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# Nandong Smong: Revitalizing Musical and Oral Traditions to Enhance Disaster Education for Gen Z in Indonesia

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Abstract: In light of growing concerns regarding cultural erosion and vulnerability to disasters, oral traditions such as Nandong Smong from Simeulue Island, Indonesia, provide essential insights into utilizing local wisdom systems to improve disaster resilience. Traditions once vital for tsunami preparedness are now largely underutilized in modern education, especially among Gen Z, who favor digital and media-based learning methods. This research examines Nandong Smong as a musical narrative that integrates disaster awareness, cultural identity, and moral education. The research employs a qualitative-narrative methodology, incorporating fieldwork that includes direct observation and in-depth interviews with local elders, as well as a textual analysis of Smong lyrics from publicly accessible recordings. The findings indicate that Nandong Smong incorporates structured thematic elements, including orientation, complication, resolution, and moral coda, which effectively communicate survival strategies, cultural memories, and intergenerational values. These elements promote cognitive comprehension of disasters while incorporating emotional and ethical viewpoints. The musical format improves message retention and relevance among younger audiences, providing a participatory and effective model for communitybased disaster education. This study proposes that the incorporation of indigenous narratives into educational frameworks may enhance disaster risk reduction (DRR) strategies, particularly in culturally diverse and hazard-prone areas. Policymakers and educators should collaborate with local communities to preserve and adapt traditions such as Nandong Smong into multimedia curricula that correspond with the learning styles of Gen Z.

Keywords: Nandong Smong, Disaster Education, Local Wisdom, Gen Z, Musical Narrative







#### 1. Introduction

Simeulue Island, located in Aceh, exemplifies the power of local wisdom in saving lives during the tsunami on December 26, 2004. In light of the extensive destruction that led to the loss of more than 230,000 lives throughout the Indian Ocean, the island recorded merely seven deaths. This notable result can be ascribed to the oral tradition known as Smong, which significantly contributed to community awareness and preparedness (BNPB, 2022). This tradition has been passed down through generations, manifested as songs and folktales that teach how to respond to earthquakes and tsunamis (Marselina & Widodo, 2012). Nevertheless, the evolving lifestyles of younger generations, particularly Gen Z, and the changing societal norms present challenges to contemporary principles. This demographic is more interested in digital culture, audiovisual media, and technology than in traditional oral narratives. The educational value of Smong may diminish in the absence of appropriate contextual revitalization. The Nandong Smong tradition provides an alternative method of incorporating modern educational techniques with local heritage (Rahman et al., 2018). This performance method has been demonstrated to be effective in capturing the attention and emotional engagement of Gen Z. This issue is essential for the advancement of disaster education in the digital age (Susanto et al., 2022). Consequently, it is both a practical and intellectual necessity to revitalize this tradition through a musical approach.

Previous studies, like those of Syahputra (2019), indicate that the *Smong* tradition is successful in conveying disaster mitigation messages in Simeulue. Nevertheless, these approaches are deeply rooted in tradition and do not integrate modern teaching strategies. Primayanti (2022) dan Tohri (2022) underscore the potential of local knowledge in education, while noting its restricted implementation, primarily limited to oral instruction. Moreover, Diab (2022) dan Pajarianto (2022) note that cultural arts are superficially integrated into curricula, missing profundity and emotional meaning. These studies notably neglect the incorporation of musical acts as a significant instructional instrument for Gen Z in crisis scenarios, highlighting a crucial deficiency that necessitates new, contextual, and participatory methodologies. The existing study rarely recognizes the instructional value of local music in disaster preparedness. Music has the distinctive capacity to ingratiate itself into memory and cultivate communal consciousness. Consequently, there exists a pressing necessity to examine *Nandong Smong* as an educational medium that encompasses emotions, culture, and morality. This research seeks to address that gap.

This article investigates three essential aspects of *Nandong Smong* tradition that enhance disaster mitigation teaching through an artistic medium aligned with Gen Z's



learning styles. Then, it seeks to revitalize and safeguard Simeulue's cultural identity imperiled by globalization and internalize ethical and intergenerational ideals through emotionally impactful narratives. These notions are interrelated, reinforcing a broader mission of character education rooted in local wisdom. A musical method guarantees that disaster messages are communicated with clarity, empathy, and lasting significance (Sedmak et al., 2021). This strategy improves both the cognitive dimension of learning and engages students emotionally and socially.

The central research inquiry of this study is: How can the *Nandong Smong* tradition be utilized as an effective educational instrument to enhance disaster literacy, cultural identity, and moral values among Gen Z in Simeulue? The key hypothesis posits that the *Nandong Smong* tradition, grounded in cultural heritage, provides a more emotionally impactful and effective approach to disaster teaching for Gen Z than traditional oral storytelling. This research seeks to develop a culturally-informed disaster education paradigm through qualitative and narrative analysis, ensuring it is both academically rigorous and practically impactful.

