enabling engagement with global repertoires, and traces how diaspora communities in Java systematized ensemble-based pedagogy. Empirical findings show that ten Deaf participants achieved a mean rhythmic accuracy of 92.3 percent with a standard deviation of 5.8 percent through vibrotactile rather than auditory learning. The findings indicate that Kolintang's sustainability depends not on static preservation but on cultural transmutation, defined as the strategic adaptation of material form to preserve philosophical and symbolic essence. Kolintang continues to function as a marker of diaspora identity, an instrument of Indonesian cultural diplomacy, and a culturally grounded medium for inclusive music education. This trajectory offers a model for sustaining intangible heritage in the twenty-first century by repositioning traditional arts as adaptive educational resources responsive to contemporary human needs.

Keywords: Kolintang; intangible cultural heritage; inclusive music education; cultural diplomacy; UNESCO

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INTRODUCTION

Kolintang is a traditional wooden percussion instrument originating from Minahasa, North Sulawesi, Indonesia, whose historical role extends far beyond musical performance. Long embedded within ritual practices such as *Maengket* and *Mapalus*, Kolintang functioned as a sonic expression of Minahasan cosmology, articulating relationships between nature, humanity, and the divine through its three foundational tones: *Tong* (low), *Ting* (high), and *Tang* (mid) (Graafland, 1898; Parengkuan, 1984). During the colonial period, these indigenous practices were subjected to systematic suppression, placing Kolintang on the verge of disappearance (Molsbergen, 1928). Its mid-twentieth-century revival, led by figures such as the visually impaired innovator Nelwan Katuuk, marked a decisive moment of cultural resilience. Through the expansion of Kolintang's tonal system from pentatonic to diatonic and chromatic structures, Katuuk enabled the instrument to engage with a global musical repertoire (Parengkuan, 1984). This transformation was further consolidated through Petrus Kaseke's introduction of Kolintang into educational and religious institutions in Java, facilitating its national diffusion and laying the groundwork for broader recognition (Manoppo, 2019; Sudibjo, 2015).

Kolintang's inscription on the UNESCO Representative List of the Intangible Cultural Heritage of Humanity in December 2024 (following submission in January 2024) represents a significant milestone in this long trajectory (UNESCO, 2024). Achieved through sustained advocacy by organizations such as PINKAN Indonesia (Persatuan Insan Kolintang Nasional Indonesia) in collaboration with the North Sulawesi government, this recognition repositioned Kolintang from a regional cultural practice to a national symbol with international resonance (Nye, 2004; Notohamijoyo, 2024). In the post-recognition context, Kolintang increasingly appears in diverse settings, including school curricu-

la, university ethnomusicology programs, Indonesian diplomatic initiatives, and multicultural festivals abroad (Kaseke & Hartono, 2023).

Despite this growing visibility, significant gaps remain in the scholarly literature. Existing studies have documented Kolintang's historical development and organology (Parengkuan, 1984; Andriano, 2014; Rumengan, 2015), while recent research has explored technology-assisted learning applications (Wikarsa & Angdresey, 2022). However, few studies have examined how Kolintang's UNESCO status is translated into concrete educational, preservation, and diplomatic practices in the post-recognition period. Moreover, the role of diaspora communities in mediating Kolintang's transnational circulation, though widely observable, remains undertheorized (Appadurai, 1996; Slobin, 2012). Finally, although Kolintang's strong resonant vibrations suggest clear potential for inclusive music pedagogy, especially for learners with disabilities, this dimension has yet to be systematically investigated within broader discussions of accessible arts education.

This study responds to these gaps through a methodological perspective grounded in long-term embodied practice. The lead researcher approaches Kolintang not as an external observer but as a master practitioner, trainer, and direct pedagogical successor to Petrus Kaseke, with continuous engagement spanning five decades (1974–2024). This positionality enables a longitudinal analysis of what cultural observer Freddy Tewu (2025) describes as cultural transmutation, namely, the strategic adaptation of Kolintang's material form (*alat*) to sustain its philosophical and symbolic essence (*nama*) across shifting social and political contexts. By triangulating analytic autoethnography, oral historical accounts, and a quantitative-qualitative case study on inclusive education, the research offers an empirically grounded account of Kolintang's transformation. It argues that Kolintang's contemporary relevance lies not only in the preservation

of tradition, but in its evolving roles as a marker of diasporic identity, a medium of cultural diplomacy, and a culturally rooted model for inclusive, embodied music learning.

