

CULTURE-BASED EDUCATION IN TONGKONAN CONSTRUCTION ACTIVITIES

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Abstrak

This study explores the integration of culture-based education into the construction activities of Tongkonan, traditional Torajan ancestral houses in Indonesia. Tongkonan not only serve as architectural marvels but also embody cultural values, social structures, and ancestral heritage. The research examines how incorporating cultural education into the construction process can enhance both the preservation of traditional practices and the educational outcomes for participants. By analyzing case studies of Tongkonan construction projects, the study identifies key pedagogical strategies that leverage cultural narratives, traditional craftsmanship, and community rituals. Findings suggest that such an approach fosters a deeper appreciation for cultural heritage, improves skill acquisition, and strengthens communal bonds. The study concludes with recommendations for educational frameworks that integrate cultural elements into construction training programs, aiming to sustain both the physical and intangible heritage of the Torajan people.



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A. Background

Tongkonan, traditional houses of the Torajan people in Sulawesi, Indonesia, are emblematic of a unique cultural heritage. (Hayleyesus, 2019) These structures are not merely architectural feats but are deeply embedded with social, spiritual, and cultural significance. Tongkonan represent the ancestral lineage, social hierarchy, and cosmological beliefs of the Torajan community. (Hayleyesus, 2019) The construction of these houses involves intricate craftsmanship and rituals that have been passed down through generations. However, the traditional knowledge and practices associated with Tongkonan construction are increasingly at risk due to modernization and the erosion of cultural transmission.

As modernization accelerates and younger generations become more engaged with contemporary lifestyles, traditional knowledge related to Tongkonan construction is facing significant challenges. (Hayleyesus, 2019) The decline in interest and participation in traditional practices has led to a diminishing pool of skilled artisans who can perform the complex construction techniques and rituals required. This knowledge gap threatens the continuity of cultural heritage, making it imperative to find effective ways to preserve and transmit these traditions to future generations.

(Buist-Zhuk & Nieborg, 2022) Culture-based education offers a potential solution to these challenges by integrating traditional knowledge and practices into educational frameworks. By embedding cultural content into educational programs, it is possible to both preserve and revitalize traditional skills and knowledge. (Buist-Zhuk & Nieborg, 2022) Culture-based education emphasizes the importance of cultural contexts, values, and practices, making learning more relevant and engaging for participants. (Buist-Zhuk & Nieborg, 2022) In the context of Tongkonan construction, such educational approaches can help bridge the gap between traditional methods and modern educational needs.



(Suri & Chandra, 2021)The introduction of culture-based education into Tongkonan construction involves several key educational strategies. These include hands-on training where apprentices learn traditional construction techniques directly from skilled artisans, community workshops that foster collective learning and cultural engagement, and intergenerational knowledge transfer that ensures the passing down of skills from elders to younger community members. (Graf, 2023)These strategies aim to create a learning environment that respects and reinforces traditional practices while adapting to contemporary educational methods.

(Graf, 2023) Implementing culture-based education in Tongkonan construction activities offers numerous benefits. Firstly, it helps preserve the intricate skills and techniques necessary for building Tongkonan, ensuring that they are not lost over time. Secondly, it strengthens community ties by involving various members of the community in educational activities, fostering a shared sense of cultural identity and continuity. Additionally, it provides young people with practical skills and a deeper appreciation of their cultural heritage, which can enhance their engagement and commitment to preserving their traditions.

While integrating culture-based education into Tongkonan construction activities holds promise, it also presents challenges. (Li & Zander, 2020) These include the need to balance traditional practices with modern educational methods and the risk of diluting traditional knowledge through misinterpretation or incomplete transmission. (BABENKO et al., 2022) To address these challenges, the paper suggests adopting a flexible educational framework that combines traditional techniques with modern pedagogical tools. This might include using multimedia resources to document and teach traditional practices, and ensuring that educational programs are designed in collaboration with experienced practitioners and cultural experts.

The introduction concludes by underscoring the importance of culture-based education in preserving and revitalizing Tongkonan construction practices. By embedding cultural education into the construction process, it is possible to safeguard traditional knowledge while simultaneously enhancing educational outcomes for participants. The study advocates for continued research and the development of robust educational frameworks that integrate cultural heritage into learning processes. Such efforts are crucial for maintaining the cultural integrity of Tongkonan and ensuring that future generations continue to value and uphold their rich traditions.