## 2. Literature Review

#### 2.1. Local Wisdom Values

Local wisdom is a set of knowledge, values, and practices that communities develop in response to their social and natural environments. This knowledge is traditionally transmitted across generations through storytelling, rituals, language, art, and daily practices (Sun & Mo, 2024). It inherently encompasses moral, ethical, and spiritual dimensions, reflecting a collective understanding of societal and ecological realities. Local wisdom plays a crucial role in shaping cultural identity and social norms within the Indonesian context (Bilige, 2024). The *Smong* narrative from Simeulue Island exemplifies traditional knowledge in disaster response "(Machin-Autenrieth, 2021). These values are essential for character education and disaster preparedness. Local wisdom preserves historical narratives and functions as an educational tool that is relevant today and will remain so in the future (Bhumi et al., 2023). Therefore, the revitalization of local values should be conducted in ways that are contextually relevant and communicative.

Local wisdom can be categorized into three principal aspects: (1) normative values, which include collective ethics and solidarity; (2) functional knowledge, encompassing farming techniques and disaster response; and (3) cultural expression, represented in art and oral literature (Morgenstern, 2021; Qi et al., 2024). Local wisdom, traditionally conveyed through oral and symbolic means, currently confronts the challenges posed by modernization and technological disruption. In the *Smong* case,



local disaster mitigation values are maintained through memorable narratives and musical expressions. This understanding goes beyond folklore, incorporating a culturally ingrained early warning system. For instance, the lyrics outline a series of disasters: an earthquake, a receding sea, and subsequently a tsunami "(Cao & Park, 2024; McKerrell & Hornabrook, 2022). The decline of literacy in local wisdom among younger generations, especially Gen Z, is attributed to the dominance of instant digital culture (Amiri et al., 2019). Innovative approaches, such as arts-based education, are essential for ensuring that these values persist and remain pertinent in changing contexts. Previous models of local wisdom transmission have primarily focused on cognitive aspects, including information retention and historical knowledge, while neglecting the role of affective learning in fostering emotional connections and the internalization of values (He, 2023). Consequently, while content may be retained, the immediacy and emotional connection to the meanings of traditions are diminished, especially among digital-native learners. Reimagining educational strategies by incorporating affective elements through interactive and expressive formats, such as music and performance-based learning, is indispensable.

## 2.2. Nandong Smong

Nandong Smong represents a musical narrative tradition within the Simeulue community, conveying local wisdom related to tsunami disaster mitigation. This tradition integrates oral literature and song to convey responses to natural signs. Nandong Smong follows a structured narrative progression encompassing orientation, complication, resolution, and coda, conveying critical lessons such as the importance of promptly relocating to higher ground after an earthquake (Takari, 2020). The educational values played a crucial role in preserving numerous lives during the 2004 tsunami, illustrating the effectiveness of narratives in enhancing disaster awareness. This musical approach is consistent with culturally responsive pedagogy, emphasizing the importance of contextually relevant learning materials (Im et al., 2023; Sutton et al., 2021). Nandong Smong goes beyond simple narrative, functioning as a significant educational resource in values, culture, and purpose (Curran & Radhakrishnan, 2021). Integrating Nandong Smong into education serves as a strategic approach to contextualizing disaster-related content effectively.

International comparisons indicate the use of analogous musical traditions for disaster education worldwide. Chants and oral poetry in Tonga and Samoa recount historical disasters to enhance community preparedness (Rivera, 2021). Following Japan's 2011 Tōhoku earthquake and tsunami, schools employed musical storytelling to facilitate children's emotional processing of trauma and to instruct on evacuation strategies (Théberge, 2023). These practices frequently exist independently of formal



curricula and are seldom tailored for digital learning platforms, thereby constraining their accessibility and effectiveness, particularly for younger, technologically adept learners. An examination of current models reveals a shortcoming in providing emotional engagement and affective learning (Stokes, 2023). The cultural richness and historical accuracy of the content are undermined by a lack of interaction, sensory immersion, and musical dynamics, leading to inadequate retention and weak internalization of values among students. *Nandong Smong*, through its musical performance combined with narrative and emotion, provides a multisensory learning experience that fosters empathy, memory, and moral imagination (Dirksen, 2021). This highlights the significance of integrating musical storytelling for both heritage preservation and as an effective educational tool for disaster literacy.