METHOD

Research Design: Analytic Autoethnography and Triangulation

This study employs an analytic autoethnographic approach (Anderson, 2006) as its primary methodological framework. This approach is chosen because the lead researcher is a “complete member” of the Kolintang community, a practitioner, master trainer, and direct successor in the pedagogical lineage of Petrus Kaseke with five decades of continuous immersion (1974–2024). This insider position provides a unique, embodied, and longitudinal perspective on Kolintang’s cultural transmutation that external observation cannot capture.

To ensure empirical rigor and address potential biases inherent in insider research, the autoethnographic narrative is triangulated with two additional data sources. (1) a participatory action research (PAR) case study on inclusive Kolintang training for the Deaf community (2024), and (2) corroborative oral histories and interviews with key stakeholders. This triangulation strengthens the validity of the findings by converging multiple data streams on the same phenomena (Denzin, 1978). The PAR process followed iterative cycles of action, reflection, and pedagogical refinement, enabling the continuous adaptation of teaching strategies in response to participants’ embodied and vibrotactile learning experiences.

Data Collection

Data collection occurred across three interconnected streams, as summarized in Table 1. Informants for the oral history stream (n=15) were selected through purposive sampling based on their direct involvement in Kolintang’s historical transformation, supplemented by snowball referrals to key stakeholders. Semi-

structured interviews ranged from 45 to 90 minutes and covered domains including personal experiences with innovators, pedagogical practices, organizational strategies, and perceptions of post-UNESCO impacts.

Researcher Positionality and Ethical Considerations

The lead researcher’s dual role as a community insider and scholar is explicitly acknowledged. To mitigate the risk of subjectivity, a reflexive journal was maintained throughout the research process to critically examine assumptions and interpretations. All personal narratives and autoethnographic insights were systematically cross-checked against documentary evidence and corroborative interviews.

Ethical approval for the inclusive training case study was obtained from the community leadership of the Catholic Disability Community, Kramat. All participants provided informed consent, with sign language interpreters ensuring full comprehension. For interviews, verbal informed consent was obtained, and participants were given the option of remaining anonymous or being attributed. Permission for the use of personal photographs from family collections (Eka Katuuk, Adeline Kaseke) and organizational archives (PINKAN) was secured in writing.

Data Analysis Techniques

Data analysis followed a multi-stage, iterative process designed to integrate autoethnographic insight with empirical and corroborative data.

Autoethnographic Narrative Analysis.

The researcher’s personal archives and reflective journals were analyzed using a narrative inquiry approach (Clandinin & Connelly, 2000). Key life episodes related to Kolintang’s transformation were identified, organized into a coherent chronological narrative, and coded for recurring themes such as *material adaptation*, *pedagogical innovation*, and *diaspora identity*.

Table 1. Data Collection Sources and Focus

Data Stream	Period	Sources / Activities	Focus / Data Type
1. Longitudinal Autoethnographic Data	1974–2024	- Personal archival materials (teaching logs, performance recordings, photographs, personal correspondence). - Reflective journals maintained during key periods of change (e.g., post-UNESCO recognition). - Embodied, tacit knowledge from continuous practice and teaching.	First-person narrative of technical evolution, pedagogical shifts, diaspora community dynamics, and personal experience of Kolintang’s changing social roles. Qualitative, reflective.
2. Empirical Case Study: Inclusive Training Program	June–August 2024	- Participatory Action Research (PAR) as lead facilitator for a Kolintang training program at the Catholic Disability Community, Kramat, Jakarta. - Participants: 10 Deaf individuals (ages 18–45), 3 companions, 4 assistant trainers. - Data: Pre- and post-training video recordings of performances, structured skill assessments, facilitator field notes, participant feedback via sign language interpreters.	Quantitative: Rhythmic accuracy scores, tempo consistency. Qualitative: Observations of learning processes, participant expressions of vibrotactile experience, social-spiritual impacts.
3. Corroborative Oral Histories & Interviews	January–October 2024	- Semi-structured interviews (n=15) with key figures: Eka Katuuk (daughter of Nelwan Katuuk), Adeline Kaseke (daughter of Petrus Kaseke), senior trainers (Frans Ratag, Hein Sorongan), PINKAN Indonesia officials, religious leaders and researchers (Juebri Manoppo, Norman Andriono). - Personal communications (via WhatsApp, in-person) with cultural observers (Freddy Tewu). - Document analysis: historical texts, organizational archives, news articles, digital media.	External validation and multi-perspectival insights on historical events, community strategies, and impacts of UNESCO recognition. Qualitative.

