



Transcending Educational Boundaries: Integration of Local Wisdom of the Ammatoa Indigenous Community in the Social Dynamics of High Schools

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ABSTRACT

Purpose of the study: This research aims to determine the results of integrating local wisdom values of the Ammatoa indigenous community in social interactions in state high schools.

Methodology: The research used is field research with a qualitative descriptive type. The approach used is a sociological approach. The data from this research comes from primary data and secondary data. The method uses observation, interviews and documentation, while the data collection techniques used are data reduction, data presentation and drawing conclusions.

Main Findings: Based on the research results, it shows that the process of inheriting the values of local wisdom of the Ammatoa indigenous community in state high schools is greatly influenced by the efforts of teachers to take advantage of conditions to gain the trust of students, in this case trust provides an example of attitudes towards students, so that it can become a conscious effort that aims to pass on the values of local wisdom of the Ammatoa indigenous people. The inherited values include Pammopporang, Sipakatau, Sipakainga, and Tallasa Kamase-mase.

Novelty/Originality of this study: The main breakthrough of this article lies in the interdisciplinary approach used to integrate the local wisdom of the Ammatoa Indigenous community into the social studies education curriculum.

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1. INTRODUCTION

Humans are social creatures who build relationships with others, forming families, communities and societies. Humans have physical, mental, emotional, social, and spiritual characteristics that differentiate them from other species [1]–[3]. This can be seen from better ethics, morals and habits and being able to communicate in a complex manner [4]–[6]. This difference is obtained from daily learning activities.

Learning is the process of acquiring new knowledge, skills, understanding, or experience through study, teaching, practice, or observation. It involves absorbing information, processing it, and forming new connections in our minds [7]–[9]. Learning is the way humans and other creatures gain knowledge and develop the ability to face challenges and solve problems [10]–[12]. Learning goals can be varied, such as increasing knowledge, developing skills, gaining a deeper understanding of the world around us, preparing for a particular job, or improving the overall quality of life [13]–[15]. Learning is also a lifelong process, because we continue to learn and develop ourselves throughout our lives.

Learning involves motivation, patience, discipline, and perseverance. The process can be fun, challenging, and rewarding. By learning, we can continue to grow and develop as individuals, and face changes and challenges in life better [16]–[18]. The learning process involves several steps or stages that help in acquiring new knowledge and skills [19]–[21]. In the learning process there are several stages that need to be known, including: goal setting, information search, information processing, practice and experience, reflection, application, and evaluation [22]–[24]. However, each individual has their own way and learning stage to explore their desires effectively.

Learning materials can also be adjusted to individual wishes so that their knowledge is not limited to one area [25], [26]. For example, academic subject matter includes: Mathematics, English, Indonesian, Physics, Chemistry, Biology, History, Geography, Economics, Arts, and others. Academic subject matter is usually structured and based on the curriculum set by the educational institution [27], [28]. Students are not limited to receiving knowledge from academic learning materials, because social interactions with fellow humans and the environment can also have other big influences..

Social interaction is an important part of human life and is the foundation of complex social structures in society. Social interaction involves the exchange of information, ideas, and feelings between individuals or groups [29], [30]. Communication can be verbal (through words) or non-verbal (through facial expressions, body language, or tone of voice) [31], [32]. Through social interactions, individuals build relationships, understand the world around them, and acquire the knowledge and social skills necessary to be part of society.

This is also known as part of society, namely local wisdom. Local community wisdom refers to the knowledge, values, practices and traditions that are owned and practiced by communities or groups of people in a particular area. [33]–[35]. This is a cultural heritage obtained from continuous experience and adaptation to the natural environment, history, and values accepted from generation to generation. One of the communities that still exists is the Ammatoa indigenous community. The Ammatoa indigenous people understand that the world created by Turiek Arakna and its contents must be maintained in balance, especially forests [36], [37].

Previous research conducted by Embas, 2017 [38] with the aim of describing the Ammatoa traditional village government system in preserving the environment by looking at the implementation of the traditional government system in preserving the Kajang environment in Bulukumba Regency. It is the basis for the latest research by integrating local wisdom values in the social interactions of students in state high schools.

Previous research conducted Widodo, 2020 [39] which states that the potential for social studies learning resources related to cultural aspects is very abundant. Apart from that, Widodo, 2020 also said that social studies education is one of the subjects that is close to cultural aspects and should be able to facilitate value learning for students. Therefore, it is time to implement social studies learning using a local wisdom approach so that students in the regions are not uprooted from their own cultural roots.

Previous research conducted Miranti et al., 2021 [40] which states that an alternative source of moral values education is local wisdom which can be used as a guide for daily activities as a medium for forming meaningful character in social life. The importance of learning based on local wisdom is in accordance with the goals of education as an effort to inherit culture to underlie the growth of character education values. Through education, the noble values of local cultural wisdom should be introduced and developed to students so that they are able to become proud cultural heirs and can develop the nation's culture.

The novelty of this research is that this article can explore how the local wisdom of the Ammatoa Indigenous Community is incorporated into the school environment, by emphasizing a more holistic educational approach and respecting cultural diversity. Meanwhile, the urgency of this research lies in the importance of incorporating local wisdom values into the education system to build national character and answer the challenges of globalization. This article aims to examine the contribution of local wisdom values to education, emphasizing its potential impact on the soul and mentality of the nation, especially in the face of multifaceted globalization.