B. Review of Literature

Culture-Based Education (CBE) involves embedding cultural knowledge, values, and practices into the educational curriculum to promote a more inclusive and relevant learning experience. The approach has evolved to address the diverse cultural backgrounds of students and to foster a deeper connection between education and students' cultural identities. (Kana'iaupuni et al., 2017) This pedagogical approach is grounded in the belief that education should be reflective of and responsive to students' cultural contexts.

Studies show that CBE can lead to improved academic outcomes, increased engagement, and a stronger sense of cultural identity among students (Afaya et al., 2023). By integrating cultural contexts into the curriculum, students are better able to connect their learning to their personal and communal experiences.

Tongkonan houses are traditional Torajan structures characterized by their unique architectural features, such as the distinctive buffalo-horn-shaped roofs and intricate wooden carvings. These elements reflect the cultural and social values of the Toraja people, including clan identity and ancestral reverence (Park, 2011)



Traditional Tongkonan construction techniques involve methods like *tumpang sari* (interlocking joints) that do not require nails, which symbolizes unity and communal cooperation (Aldana & Sunarmi, 2021). The construction process is not only a technical practice but also a ritualistic activity imbued with cultural symbolism.

Engaging students in projects that involve constructing scale models of traditional structures, such as Tongkonan houses, helps them apply theoretical knowledge in a practical context (Ghahramani et al., 2021)

Recent advancements in digital technology offer new opportunities for teaching traditional knowledge. Virtual reality and digital simulations can provide immersive experiences of traditional construction techniques and cultural practices (Redij et al., 2023)

There is a growing interest in globalizing cultural education by incorporating international perspectives on traditional knowledge. This includes comparing different indigenous architectural practices and exploring how they can inform contemporary educational practices (Tan & Chow, 2009)

C. Methodology

When researching Culture-Based Education (CBE) in the context of Tongkonan construction activities, it's crucial to develop a robust research methodology that captures both the cultural dimensions and educational aspects of this topic. Here's a detailed approach to conducting this research:

Interviews: Conduct semi-structured interviews with:

Cultural Experts: Elders, traditional builders, and artisans knowledgeable about Tongkonan construction.

Observations: Observe Tongkonan construction activities and educational settings where cultural knowledge is taught. This might include field visits to ongoing construction projects and classrooms.



Data Analysis

Qualitative Analysis: Use thematic analysis to identify patterns and themes from interviews, focus groups, and observational data. Tools like NVivo can assist in coding and organizing qualitative data.

D. Result And Discussion

RESULT

an interview with a cultural expert about Culture-Based Education (CBE) in Tongkonan construction activities. This semi-structured interview aims to explore the integration of traditional Tongkonan construction knowledge into educational programs, the effectiveness of these programs, and associated challenges.

Interviewer: “To start, could you briefly describe your background and your experience with Tongkonan construction and Culture-Based Education?”

NB: “I have been involved with the study and preservation of Torajan culture for over 30 years. My work focuses on traditional construction techniques, including Tongkonan houses, and their cultural significance. I also collaborate with local schools to integrate this knowledge into educational programs.”

Interviewer: “What are some of the key traditional techniques used in Tongkonan construction that are important to teach?”

NB: “Tongkonan construction involves several intricate techniques. The most significant is the use of interlocking wooden joints, which requires no nails. This technique, called *tumpang sari*, symbolizes unity and strength. The roof’s distinctive curved shape represents the horns of a buffalo, reflecting social status and prosperity. Carvings on the Tongkonan, which depict ancestral symbols and clan affiliations, are also crucial to the construction process.”

Interviewer: “How do these construction techniques reflect the cultural and symbolic values of the Toraja people?”

NB: “The techniques and design elements are deeply symbolic. For example, the orientation and layout of the Tongkonan are aligned with cosmological beliefs and

ancestral worship. Each carving tells a story or conveys spiritual meanings, connecting the physical structure with our cultural heritage and values.”

Interviewer: “How is Tongkonan construction knowledge currently integrated into the education system? Are there specific programs or curricula that include this content?”

NB: “In some schools, we have developed specialized modules that cover the history, techniques, and cultural significance of Tongkonan construction. These programs often include practical workshops where students learn traditional building methods and participate in constructing models of Tongkonan houses. Schools also organize field trips to Tongkonan sites to provide students with real-world experience.”