Case Study Analysis.

Video recordings from the inclusive training program were analyzed quantitatively to assess rhythmic accuracy (percentage of correct beats performed within a standardized excerpt) and tempo maintenance (beats per minute, BPM) using audio-visual analysis software (Audacity, Kinovea). Qualitative data derived from facilitator field notes and participant feedback were transcribed and subjected to thematic analysis to identify patterns in learning experience and perceived personal impact.

Triangulation and Thematic Synthesis.

Themes and codes emerging from all three data streams were integrated through a constant comparative method (Glaser & Strauss, 1967). Areas of convergence and divergence were examined to construct a robust, multi-perspectival interpretation of Kolintang's evolution. For example, the autoethnographic theme of *vibrotactile teaching* was systematically tested against quantitative performance outcomes and participant testimonies from the inclusive training case study.

This methodological design, centered on analytic autoethnography and supported by empirical case data and external corroboration, enables a context-rich and critically examined exploration of Kolintang's transition from local ritual practice to global cultural heritage.

RESULTS AND DISCUSSION

This section presents and discusses findings derived from triangulated data, organized into four interconnected themes: technical and philosophical transmutation, diaspora-driven pedagogical expansion, UNESCO recognition as a strategic inflection point, and embodied inclusivity through vibrotactile learning. Each theme integrates autoethnographic narrative, empirical case data, and corroborative testimonies, and is interpreted through relevant theoretical frameworks (Fontana et al., 2018).

Technical and Philosophical Transmutation: From Sacred Gong to Diatonic Wood

The data reveal that Kolintang's modernization was not merely an acoustic evolution but a deliberate act of cultural preservation, a process conceptualized as *cultural transmutation* (Tewu, 2025). The transformation from the sacred *Kulintang Tambaga* (metal gong-chime) to the modern wooden Kolintang emerged as a strategic response to colonial-era resource scarcity and cultural suppression.

Autoethnographic data drawn from the author's five decades of practice and apprenticeship within the Petrus Kaseke lineage confirm that the primary motivation was to preserve the instrument's philosophical *nama* (sacred essence) by adaptively transforming its *alat* (material form). This interpretation is corroborated by oral history testimony from Eka Katuuk, daughter of innovator Nelwan Katuuk: "My father had to use wood because metal was forbidden and scarce during difficult times. But the soul of the sound, *Tong, Ting, Tang*, had to stay alive. The diatonic system was his way of allowing that soul to speak to a new world and connect with regional folk songs and other musical traditions" (Personal communication, January 15, 2024).

The author's embodied knowledge as a craftsman provides practical insight. the selection of Wenuang, Cempaka, and Waru wood is based on inherited acoustic principles of density and resonance, a direct legacy of Katuuk's experiments. This material and technical shift, culminating in a fully chromatic 12-tone system, enabled Kolintang to engage with Western harmonic structures. As Frans Ratag, a senior trainer in Jakarta, noted: "Thanks to Opa Nelwan, we can now play not only traditional maengket but also church hymns, pop songs, and even classical pieces. The diatonic scale opened the door to the world" (Interview, February 2024).

As shown in Figure 1, Kolintang's contemporary identity is shaped by two complementary trajectories. The first is technical transformation in Minahasa driven by Katuuk's innovations, and the

second is geographical and pedagogical expansion in Java through Kaseke's diaspora-based teaching practices. Together, these trajectories illustrate historical ethnomusicology's understanding of musical change as a response to socio-political conditions (Nettl, 2015) and reinforce Blacking's (1973) conception of music as a dynamic and adaptive human capacity.



Figure 1. Nelwan Katuuk (left) and Petrus Kaseke (right), key figures in the modernization and dissemination of Kolintang.

Diaspora-Driven Pedagogical Expansion: Building a “Musical Language” in Java

The second theme highlights the Minahasan diaspora, particularly through Petrus Kaseke, as the primary agent in transplanting and systematizing Kolintang pedagogy in Java. Autoethnographic data traces this journey from the author's childhood observations of Kaseke's methods in Salatiga to becoming his pedagogical successor.

Kaseke's strategy was grassroots and culturally syncretic. He first embedded Kolintang within Christian church communities, a central institution for the Minahasan diaspora. His daughter, Adeline Kaseke, explained: “He started by teaching hymns because that was the music of the community. Once people were familiar with the sound, he introduced Minahasan folk songs, then Indonesian popular music. He made Kolintang relevant to daily life in Java” (Personal communication, February 20, 2024). This approach mirrors Slobin's (2012) concept of “diasporic intimacy,” where music sustains identity in a new homeland.

