

***Strengthening Religious Moderation Character Education Based  
on Batak Customary Values through Mathematics Learning  
in Pahae Jae***

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***Abstract***

Religious moderation is a vital aspect of character education, essential for fostering a tolerant and harmonious society. In Pahae Jae District, North Tapanuli Regency, the local wisdom of Batak customary culture embodies noble values that naturally align with the principles of religious moderation. This article discusses how the integration of Batak customary values into mathematics learning can strengthen character education in religious moderation. Through contextual and socio-cultural learning approaches, students not only learn mathematical concepts but also internalize the values of tolerance, cooperation, and mutual respect, which are characteristics of Batak custom/culture. The findings of the study indicate that character strengthening through local culture-based mathematics has the potential to enhance moderate attitudes and appreciation for diversity among students. Its practical implications can serve as an innovative model for character learning/education in other regions with different cultural backgrounds.

**Keywords:** *Character Education; Religious Moderation; Batak Culture; Mathematics Learning.*

***Abstrak***

Pendidikan karakter moderasi beragama merupakan aspek penting dalam membangun masyarakat yang toleran dan harmonis. Di Kecamatan Pahae Jae, Kabupaten Tapanuli Utara, kearifan lokal Adat Batak memiliki nilai-nilai luhur yang sejalan dengan prinsip moderasi beragama. Artikel ini membahas bagaimana integrasi nilai-nilai Adat Batak ke dalam pembelajaran matematika dapat memperkuat pendidikan karakter moderasi beragama. Melalui pendekatan pembelajaran kontekstual dan sosial, siswa tidak hanya belajar konsep matematika, tetapi juga mengenal nilai toleransi, kerja sama, dan saling menghormati yang menjadi ciri khas Adat Batak. Hasil kajian menunjukkan bahwa penguatan karakter melalui matematika berbasis budaya lokal berpotensi meningkatkan sikap moderat dan menghargai perbedaan di kalangan siswa. Implikasi praktisnya dapat dijadikan model pembelajaran karakter yang inovatif di daerah lain dengan latar budaya berbeda.

**Kata Kunci:** Pendidikan Karakter; Moderasi Beragama; Adat Batak; Pembelajaran Matematika.

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## INTRODUCTION

Character education is one of the main focuses of the Indonesian education curriculum. Its aim is to shape a generation that excels not only academically but also possesses good character and positive attitudes. One of the essential aspects of character education is the reinforcement of religious moderation an attitude of tolerance, mutual respect, and the ability to live peacefully amidst differences in religion and belief.

Etymologically, the term moderation derives from the Latin word *moderation*, which means balance or temperance neither excessive nor deficient (Tim Penyusun Kementerian Agama RI, 2019). In Arabic, the word *moderate* is often translated as *wasath*, while *wasathiyyah* refers to the concept or attitude of moderation. Being moderate means avoiding extremes and maintaining a balanced stance (Tim Penyusun Direktorat KSKK Madrasah, 2021). In Islamic thought, religious moderation is known as *Wasathiyah al-Islam*, derived from the word *wasath*, which denotes the “middle,” “center,” or “equidistant point between two extremes (Yanto, 2021).

Religious moderation is highly relevant to the pluralistic context of Indonesian society, which consists of diverse ethnicities, cultures, and religions. Strengthening the values of religious moderation is crucial for mitigating potential social conflicts arising from differences in belief and for reinforcing national unity and cohesion. Scholars agree that character education programs have a positive impact on both character development and academic achievement (Katilmis, A., Eksi, H. & Ozturk, 2011). The role of character is fundamental, particularly when combined with intelligence. As Majid, A., & Andayani (2010) emphasize, “Intelligence plus character that is the true aim of education.” This means that intellectual ability alone is not enough; it must be accompanied by good behavior and moral integrity (Purwanto, Y., Qowaid, Q., Ma’rifataini, L., & Fauzi, 2019).

In this context, education bears responsibility not only for cognitive development but also for nurturing emotional, spiritual, and moral aspects, including fostering moderate religious attitudes in character formation.

One region with strong potential for developing culture-based character education is Pahae Jae District in North Tapanuli Regency. This area is known for its strong adherence to traditional values that promote social harmony, tolerance, and cooperation. A core principle of Batak custom is the concept of *Dalihan Na Tolu*, which emphasizes maintaining harmonious relationships within families and communities, respecting differences, and upholding collective cooperation (*gotong royong*). These values align closely with the principles of religious moderation, making them a strong social foundation for developing culture-based character education. Utilizing such local wisdom in education helps strengthen cultural identity while instilling values of tolerance and moderation in younger generations.

On the other hand, mathematics is often perceived as an abstract subject with little connection to students' social and cultural realities. In fact, mathematics learning involves interactive processes between teachers and students, aiming to foster optimal development in understanding and applying concepts. Mathematics, therefore, holds great potential as a medium for character education and can effectively be used to embed these values through culturally contextualized learning.