## 2.3. Generation Z (Gen Z)

Generation Z, commonly called Gen Z, encompasses individuals born from 1997 to the early 2010s. This cohort has been raised in the digital age, resulting in distinct traits regarding their learning styles, communication methods, and information absorption (Lismayanti et al., 2023). Individuals have become familiar with digital technology, social media, and rapid, interactive audiovisual learning methods. As noted by Ratminingsih et al. (2020), Gen Z exhibits shorter attention spans while simultaneously demonstrating the ability to process substantial quantities of information rapidly. In educational settings, Gen Z demonstrates a greater responsiveness to technology-driven methods, emotional engagement, and visual aesthetics in contrast to traditional approaches. Consequently, learning models incorporating local culture must be presented in innovative formats to engage Gen Z (Anisimov et al., 2020). The necessity for educational strategies that correspond with individual learning styles constitutes a fundamental basis for pedagogical reform. In this context, *Nandong Smong* serves as a musical narrative that connects cultural heritage with contemporary educational requirements.

Comparable strategies aimed at youth demographics have been implemented in Japan and the Pacific, utilizing disaster-themed animated songs, school plays, and interactive games (Wadiyo et al., 2022). The tools are specifically designed to convey preparedness messages in a manner that is both engaging and relevant to children and adolescents. Nevertheless, these models frequently exhibit external design characteristics, lacking profound cultural foundations and emotional authenticity (Handayani et al., 2023). While they may provide entertainment, they do not inherently foster enduring moral responsibility or resilience rooted in identity. Previous models of education for Gen Z often emphasize engagement primarily through superficial elements, such as visually appealing designs or gamification techniques, while



neglecting to incorporate cultural or emotional depth. Consequently, the lessons may provide entertainment, yet do not succeed in altering values or enhancing empathy (Lon & Widyawati, 2020). *Nandong Smong* integrates local identity, emotional storytelling, and musical aesthetics, thereby providing a comprehensive and well-rounded educational experience. By engaging both emotional and cognitive faculties, it enables Gen Z learners to comprehend disaster risks while fostering an emotional connection to their cultural heritage and associated responsibilities.

#### 3. Methods

This study was conducted amidst a rising trend where modern music is more popular than traditional music. However, this study focuses on studying and evaluating research that addresses issues concerning traditional music in Asia 20 years using articles retrieved from the Scopus database as the unit of analysis. The selection of traditional music issues as the object of study stems from three weighty considerations. Firstly, traditional music has fundamental issues that have never been comprehensively addressed by previous research in the past two decades, particularly in the Asian context. Secondly, traditional music possesses abstract and concrete contextual characteristics, and thus it is crucial to explore. Thirdly, traditional music possesses fundamental patterns and dynamics which are significant to take into account. These three points are the foundation of this research, which explores and analyzes the trends and developments in research on Asian traditional music 20 years, based on article searches in the Scopus database.

This study utilizes a qualitative methodology with a descriptive-narrative framework to investigate the educational, cultural, and moral qualities inherent in the Nandong Smong musical tradition. This heritage serves as a conduit for catastrophe education and the rejuvenation of local knowledge, especially for Gen Z's learning styles (Ismail et al., 2023). The unit of analysis in this study is the oral text of the Nandong Smong song, encompassing its lyrics and performance environment. The analysis incorporates community interpretations derived from interviews and observations of performances, which elucidate the lived cultural significance of the tradition. The data collection procedure comprised three methodologies: observation, in-depth interviews, and document analysis. Direct observation was undertaken on Simeulue Island for a duration of two weeks in March 2024, concentrating on live or community-based performances of Nandong Smong. The participants comprised four male and two female community seniors aged 50 to 75, along with two music practitioners aged 30 to 40 who actively play Nandong Smong. This sample was selected for their cultural expertise and proactive involvement in the preservation of



local traditions.

The researchers conducted the fieldwork without official institutional ethical clearance, although the project was executed in strict compliance with ethical research guidelines. All participants were thoroughly apprised of the research objectives, methodologies, and planned applications of the data. Before the interviews and observations, verbal agreement was secured, and participants willingly consented to answer the research questions. No coercion was present, and participants retained the opportunity to abstain from responding to any questions they considered sensitive. The confidentiality of participants was preserved during the research procedure, and interview transcripts were sent to each participant for member checking to verify accurate depiction. Consequently, in spite of lacking a formal clearance letter, the research was ethically robust and prioritized the dignity and rights of participants.

Both primary and secondary data sources were employed. The primary data comprised transcripts from interviews and observational field notes, whereas the secondary data encompassed digital recordings of Nandong Smong songs sourced from YouTube and local cultural archives. The words of the song served as the textual foundation for content analysis. A theme coding technique was employed to classify the content into three primary domains: (1) disaster mitigation values, (2) moral and ethical messages, and (3) representations of cultural identity. The coding process employed a deductive-inductive approach, commencing with preliminary codes derived from existing literature and subsequently refined through emerging themes from the data (Junyi, 2023). Multiple strategies were implemented to enhance validity and reliability. Initially, triangulation was employed by cross-referencing observational data with interview narratives and secondary sources. Secondly, member verification was performed to validate the interpretations of the lyrics and tales with the participants. Third, peer debriefing was conducted with two cultural studies scholars to examine preliminary data and reduce researcher bias. A reflective journal was kept to record the researcher's positionality and possible subjectivity during the fieldwork.