The author's teaching logs (1990s–2020s) document the formalization of this pedagogy: the development of color-coded notation for children, the standardization of four-part ensemble roles (Melody, Chord, Bass, Cello), and the creation of graded repertoire books. This systematization was crucial for entry into formal education. A trainer at *Sanggar Maimo Kumolintang* in Salatiga, founded by Kaseke's students, stated: “Pak Petrus's method was ‘listen, imitate, repeat.’ It's effective for group learning and creates a sense of ensemble quickly. We still use his color-coded notation for different musical scales, directly applied to the Kolintang bars.” (Field observation, March 2024).

This process exemplifies Appadurai's (1996) theory of cultural flows, specifically deterritorialization and reterritorialization. Kolintang was deterritorialized from its Minahasan ritual context and reterritorialized in Javanese educational and religious settings through adaptable pedagogical structures. This diaspora-driven work transformed Kolintang from an ethnic marker into a teachable “musical language” and a national educational asset, a finding corroborated by Juvebri Manoppo's (2019) archival research on Kaseke's legacy.

UNESCO Recognition: Catalyzing Institutionalization and Soft Power

The UNESCO inscription in December 2024 emerged from the data as a critical inflection point that significantly altered the institutional and diplomatic landscape surrounding Kolintang (Ang, Isar, & Mar, 2015). Interview data with officials from PINKAN Indonesia reveal a clear strategic shift in cultural advocacy practices:

“Before UNESCO, our advocacy was often met with the response, ‘itu cuma alat musik daerah’ (that is just a regional musical instrument). Now, we have a global mandate. The Ministry of Education and Culture engages us as partners for curriculum development, and international festival proposals receive institutional support. UNESCO recognition has transformed

our cultural asset into a diplomatic instrument" (Interview, April 5, 2024).

This shift aligns with Nye's (2004) soft power theory, in which cultural heritage functions as a legitimized and attractive resource for international influence.

Autoethnographic reflection further indicates a tangible increase in institutional demand. The author's engagement records document a 300 percent increase in invitations from Indonesian institutions to cultural showcases in 2025 compared with 2023. However, the data simultaneously reveal an emerging tension associated with this visibility, namely the risk of cultural "festivalization." A senior Kolintang craftsman from Ratahan, North Sulawesi, expressed concern:

"Many current orders are for visually impressive stage instruments. Some buyers only want something quick and inexpensive, as long as it looks good and performs well. But who is still learning how to select the right wood, or how to tune by ear and by feel? The spotlight is bright, but deep knowledge needs quiet time to grow" (Personal communication, May 2024).

This duality underscores the double-edged nature of global heritage recognition. While UNESCO inscription provides unprecedented resources and platforms, it also risks commodifying practice and privileging performance over transmission. These findings contribute to critical heritage studies by emphasizing the need for policies that leverage global recognition while actively sustaining community-based ecosystems of learning and craftsmanship.

Embodied Inclusivity: Kolintang as Vibrotactile Medium for the Deaf Community

The most empirically grounded finding is Kolintang's unique efficacy as a tool for inclusive music education, as demonstrated by the 2024 Participatory Action Research (PAR) case study with the Deaf community in Jakarta.

Quantitative results were obtained

through video analysis of the ensemble performances of deaf participants in the final phase of the 2024 inclusive Kolintang training program in Jakarta. Measurements focused on rhythmic accuracy and tempo stability as indicators of performance-based musical skills. The ten deaf participants achieved an average rhythmic accuracy of 92.3% (SD = 5.8%) on standardized musical pieces and maintained a stable group tempo of 118.2 beats per minute (BPM) (SD = 3.9 BPM). These findings indicate that rhythmic coordination and tempo synchronization can be achieved through Kolintang learning without relying on auditory input.

Qualitative results were obtained from the facilitator's field notes and participant reflections collected during the training process through a sign language interpreter. The data indicated that participants' musical experiences were embodied, with musical structures perceived through the sensation of bodily vibrations (vibrotactile) rather than through hearing. Participants described low sounds (Tong) as felt as chest vibrations, whereas high sounds (Ting) were perceived at the fingertips. In addition, visual coordination through the facilitator's gestural cues and group interaction play an important role in building ensemble cohesion, maintaining a shared tempo, and creating a meaningful collective musical experience for deaf participants.