Previous researchers have connected local culture with mathematics learning through what is known as *ethnomathematics* a field that explores the relationship between culture and mathematical thinking. For instance, Rakhmawati & Alifia, (2018) suggest that mathematics learning based on local wisdom helps bring mathematics closer to students' daily lives while fostering appreciation for cultural values that strengthen character. Similarly, Surtini et al, (2022) argue that geometry learning integrated with *ethnomathematics* can shape students' character in line with national identity. However, these studies focus primarily on cultural aspects in mathematics education without integrating other important domains, such as religious moderation values.

This integration is particularly relevant in Indonesia, a nation with diverse religious traditions. Unfortunately, such integration has not yet been widely implemented in mathematics education, even though promoting religious

moderation among students is equally vital. Through religious moderation, learners are taught to prevent and resolve both intra and inter religious conflicts.

Therefore, this article proposes that mathematics learning connected to everyday life and local culture can provide meaningful educational experiences while internalizing important character values supported by a spirit of religious moderation. Integrating Batak customary values into mathematics learning not only facilitates students' understanding of mathematical concepts but also cultivates tolerance, mutual respect, and cooperation the core principles of religious moderation. For example, contextual math problems based on Batak traditions can be used to develop mathematical skills while simultaneously instilling values of cooperation, respect, and inclusivity.

In conclusion, strengthening character education through the integration of religious moderation values based on Batak culture in mathematics learning in Pahae Jae District represents an innovative effort to develop a generation that is not only cognitively intelligent but also inclusive, respectful, and harmonious in character. This article seeks to examine how such integration can be implemented and its impact on students' attitudes and character. The findings are expected to serve as a model adaptable to other regions with different cultural backgrounds, thereby optimizing and contextualizing character education based on local wisdom.

## **RESEARCH METHODS**

This research employs a descriptive qualitative approach aimed at thoroughly detailing the process and impact of integrating the values of religious moderation based on Batak customs into mathematics learning in Pahae Jae District. The qualitative approach was chosen because it allows the researcher to understand the phenomenon holistically within a complex social and cultural context.

The research was conducted at elementary schools (SD) and Islamic elementary schools (MI) in North Tapanuli, located in Pahae Jae District, North

Tapanuli Regency. This region is characterized by a strong social and cultural environment where the Batak indigenous community still rigorously maintains its traditions and local values. The research subjects included mathematics teachers who implement local wisdom-based learning, as well as students as participants in the learning process.

Data were collected through several techniques, including: Observation, conducted during the mathematics learning process to directly examine how the values of Batak customs and religious moderation are integrated into teaching and learning activities. This was followed by in-depth interviews with mathematics teachers, students, and local customary figures to explore their views, experiences, and perceptions regarding the implementation of character education based on religious moderation and Batak customs. Documentation, such as teaching materials, mathematics problems containing elements of local culture, and records of learning activities, was collected for analysis.

The collected data were analyzed using a descriptive qualitative method, employing techniques of data reduction, data display, and conclusion drawing. The analysis focused on the process of integrating the character values of religious moderation and Batak customs into mathematics learning, as well as the impact on students' attitudes and understanding.

## **RESULTS AND DISCUSSION**

Based on the findings derived from observation, interviews, and documentation analysis, this research revealed several key points concerning the reinforcement of religious moderation character education rooted in Batak customs through mathematics learning in Pahae Jae District.

### **1. Integration of Batak Customary Values in Mathematics Learning**

Mathematics teachers in elementary schools (SD) and Islamic elementary schools (MI) in Pahae Jae, North Tapanuli, actively integrate Batak customary values into the learning material. For instance, mathematical word problems involve calculations related to customary ceremonies, the distribution of harvest yields, or the division of inheritance as regulated by Batak

Customary Law (Adat Batak). This approach enables students to grasp mathematical concepts more easily because the content is directly relevant to their daily lives and culture. Students appeared more enthusiastic and engaged in the learning process. As one student mentioned: *“If the problem is like this (Batak Custom), I immediately understand. I often see it at home and in this village, and I often hear about it.”*

An example from Batak customs is the concept known as Dalihan Natolu. This system encompasses three fundamental principles in the life of the Toba Batak community: boru (the women/wife-givers), hula-hula (the male/wife-takers), and anak (the children/the descendants). Dalihan Natolu governs the social, economic, and political relationships within the Toba Batak society.

The term 'Dalihan Natolu' is a fundamental concept in the life of the Toba Batak community. The term originates from the Batak language, where dalihan signifies social relations, and natolu means three. Thus, literally, 'Dalihan Natolu' can be translated as 'the three social relations' or 'three fundamental principles of social life.

- 1) Boru (The Wife-Receiver): This principle refers to the relationship involving the female lineage or the wife-receiving group (hulahula's daughters). It encompasses the norms, responsibilities, and obligations owed to the women and their families (the Boru group) within the kinship and social structure.
- 2) Hula-hula (The Wife-Givers): This principle defines the relationship with the male lineage of the wife's family (the wife-giving group). It involves the highest level of respect, norms, and reciprocal responsibilities towards the wife-givers in the family and community framework.
- 3) Anak (The Sons/Own Kin): This principle pertains to the direct male descendants or the core kinship group. It outlines the fundamental norms and responsibilities within one's immediate and extended family (the Anak group) concerning the continuity of the lineage and community welfare.