The data interpretation was informed by two theoretical frameworks. The Cultural Memory Theory by Assmann (2022) highlights the transmission of collective knowledge through cultural tales and performances across generations. This framework elucidates the symbolic and emotional aspects of *Nandong Smong* as a manifestation of collective memory. Secondly, the Resilience Theory of Yao & Liu (2022) was utilized to examine the role of musical tradition in fostering community resilience, specifically in equipping younger generations for crisis scenarios through culturally ingrained narratives. These ideas provided a comprehensive framework for



connecting the lyrical and cultural elements of Nandong Smong with broader educational and societal contexts. The data analysis adhered to the approach proposed by Miles and Huberman (1994), encompassing data reduction, data display, and conclusion drafting. During the reduction process, pertinent elements of lyrics and interview transcripts related to disaster mitigation and cultural values were emphasized. The items were subsequently classified and presented in topic matrices. The third stage was interpretive synthesis, linking thematic findings to the theoretical framework, which culminated in a comprehensive understanding of *Nandong Smong* as a tool for emotive, cultural, and resilience-oriented education.

## 4. Results

The Nandong Smong musical tradition, as a means of rejuvenating local wisdom values on the Simeulue Islands, functions not just in cultural preservation but also as a pertinent and significant educational medium for Gen Z. The oral texts presented in the Devayan and Sigulai languages exhibit a systematic narrative framework, progressing from orientation to closure, and are abundant in historical and educational messages.

Table 1: Narrative Structure and Translation of Nandong Smong Lyrics Source: Author's interviews and documentation, and YouTube video link https://youtu.be/gNOYBkSROK4

Text Structure	Devayan/Sigulai (Excerpt)	Indonesian Translation	<b>English Translation</b>
Orientation	Enggel mon sao curito / Inang maso semonan	Dengarlah suatu cerita / Pada zaman dahulu	Listen to a story / Once upon a time
Orientation	Manoknop sao fano / Wiyelah da sesewan	Terbenam satu negeri / Begitulah mereka ceritakan	A land was submerged / They told it that way.
Complication	Unen-unen alek linon / Besang bakat ne malli	Diawali oleh gempa / Disusul ombak yang besar	It began with an earthquake / Followed by a big wave
Complication	Manoknop sao hampung / Tibo- tibo mawi	Tenggelam satu negeri / Tiba-tiba saja	A village sank / Suddenly
Complication	Anga linon ne malli / Uwek suruik sahuli	Kalau gempanya dahsyat / Disusul air surut	If the earthquake is strong / Then the sea recedes
Resolution	Maheya mihawali / Fanome singa atai	Carilah segera / Tempat kalian yang tinggi	Quickly seek / A higher place
Coda / Message	Soede kahanne smong / Tureang da nenekta	Itulah namanya Smong / Cerita pendahulu kita	That is called Smong / A tale from our ancestors
Coda / Message	Miredem teher ere / Pesan dan navi da	Kenanglah benar- benar ini / Pesan dan nasehatnya	Remember this well / Its message and advice
Closure	Longola amba curito / Pado zaman nafe'e	Lanjut cerita / Pada zaman dahulu	Continue the story / Once upon a time



Table 1 shows that these messages are conveyed in a more captivating and contextualized form through a musical medium, resonating with the personality traits of the younger generation. Consequently, the values contained inside are not merely heard but also experienced and comprehended on a profound level. Textual research of *Nandong Smong* reveals three salient values: disaster mitigation education, the strengthening of local cultural identity, and the instillation of moral ideals and noble sentiments.

Figure 1: Thematic Frequency in the Nandong Smong Lyrics

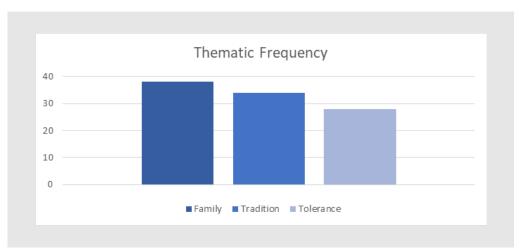


Figure 1 demonstrates that the thematic analysis of *Nandong Smong* lyrics disclosed three primary categories: disaster mitigation (38%), cultural identity (34%), and moral messages (28%). Figure 1 illustrates this frequency distribution, indicating that disaster mitigation is the predominant theme, consistent with *Nandong Smong*'s primary role as an educational instrument for disaster response. The prominent presence of cultural identification underscores the function of the lyrics in strengthening emotional connections and local identity among the Simeulue community. Simultaneously, the moral and ethical aspect underscores the song's significance in character development and contemplative learning. The examination of word count across categories reveals a balanced and content-rich structure, averaging 15–20 words per thematic section. This evidence substantiates the assertion that *Nandong Smong* is not solely a cultural artifact but a concise and impactful instructional medium that integrates practical survival skills with cultural and moral instruction.