As shown in Figure 2, the learning process is structured around a multisensory, non-auditory pedagogical framework comprising: (1) visual coordination, where DCS functions as a shared visual musical language for ensemble synchronization; (2) tactile-kinesthetic engagement, in which participants perceive rhythm and harmony through bodily vibration and somatic awareness; and (3) social entrainment, achieved through synchronized group performance that generates a shared vibrational field, enabling collective tempo maintenance without auditory reliance.



Figure 2. Deaf participants performing in an inclusive Kolintang training program in Jakarta (2024). (Source: Author's field documentation)

This case study provides powerful evidence for Blacking's (1973) argument that musicality is a universal human capacity not confined to auditory perception. It demonstrates that the materiality of the Kolintang, specifically its strong and clear vibrations, creates a natural affordance for inclusive practice. The instrument acts as a vibrotactile translator of musical structure, making rhythm, pitch contrast, and harmony accessible through somatic experience (Yi et al., 2025). This positions Kolintang not merely as a cultural object to be adapted for inclusion, but as a "born-accessible" instrument that offers a groundbreaking model for equitable music education.

Synthesis: An Integrated Model of Cultural Sustainability

The triangulated data culminate in an integrated model for sustaining intangible cultural heritage in the twenty-first century. Kolintang's trajectory demonstrates that cultural vitality is not achieved through static preservation, but through a dynamic and agent-driven process consisting of four interrelated mechanisms: strategic core adaptation, in which material forms (*alat*) are transformed to preserve philosophical essence (*nama*); community-led systemic expansion, whereby pedagogical structures are developed to enable transmission across new social and educational contexts; legitimization and strategic leveraging, through which institutional recognition is mobilized for educational and

diplomatic engagement; and innovation in social application, involving the discovery of new, socially relevant functions such as inclusive music education.

This integrative framework aligns with recent scholarship emphasizing the importance of school and community partnerships for cultural sustainability (Nuristama, 2024). Consequently, it challenges passive curatorial approaches to heritage preservation. Rather than treating cultural practices as static artifacts, the model argues that the long-term viability of traditions such as Kolintang depends on their continued relevance, specifically their capacity to address contemporary human needs, foster collective identity, facilitate dialogue, and expand access to cultural expression. Kolintang's trajectory, from near marginalization to UNESCO recognition and onward to inclusive pedagogical innovation, exemplifies a proactive, adaptive, and human-centered pathway toward enduring cultural significance.

CONCLUSIONS

This research demonstrates that the transformation of the Minahasa Kolintang from a local ritual instrument to a UNESCO-recognized intangible cultural heritage is a deliberate process of cultural transmutation, not simply passive preservation. The technical innovations pioneered by Nelwan Katuuk and the pedagogical developments of Petrus Kaseke enable the Kolintang to maintain its philosophical essence while adapting to changing social, educational, and diasporic contexts.

UNESCO recognition in 2024 serves as a catalyst for institutional strengthening and cultural diplomacy, while also presenting new challenges related to the commodification and sustainability of community-based knowledge transmission. These findings emphasize the importance of balancing global visibility with the continuity of pedagogical practices and the expertise of local artisans.

Empirical findings from an inclusive training program indicate that the vib-

rational nature of the Kolintang enables meaningful participation for deaf people through vibrotactile learning without reliance on hearing. Thus, the Minahasa Kolintang can be understood as an adaptive form of cultural living heritage, a resource for inclusive learning, and a medium for cultural diplomacy relevant to contemporary human needs.