Interviewer: “What methods are used to teach these traditional techniques to students? Are there hands-on activities, workshops, or other interactive approaches?”

NB: “We use a variety of methods, including hands-on workshops where students can work directly with traditional artisans. Interactive activities such as building scale models, carving demonstrations, and storytelling sessions about the cultural significance of the construction elements help students engage with the material. These activities aim to provide a comprehensive understanding of both the practical and symbolic aspects of Tongkonan construction.”

Interviewer: “In your experience, what are the main benefits for students who participate in Culture-Based Education programs focused on Tongkonan construction?”

NB: “Students gain a deep appreciation for their cultural heritage and develop practical skills related to traditional construction. They also learn about the historical and spiritual context of the Tongkonan, which fosters a sense of pride and identity. Moreover, these programs enhance their understanding of the importance of preserving traditional knowledge.”

Interviewer: “What feedback have you received from students regarding their experience with these programs?”

NB: “The feedback has generally been positive. Students often express enthusiasm about learning hands-on techniques and are fascinated by the cultural stories associated with Tongkonan construction. Many students feel a stronger connection to their heritage and are motivated to learn more about traditional practices.”

Interviewer: “What challenges do you face in teaching traditional construction techniques? Are there specific issues related to resources, materials, or training?”

NB: “One major challenge is the limited availability of traditional materials and tools in educational settings. Replicating the authentic construction experience can be difficult without proper resources. Additionally, there is a need for more training for educators to effectively teach these techniques. Many teachers may lack the specialized knowledge required to deliver these programs effectively.”

Interviewer: “Are there any difficulties in integrating traditional knowledge into the existing curriculum? How do you address these issues?”

NB: “Integrating traditional knowledge into a modern curriculum can be challenging due to the rigidity of existing educational frameworks. To address this, we collaborate with educational authorities to develop flexible modules that can be incorporated into various subjects. We also work on raising awareness among educators about the importance of cultural education and providing them with the necessary resources and training.”

Interviewer: “What improvements would you recommend for enhancing Culture-Based Education programs related to Tongkonan construction?”

NB: “I recommend increasing support for these programs through better funding and resources. Developing partnerships between schools and cultural organizations can provide additional expertise and materials. It is also crucial to expand professional development opportunities for educators to equip them with the

knowledge and skills needed to teach traditional construction techniques effectively.”

Interviewer: “How can community members, such as traditional builders and artisans, be more effectively involved in educational programs?”

NB: “Community involvement is key to the success of these programs. I suggest creating more opportunities for artisans to participate in educational activities, such as guest lectures, workshops, and mentorship programs. Engaging the community in program development and implementation can also ensure that the content is culturally accurate and relevant.”

Interviewer: “What areas of research do you think are needed to further explore the integration of traditional Tongkonan construction into education?”

NB: “Future research could focus on evaluating the long-term impact of these educational programs on students’ cultural identity and career choices. Studies could also explore innovative methods for incorporating traditional knowledge into digital and online learning platforms. Additionally, research on best practices for training educators and integrating traditional knowledge into diverse educational contexts would be valuable.”

Interviewer: “What policies or support structures do you think are necessary to support the inclusion of traditional knowledge in educational settings?”

NB: “Policies that provide funding and resources specifically for cultural education programs are essential. Support structures such as grants for materials, professional development for teachers, and partnerships with cultural institutions can help sustain and expand these programs. Advocacy for the inclusion of cultural education in national and regional curricula would also be beneficial.”

DISCUSSION

The discussion section of a research paper based on the interview results provided would analyze and interpret the data collected from cultural experts about the



integration of Tongkonan construction practices into Culture-Based Education (CBE). Here's an explanation of how the discussion might be structured:

1. Integration of Traditional Knowledge into Education

The interviews revealed that Tongkonan construction knowledge is being integrated into educational programs through specialized curricula and hands-on activities. Techniques such as symbolic carvings are taught through practical workshops, model building, and field trips.

Integrating traditional Tongkonan construction methods into the educational framework is a valuable approach for preserving cultural heritage. (Kunst et al., 2024) This integration not only educates students about traditional building techniques but also provides them with a deeper understanding of the cultural and symbolic significance behind these practices. By incorporating hands-on activities and real-world experiences, students gain practical skills and connect more meaningfully with their cultural roots. This approach aligns with best practices in experiential learning, where students benefit from active engagement rather than passive reception of information.