This study adopts 'Crain's Social Learning Theory (2021), based on Bandura's insight, to examine the profound themes in *Nandong Smong*, highlighting that learning happens through both direct experience and the observation of symbolic models, including songs and narratives. *Nandong Smong* functions as a symbolic exemplar that facilitates the assimilation of cultural values, ethics, and disaster response tactics in



individuals, particularly children and adolescents, through imitation and internalization. This framework integrates the Indigenous Knowledge Framework, emphasizing the significance of oral traditions in forming collective memory and fostering communal resilience. These integrated viewpoints facilitate a more profound comprehension of *Nandong Smong* not merely as an artistic expression, but as a potent educational instrument that conveys local knowledge into significant, intergenerational learning.

The triangulation of data from interviews with parents and youth indicated a generational disparity in their assessments of *Nandong Smong*. Parents regard *Nandong Smong* as a cultural heritage that necessitates care and preservation due to its historical significance and ancestral imperatives. They underscore communal accountability, social consciousness, and the significance of deriving lessons from historical calamities. Conversely, youth—especially Gen Z—exhibit heightened interest in *Nandong Smong* because to its distinctive musical structure and the incorporation of local languages, which are both unfamiliar and captivating. They perceive the messages more readily when conveyed through song rather than conventional lectures or printed texts. This suggests that although the origin of meaning is consistent, the approach to assimilating the information varies among generations. The musical method is more effective in engaging younger audiences while preserving the ancestral values upheld by elder generations.

## 4.1. The Value of Disaster Mitigation Education

The Smong musical tradition represents an oral cultural history of the Simeulue people, imbued with significant educational value, especially regarding catastrophe mitigation. This musical serves as both entertainment and a potent educational tool with its straightforward yet impactful lyrics. Certain poems explicitly urge the prompt pursuit of elevated terrain following an earthquake and the withdrawal of seawater—indications that a tsunami may ensue. This demonstrates how the local community has established a system of pragmatic and contextual indigenous knowledge. When these ideals are presented in an entertaining musical style, Smong possesses significant potential as instructional material pertinent to the younger generation, particularly Gen Z, who are more receptive to learning through media and popular culture.

# Evidence from the text:

"Anga linon ne malli Uwek suruik sahuli Maheya mihawali Fanome singa atai"
(If the earthquake is strong / Followed by receding sea water / Quickly seek / A higher place)

Table 2. Essential Meanings of the Verses Regarding Smong as Local Identity and Ancestral Narrative

Verse (Devayan/Sigulai)	Indonesian Translation	Contextual Meaning	Educational Value
Anga linon ne malli	Jika gempa bumi kuat	It signifies the early signs of a major disaster that the community must be aware of.	Early detection of natural disasters
Uwek suruik sahuli	Diikuti dengan surutnya air laut	A further sign that strongly indicates the imminent onset of a tsunami.	Understanding natural warning signals
Maheya mihawali	Segera cari	A call to act promptly upon identifying the signs	Rapid responses in emergency situations
Fanome singa atai	Tempat yang lebih tinggi	A specific directive that indicates a secure location for evacuation	Being aware of safe evacuation locations

Table 2 demonstrates that the lyrics Anga linon ne malli / Uwek suruik sahuli / Maheya mihawali / Fanome singa atai communicate essential information regarding survival strategies during natural disasters, particularly earthquakes and tsunamis. This verse instructs the local community that a significant earthquake, accompanied by receding seawater, indicates the imminent arrival of a large wave or tsunami. Consequently, it is imperative that they promptly seek elevated terrain for safety. The lyrics exemplify a straightforward yet efficient early warning system transmitted through oral tradition and music. This essential information is encapsulated in a folk song that is memorable, easily understood, and suitable for teaching, particularly to younger audiences. The Smong musical exemplifies a unique pattern of local wisdom, characterized by the transmission of vital knowledge through collective and intergenerational artistic mediums. This pattern highlights that knowledge transfer in Gen Z education can occur not only through formal methods but also through cultural and musical expressions that reflect everyday experiences. Smong illustrates the community's understanding of nature and the significance of harmonious coexistence with it. This illustrates the development of social defense systems within communities, rooted in collective experience and cultural memory. For Gen Z, well-versed in digital media, musical forms can be transformed into engaging and relevant educational content that emphasizes values, thereby enhancing disaster literacy and fostering appreciation for local culture.