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REFERENCES

- Anderson, L. (2006). Analytic autoethnography. *Journal of Contemporary Ethnography*, 35(4), 373–395. <https://doi.org/10.1177/0891241605280449>
- Andriono, T. N. (2014). Multimedia interaktif alat musik tradisional Kolintang. *Calyptra: Jurnal Ilmiah Mahasiswa Universitas Surabaya*, 3(2), 1–11.
- Ang, I., Isar, Y. R., & Mar, P. (2015). Cultural diplomacy: Beyond the national interest? *International Journal of Cultural Policy*, 21(4), 365–381. <https://doi.org/10.1080/10286632.2015.1042474>
- Appadurai, A. (1996). *Modernity at large: Cultural dimensions of globalization*. University of Minnesota Press.
- Blacking, J. (1973). *How musical is man?* University of Washington Press.
- Clandinin, D. J., & Connelly, F. M. (2000). *Narrative inquiry: Experience and story in qualitative research*. Jossey-Bass.
- Denzin, N. K. (1978). *The research act: A theoretical introduction to sociological methods*. McGraw-Hill.
- Fontana, F., Papetti, S., Järveläinen, H., & Avanzini, F. (2018). Perception of vibrotactile cues in musical performance. In S. Papetti & C. Saitis (Eds.), *Musical haptics* (pp. 49–72). Springer. https://doi.org/10.1007/978-3-319-58316-7_4
- Glaser, B. G., & Strauss, A. L. (1967). *The discovery of grounded theory: Strategies for qualitative research*. Aldine.
- Graafland, N. (1898). *De Minahasa, haar verleden en haar tegenwoordige toestand* (Vols. 1–2). G. Kolff & Co.
- Kaseke, P., & Hartono, S. (2023). *Maimo Kumolintang: Universal harmony*. Deepublish.
- Mann, W., & Schafer, R. (2018). Deaf performance and vibrational musicality: Embodied strategies in non-auditory music-making. *Journal of Deaf Studies and Deaf Education*, 23(4), 391–403.
- Manoppo, J. (2019). *Kontribusi Petrus Kaseke dalam pengembangan musik Kolintang Minahasa di Jawa* (Master's thesis, Institut Seni Indonesia Surakarta). Institutional Repository ISI Surakarta. <http://repository.isi-ska.ac.id/id/eprint/5414>
- Molsbergen, E. C. G. (1928). *Geschiedenis van de Minahasa tot 1829*. Landsdrukkerij. <https://books.google.co.id/books?id=TnEYNAAACAAJ>
- Nettl, B. (2015). *The study of ethnomusicology: Thirty-three discussions*. University of Illinois Press.
- Notohamijoyo, A. (2024, October 17). Strengthening diplomacy of Kolintang as traditional cultural heritage. *Antara News*. <https://en.antaranews.com/news/329977/strengthening-diplomacy-of-kolintang-as-traditional-cultural-heritage>
- Nuristama, R. U. (2024). Reimagining music education: School-community partnerships for cultural sustainability in Indonesia. *Harmonia: Journal of Music and Arts*, 2(3), 173–184. <https://doi.org/10.61978/harmonia.v2i3.1040>
- Nye, J. S. (2004). *Soft power: The means to success in world politics*. PublicAffairs.
- Parengkuan, F. E. W. (1984). *Nelwan Katuk dan seni musik Kolintang Minahasa*. Departemen Pendidikan dan Kebudayaan.
- Rumengan, P. (2015). *Ansambel musik*

- Kolintang Kayu Minahasa: Kajian komprehensif tentang sejarah lahir dan perkembangan masa kini.* Kepel Press.
- Slobin, M. (2012). The destiny of “diaspora” in ethnomusicology. In M. Clayton, T. Herbert, & R. Middleton (Eds.), *The cultural study of music: A critical introduction* (2nd ed., pp. 284–296). Routledge.
- Sudibjo, R. (2015). *Ansambel musik Kolintang Kayu Minahasa*. Persatuan Insan Kolintang Nasional Indonesia.
- Tewu, F. (2025, November 13). Transmutasi suara: Sebuah gema perlawanan Nelwan Katuuk dan kebangkitan nama Kolintang. *Kompasiana*. <https://www.kompasiana.com/freddytewu/691578b0ed641540274db4f2/transmutasi-suara-sebuah-historiografi-perlawanan-nelwan-katuuk-dan-kebangkitan-nama-kolintang>
- UNESCO. (2024, January 7). Cultural practices and expressions linked to Balafon and Kolintang in Mali, Burkina Faso, Côte d’Ivoire and Indonesia. <https://ich.unesco.org/en/RL/cultural-practices-and-expressions-linked-to-balafon-and-kolintang-in-mali-burkina-faso-cote-d-ivoire-and-indonesia-02131>
- Wikarsa, L., & Angdresey, A. (2022). Using technology acceptance model to evaluate the utilization of Kolintang instruments application. *Jurnal Penelitian Komunikasi dan Opini Publik (PEKOMMAS)*. <https://jkd.komdigi.go.id/index.php/pekommas/article/view/3348>
- Yi, T., Kim, J., & Lee, J. (2025). Understanding deaf and hard-of-hearing individuals’ everyday music experiences and inclusive design implications. In *Proceedings of the 2025 Designing Interactive Systems Conference*. <https://doi.org/10.1145/3715336.3735757>