The Dalihan Na Tolu is more than a mere division of gender roles or generational categories. Instead, it establishes an essential foundation of ethics and social norms that mandate mutual respect, solidarity (marsianjuan), and collective responsibility among community members. This system forms the very basis for social relations within the Batak Toba society and is widely regarded as its paramount moral framework and guiding philosophy (falsafah hidup).

The integration of Batak indigenous values, particularly the Daliihan Na Tolu philosophy, into collaborative mathematics learning activities yielded significant results. These values, which emphasize mutual respect (honoring the roles of Hula-hula, Boru, and Anak) and cooperation (marsirimpa), functioned not merely as a social ethic but as a powerful pedagogical mediator. This application was proven to enhance students' conceptual understanding of mathematics while simultaneously fostering positive attitudes, specifically in the dimensions of solidarity and reciprocal responsibility among participants. Furthermore, the Daliihan Na Tolu framework effectively operationalized the principles of Vygotsky's Sociocultural Theory, where cultural norms facilitated productive social interaction and demonstrably expanded the students' Zone of Proximal Development (ZPD) through culturally-grounded collaboration.

Indigenous cultural values, such as the Dalihan Na Tolu philosophy, which promotes mutual respect and cooperation among family and community members, are integrated into collaborative learning group activities. This pedagogical integration is found to be effective, not only in strengthening mathematical comprehension but also in fostering a durable attitude of mutual respect and teamwork among students.

## **2. Character Education for Religious Moderation through Mathematics Learning**

Pedagogy that incorporates local indigenous values also serves to instill an attitude of religious moderation, particularly emphasizing tolerance and mutual appreciation for diversity. Teacher-facilitated discussions on the

values of peace and pluralism embedded within the Batak Custom (Adat) help students grasp that religious moderation is a fundamental component of social life.

Students demonstrated an increase in tolerant attitudes and a greater appreciation for diversity following the implementation of learning integrated with local culture. By applying the Daliihan Na Tolu principles within mathematics learning groups, students' social interactions significantly improved; they learned to engage in polite discourse and collaborate regardless of their differences. Furthermore, this productive interaction facilitated the expansion of the students' Zone of Proximal Development (ZPD), enabling them to grasp complex mathematical concepts more effectively through harmonious collaboration. This empirical finding substantiates that mathematics learning can function not only as a vehicle for academic mastery but also as a crucial means for character education.

By applying the Daliihan Na Tolu philosophy within instruction, the Batak Toba community strives to maintain social harmony, build solidarity, and preserve the continuity of their traditional values. This concept is more than a guiding principle for daily life; it actively reflects the profound cultural wealth and robust identity of the Batak Toba society.

### **3. Challenges and Opportunities**

Despite the promising research findings, several implementation challenges must be addressed. A primary challenge involves the limited availability of pedagogical resources that explicitly integrate local wisdom (such as Daliihan Na Tolu) into the mathematics curriculum. Furthermore, there is a recognized need for enhanced teacher professional capacity, requiring sustained professional development to enable educators to effectively design and implement culturally-based learning models.

Conversely, the opportunities for expanding this learning model are substantial. There is significant potential to secure policy support from regional governments and educational institutions. Such support could be realized



through the allocation of resources for developing culturally relevant teaching materials and the provision of structured and continuous teacher training.

The findings of this research affirm that the integration of the Daliihan Na Tolu indigenous philosophy into mathematics instruction functions as a transformative pedagogical strategy. This result aligns with character education theory, which asserts that reinforcing local social and cultural values significantly enhances the effectiveness of character development. A contextual and local-wisdom-based approach to mathematics learning creates space for students to engage holistically, encompassing cognitive, affective, and social dimensions.

The implementation in Pahae Jae demonstrates that character education does not need to exist as an isolated, standalone subject. However, to ensure the sustainability and broad impact of this learning model, tangible policy support is essential, particularly regarding the provision of contextual teaching resources and intensive professional development for local teachers

## **CONCLUSION**

This research concludes that the integration of religious moderation values, reinforced by the Batak indigenous wisdom (Daliihan Na Tolu), constitutes an effective pedagogical strategy within mathematics instruction in Pahae Jae District. Through this contextual approach, it was found that students not only succeeded in comprehending academic concepts but also in internalizing essential character values, such as tolerance, mutual respect, and cooperation. Specifically, the Daliihan Na Tolu principle proved to function as an effective ethical foundation for cultivating a harmonious and collaborative classroom atmosphere. Consequently, mathematics learning can be strategically developed as a medium for strengthening character education rooted in culture and the nation's noble values, extending its utility beyond mere subject mastery.

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