## 4.2. Strengthening Local Cultural Identity

Evidence from the text:

"Soede kahanne smong / Tureang da nenekta"

(That is called Smong / The story of our ancestors)



Table 3. The ancestral story's mandate and cultural values
Source: Interview Data

Line (Devayan/Sigulai)	Indonesian Translation	Contextual Meaning	Cultural and Educational Values
Soede kahanne smong	Itulah yang disebut Smong	It is the local term for tsunami, suggesting that the term is based on collective experience.	Local identity, traditional vocabulary for disaster mitigation
Tureang da nenekta	Kisah pendahulu kita		Cultural heritage, intergenerational knowledge transfer, community education

Table 3 indicates that the lyrics Soede kahanne smong / Tureang da nenekta explicitly reference the term Smong as the local designation for a tsunami, illustrating the shared experience of the Simeulue community in confronting natural disasters. This expression serves not only as a designation but also as a fundamental component of the cultural identity inherent in the community. The lyrics indicate that knowledge of Smong is transmitted orally via ancestral narratives across generations. This text emphasizes that disaster mitigation in Simeulue encompasses not only technical aspects but also cultural heritage, which enhances social cohesion and collective awareness in community protection. Three primary trends can be discerned from the lyrics table. The term Smong exemplifies a commitment to preserving traditional vocabulary, serving as a mechanism for disaster mitigation and reinforcing local identity. The assertion that the narrative is an inheritance from ancestors signifies a continuous oral transmission of knowledge, facilitating the ongoing and natural occurrence of disaster education within the community. The cultural values reflected in these lyrics illustrate the Simeulue community's inclination to utilize cultural narratives as tools for education and the reinforcement of social solidarity, integrating disaster mitigation into daily life and tradition.

## 4.3. Inculcating Moral Values and Noble Mandates

Evidence from the text:

"Curito nenek moyang ta/Amanah afe nasehatla"

(The story of our ancestors / A mandate in the form of advice)

Table 4. Contextual meaning, cultural & educational values, and relevance for Gen Z
Source: Interview Data

Line (Devayan/Sigulai)	Indonesian Translation	Contextual Meaning	Cultural & Educational Values	Relevance for Gen Z
				Establishing a connection between the traditional roots and regional identity of the young generation
				Assuming social responsibility and awareness of disaster preparedness

Table 4 demonstrates that the lyrics *Curito nenek moyang ta / Amanah afe nasehatla* affirm that the message contained in the story is not something new, but a valuable and value-laden heritage from ancestors. This ancestral narrative encompasses a directive or significant guidance that transcends ordinary information, serving as a moral imperative for the community's safety and survival. Consequently,



these poems exemplify how local culture incorporates historical and ethical principles as a basis for continuous education, particularly in the context of confronting calamities and life adversities. Three primary trends may be discerned from the lyric table. The focus on the ancestral origins of information demonstrates a pronounced inclination to uphold and honor cultural heritage and local historical foundations as a reservoir of knowledge. The mandate communicated transcends mere knowledge; it embodies moral guidance that reflects the community's collective consciousness and ethical principles for survival. The significance of these values for the younger generation, particularly Gen Z, pertains to initiatives aimed at linking them to their cultural heritage and fostering social responsibility and understanding regarding disaster mitigation, ensuring that local values persist and are integrated into contemporary life.

#### 5. Discussion

The findings of this study offer a significant contribution to the development of disaster education rooted in local wisdom, particularly concerning younger generations who are more responsive to artistic and media-based approaches. The musical form of Nandong Smong demonstrates that disaster mitigation values do not need to be conveyed solely through technocratic methods but can be transformed into a more humanistic and contextual format. Theoretically, these findings enrich the literature on cultural pedagogy and affective approaches to disaster education (Okumuşlar & Bilecik, 2019). Practically, they show that oral traditions, when reimagined through performance art, can enhance engagement, comprehension, and retention among learners. As such, this study lays the groundwork for a more adaptive and relevant curriculum for Gen Z, emphasizing a balance between cognitive, affective, and cultural elements in learning. The revitalization of Smong exemplifies how traditional knowledge can be transformed into an emotionally resonant educational medium.

Despite its strengths in building emotional connection and collective memory, the oral and musical approach to disaster education has several limitations. One key challenge is the lack of standardization; as a narrative and interpretive form, the messages in songs or stories can become distorted or lose accuracy over generations (Marja & Suvi, 2021). Moreover, this approach requires a deep understanding of local culture, which may not be shared by formal educators or curriculum developers. The musical format also demands specific resources, such as training in performance arts and access to appropriate facilities, which are not always available in remote or underresourced areas. Some may argue that this method lacks scientific rigor compared to formal education modules based on technical data. Therefore, it is crucial to support this approach with pedagogical guidelines and scientific validation to ensure its



credibility and broader acceptance within national educational frameworks.