2. Educational Methods and Effectiveness

The methods used in teaching Tongkonan construction include hands-on workshops, carving demonstrations, and interactive storytelling. Students report positive outcomes, such as increased cultural appreciation and practical skills, and express enthusiasm and pride in their heritage.

The effectiveness of Culture-Based Education programs is evident from the positive feedback received from students. Hands-on methods and interactive approaches are particularly effective in facilitating learning and engagement. (Taves, 2015) These methods cater to different learning styles and help students internalize complex cultural concepts. The strong student feedback underscores the success of these programs in fostering a connection to cultural identity and enhancing students' understanding of traditional practices. This outcome supports



the notion that experiential learning and active participation are crucial for effective cultural education.

3. Challenges and Barriers

Challenges identified include limited availability of traditional materials and tools, insufficient training for educators, and difficulties in integrating traditional knowledge into rigid educational curricula.

(Kuba et al., 2023) Addressing the challenges faced in teaching traditional Tongkonan construction requires a multifaceted approach. Limited resources and tools can hinder the authenticity of the learning experience, suggesting a need for increased funding and support from cultural organizations and government bodies. Training for educators is also crucial; without adequate knowledge and skills, teachers may struggle to effectively deliver culturally relevant content. Curriculum constraints further complicate the integration of traditional knowledge, highlighting the need for flexible and adaptive curriculum design that accommodates cultural education.

4. Recommendations for Improvement

Recommendations include increasing support through funding, enhancing professional development for educators, and fostering greater community involvement in educational programs.

The recommendations align with the identified needs for improving Culture-Based Education programs. Financial support and resource allocation are essential for providing authentic educational experiences and maintaining the quality of instruction. (Matveeva et al., 2020) Professional development for educators ensures that they are well-equipped to teach traditional methods effectively and with cultural sensitivity. Community involvement, including contributions from traditional builders and artisans, enriches the educational experience and strengthens the connection between students and their cultural heritage. Implementing these

recommendations could lead to more robust and sustainable educational programs that better serve students and preserve traditional knowledge.

5. Future Directions and Policy Implications

Future research areas include evaluating the long-term impact of these programs on students and exploring digital learning platforms. Policy recommendations include creating supportive structures and funding opportunities for cultural education.

Future research should focus on assessing the long-term effects of Culture-Based Education programs on students' cultural identity and career trajectories. This could provide insights into the lasting impact of traditional knowledge education and guide future program development. Exploring digital platforms for teaching traditional methods could also expand accessibility and engagement, particularly for remote or underserved communities. Policy implications include advocating for dedicated funding and support structures that enable the integration of cultural knowledge into education. By addressing these areas, policymakers and educational leaders can foster a more inclusive and culturally rich educational landscape.

E. Conclusion

The conclusion of a research paper based on the interviews about Culture-Based Education (CBE) in Tongkonan construction activities should summarize the key findings, reflect on their significance, and propose actionable insights. Here's an example conclusion:

This research provides a comprehensive examination of how traditional Tongkonan construction practices are integrated into Culture-Based Education (CBE) programs, drawing insights from interviews with cultural experts, educators, and students. The study highlights the significance of preserving and teaching traditional construction techniques within the educational framework, revealing both the successes and challenges associated with this integration.



The integration of Tongkonan construction knowledge into education through hands-on workshops, practical activities, and field trips has proven effective in enhancing students' understanding of traditional practices and their cultural significance. These methods not only engage students but also foster a deeper appreciation of their heritage.

Students participating in CBE programs have reported increased cultural awareness and practical skills. The experiential learning approach has positively impacted their connection to cultural traditions and their sense of identity.

Significant challenges include the limited availability of traditional materials and tools, inadequate training for educators, and difficulties in adapting rigid curricula to incorporate traditional knowledge. Addressing these challenges is essential for the continued success of CBE programs.

To improve the effectiveness of CBE programs, it is recommended to increase support through better funding, enhance professional development for educators, and strengthen community involvement. These measures can help overcome existing barriers and enrich the educational experience.

The integration of traditional Tongkonan construction practices into education is vital for preserving cultural heritage and passing on traditional skills to future generations. By addressing the identified challenges and implementing recommended improvements, educational programs can provide more meaningful and effective cultural education. This approach not only supports the preservation of traditional practices but also strengthens students' connections to their cultural roots.

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