The Smong approach as a culturally rooted early warning system mirrors similar practices around the world. For example, Japan has the Namazu legend used to teach about earthquakes (Sato et al., 2021); in Hawaii, the Mo'olelo narrative tradition transmits tsunami knowledge 'Spivak et al., 2021); in Samoa, traditional songs commemorate past earthquakes and floods (Garland et al., 2015). These comparisons affirm the initial hypothesis of this study that Nandong Smong, when delivered through music, is more effective than conventional oral storytelling because it integrates narrative, rhythm, and emotional intensity. By embedding messages in music, disaster knowledge is not only cognitively understood but also emotionally retained. This supports the notion that culturally based education models—when delivered in engaging and affective formats—can significantly enhance intergenerational disaster literacy.

The Nandong Smong model holds strong potential for replication in other regions that possess rich oral traditions and face high disaster risks, such as the Pacific Islands and Southeast Asia. In the Philippines, for instance, the Hudhud chants contain ethical narratives and responses to environmental hazards (D. Fagsao, 2019). In Papua New Guinea, folklore is used to recall volcanic eruptions (Baruadi & Eraku, 2018). In Vanuatu and Tonga, traditional songs and dances communicate ecological and disaster-related messages (Jackson et al., 2017). Thai coastal communities have also developed post-2004 tsunami folktales to teach preparedness (MHumNut et al., 2021). These five examples indicate a shared cultural foundation that could be adapted for musical or narrative-based disaster education. By tailoring the structure, language, and performance styles to local contexts, models like *Smong* can strengthen community resilience across diverse geographical and cultural landscapes.

Despite its potential, integrating oral traditions like *Smong* into formal curricula faces several challenges. First, standardized national curricula often marginalize local innovations, leaving little room for culturally embedded approaches. Second, teachers are rarely trained to implement art- or culture-based pedagogies, making such methods difficult to apply effectively. Third, in bureaucratic education systems, local traditions are frequently perceived as lacking academic value, resulting in limited formal evaluation or funding. Fourth, resistance may also come from within the community when modern adaptations of tradition are viewed as deviations from cultural authenticity. Therefore, integration must be carried out through participatory strategies involving local stakeholders, curriculum developers, and cultural experts. Only through inclusive collaboration can preservation and innovation work together to



build sustainable and culturally grounded disaster education.

This study's findings significantly contribute to the advancement of disaster education grounded in local wisdom, especially for younger generations who are more receptive to creative and media-oriented methods. The musical structure of *Nandong Smong* illustrates that disaster mitigation principles can be communicated not only through technical means but also through a more humanistic and contextual approach. These findings theoretically enhance the literature on cultural pedagogy and affective methodologies in disaster education (Okumuşlar & Bilecik, 2019). They demonstrate that oral traditions, when reinterpreted through performance art, can improve engagement, understanding, and retention in learners. This study establishes the foundation for a more flexible and pertinent curriculum for Gen Z, highlighting the importance of balancing cognitive, emotive, and cultural components in education. The rebirth of *Smong* illustrates the transformation of traditional knowledge into a compelling instructional medium.

Although the oral and musical methods of disaster education excel in fostering emotional connections and collective memory, they possess numerous limitations. A primary difficulty is the absence of standardization; as a narrative and interpretative medium, the messages in songs or stories may become corrupted or lose fidelity over generations (Marja & Suvi, 2021). This approach necessitates a profound comprehension of local culture, which may not be possessed by professional educators or curriculum developers. The musical format requires specific resources, including expertise in the performing arts and access to suitable facilities, which are sometimes lacking in remote or under-resourced regions. Some may argue that this strategy lacks scientific rigor compared to formal educational modules grounded in technological data. Consequently, it is imperative to underpin this methodology with pedagogical principles and empirical validation to guarantee its legitimacy and wider acceptability within national educational systems.

The Smong method, as a culturally embedded early warning system, reflects analogous activities globally. For instance, Japan employs the Namazu legend to impart knowledge about earthquakes (Sato et al., 2021); Hawaii utilizes the Mo'olelo narrative tradition to convey information regarding tsunamis (Spivak et al., 2021); in Samoa, traditional songs memorialize historical earthquakes and floods (Garland et al., 2015). The findings substantiate the primary hypothesis of this study that Nandong Smong, when expressed through music, is more effective than conventional oral storytelling due to its integration of narrative, rhythm, and emotional intensity. Embedding messages in music facilitates both cognitive comprehension and emotional retention of disaster knowledge. This substantiates the idea that culturally



grounded educational frameworks—when presented in engaging and emotive formats—can markedly improve intergenerational disaster literacy.

(Fagsao, 2019). In Papua New Guinea, folklore is used to recall volcanic eruptions (Baruadi & Eraku, 2018). In Vanuatu and Tonga, traditional songs and dances communicate ecological and disaster-related messages (Jackson et al., 2017). Thai coastal communities have also developed post-2004 tsunami folktales to teach preparedness –(MHumNut et al., 2021).

The Nandong Smong model exhibits significant potential for replication in other areas characterized by robust oral traditions and elevated disaster risks, including the Pacific Islands and Southeast Asia. In the Philippines, the Hudhud chants encompass ethical tales and reactions to environmental threats (Fagsao, 2019). Folklore in Papua New Guinea serves to commemorate volcanic eruptions (Baruadi & Eraku, 2018). In Vanuatu and Tonga, traditional songs and dances convey ecological and disaster-related themes (Jackson et al., 2017). Post-2004 tsunami folktales have been created by Thai coastal communities to impart lessons on preparedness –(MHumNut et al., 2021). These five examples demonstrate a common cultural foundation that could be utilized for musical or narrative-driven disaster teaching. By customizing the structure, vocabulary, and performance styles to local situations, models such as *Smong* can enhance community resilience across various geographical and cultural environments.

Integrating oral traditions such as *Smong* into formal curricula presents numerous problems, despite their potential. Standardized national curriculum frequently suppresses local ideas, allowing minimal space for culturally rooted methodologies. Secondly, educators are infrequently educated to employ art- or culture-based pedagogies, rendering the effective application of such methods challenging. Third, in bureaucratic educational institutions, local traditions are often regarded as devoid of academic merit, leading to little official assessment or financial support. Fourth, resistance may arise from within the community when contemporary adaptations of tradition are perceived as departures from cultural authenticity. Consequently, integration must occur via participatory procedures that engage local stakeholders, curriculum developers, and cultural experts. Only through inclusive collaboration can preservation and innovation synergize to establish sustainable and culturally rooted disaster education.

#### 6. Conclusion

This study investigated the extent to which the *Nandong Smong* tradition can be effectively applied as an educational medium to improve disaster literacy, cultural



identity, and moral values among Gen Z in Simeulue. The research utilized narrative and thematic analysis to clarify three main functions of *Smong*: serving as a medium for disaster mitigation education through local early warning signs, reinforcing Simeulue's cultural identity through ancestral storytelling and language use, and acting as a channel for transmitting moral values and intergenerational responsibility. The findings highlight the efficacy of *Smong*, particularly when presented in an engaging and musically appealing manner, as a viable alternative to conventional disaster education models, especially for digitally oriented learners like Gen Z. This investigation underscores the diverse advantages of incorporating cultural heritage into educational frameworks, proposing a dynamic strategy to involve younger generations in vital life skills and community values.

This study is significant due to its innovative contribution to transforming disaster education by employing culturally relevant, emotionally engaging, and participatory frameworks. This contribution introduces an essential aspect to the current discussion regarding the integration of indigenous knowledge and oral traditions into community-based resilience frameworks, providing insights that connect educational theory, cultural studies, and disaster management. This study recognizes specific limitations, despite its innovative approach. The analysis fails to include quantitative evaluations of learning outcomes, lacks structured contributions from younger community members, and does not thoroughly explore the adaptation of *Smong* to digital platforms. The identified omissions create gaps that subsequent research could explore, thereby facilitating a thorough understanding of the *Smong* tradition's influence across diverse modalities and demographic groups.

To mitigate the limitations identified in the study, subsequent research should adopt a targeted participatory ethnographic methodology involving youth, which would facilitate the inclusion of varied perspectives and improve the credibility of the results. Assessing the integration of digital adaptations of *Smong* into school curricula offers a significant opportunity for investigation, potentially connecting cultural education with contemporary technological developments. Furthermore, implementing systematic impact evaluations to measure concrete changes in disaster awareness and preparedness behaviors would yield empirical evidence regarding the efficacy of the *Smong* musical tradition as an educational instrument. This multifaceted investigation would not only confirm but also broaden the applicability of *Smong* within wider national and potentially international educational contexts, thereby enhancing its significance and scalability.

To maintain the relevance and integration of culturally rooted models such as Smong within national disaster education strategies, it is essential to pursue



continuous research and policy development. Through the exploration and validation of cultural transmissions via innovative educational initiatives, stakeholders have the capacity to provide future generations with essential knowledge that respects heritage while integrating contemporary elements. This research establishes a foundation for future initiatives, presenting a framework that integrates cultural identity with essential life skills and establishing a benchmark for the role of indigenous knowledge in fostering resilient and informed communities. The ongoing evolution of these culturally inspired adaptations is poised to significantly enhance educational capacities and foster community-wide resilience, not only in Simeulue but also potentially serving as a model for various cultural contexts globally.

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