This also highlights the importance of traditional knowledge and local wisdom in preserving the environment and developing social studies learning models. The integration of local wisdom in education is seen as an appropriate method for developing basic school learning curricula and improving students' social knowledge and attitudes. Therefore, this article addresses a topic that is timely and relevant in the context of education and cultural preservation. Based on the above, the problem formulation in this research is how to integrate the local wisdom values of the Ammatoa indigenous community in social interactions in state high schools. So the aim of this research is to find out the results of integrating the local wisdom values of the Ammatoa indigenous community in social interactions in state high schools.

2. RESEARCH METHOD

2.1. Research Type

The research used in research is a qualitative research method with a case study type. Qualitative methods are methods used to examine the condition of natural objects as opposed to experiments where the

researcher is the key instrument [41], [42]. A case study is research in which the researcher explores a particular phenomenon (case) in a certain time and activity and collects detailed and in-depth information using various data collection procedures over a certain period. [43]. In simple terms, it can be said that this research is direct research aimed at describing existing phenomena [44], [45]. The reason is that researchers are able to communicate and interact in integrating the local wisdom values of the Ammatoa indigenous community in social interactions at SMA Negeri 18 Bulukumba and can describe what is happening in the field, so that the data obtained is not speculative in nature.

2.2. Research Instrument

Research instruments are tools used to collect data or information that is useful for answering research problems. The instruments used in this research were interview sheets and documentation.

2.3. Research Prosedure

The process carried out during field research uses unstructured interview techniques, so that the interview runs effectively, there are several stages that must be carried out, namely, introducing oneself and explaining the purpose of coming to the research location and bringing a research permit addressed to the school principal, teachers, stakeholders. customs, head and canteen keeper. This research does not focus on research guidelines, but rather focuses on paying attention to the characteristics and unique characteristics of informants when conducting interviews, so that interviews give the impression of chatting, joking with each other, while carrying out activities that are not rigid in nature [46].

2.4. Data Collection Technique

In-depth interviews were conducted to obtain answers to the research focus that had been formulated. Documents are records of events that have passed. Documents can be in the form of writing, images or monumental works by someone [47]. The process of taking documentation will be carried out while the research is in progress using media such as cellphones to take pictures with the informants, while the use of stationery is used to record important data submitted by the informants, all of this is needed to support the completeness of the data.

2.5. Data Analysis Technique

The data analysis technique used is based on Miles and Huberman's theory with stages: data reduction, data presentation, and drawing conclusions [48].

3. RESULTS AND DISCUSSION

Teachers who teach at SMAN 18 Bulukumba are generally of productive age, with friendly, firm personalities and easy to socialize with. The number of teachers teaching is 34 people, consisting of 18 female teachers and 16 male teachers. Students at SMAN 18 Bulukumba consist of classes X, XI, XII, which are divided into 2 classes for the Social Sciences major and 3 classes for the Science major. The number of students was 497 people consisting of male and female students.

Table 1. Number of students of SMAN 18 Bulukumba

No	Class	Gender		Amount
		Man	Woman	
1.	X	70	86	156
2.	XI	88	93	181
3.	XII	76	84	160
	Amount	233	264	497

Results of research and discussion regarding the process of inheriting local wisdom values of the Ammatoa indigenous community at SMAN 18 Bulukumba. The inheritance process is an activity carried out so that other people can obtain or know about something. The process of inheriting local wisdom values is closely related to social interaction and the individual himself. Inviting students to visit the Ammatoa traditional area to provide more in-depth knowledge to students and to go directly to observe the social conditions of the Ammatoa traditional community. So that students can understand the meaning of each activity and the local wisdom values that the Ammatao indigenous people apply in their lives.

Another inheritance process carried out by teaching staff is creating content that involves students. This content is managed by the PMR organization SMAN 18 Bulukumba, the content contains local wisdom values such as Sipakainga, Sipakatau, Pammoporang, and Tallasa Kamase-mase. This content is then disseminated via

social media YouTube so that the values of local wisdom can continue to exist amidst the onslaught of foreign culture and can still be passed down from generation to generation.



Figure 1. Content created by SMAN 18 Bulukumba students



Figure 2. Visit of SMAN 18 Bulukumba Students to the Ammatoa Traditional Area

The inheritance of the local wisdom values of the Ammatoa indigenous community in schools is greatly influenced by how teachers make use of conditions and to gain the trust of students, in this case trust provides exemplary attitudes towards students wherever they are, so that it can become a conscious effort aimed at to pass on the local wisdom values of the Ammatoa indigenous people. Educators' commitment to passing on the local wisdom values of the Ammatoa indigenous community is the basis that must be achieved in providing a good understanding to students so that they can understand the purpose of the Ammatoa indigenous local wisdom values.

The local wisdom values of the Ammatoa traditional community contained in the Pasang are considered sacred and if not implemented in daily life will have a negative impact on life in the community, as stated by Mr. Pate, the Ammatoa traditional leader, said that:

Gitte kunnri rie ni u'rangi, rie ni patantang. Tania sambarang ni gaunkang, ka rie Pasang. Lalang ngase mi injo kahajikangnga ri Pasang injo Pasang tania nu salah ka nu ballo ji pangngu'rangi.

This means that here we have something to remember, something to hold onto. Don't do anything haphazardly because there is a tide, in the tide there is all the goodness, the tide is not a wrong thing, it has value as a reminder.

Based on the results of the interview, it can be seen that Pasang ri Kajang contains life guidance for humans in terms of aspects, be it social, religious, livelihood, culture, environment and leadership systems. As is the case with local wisdom found in indigenous communities in general, Pasang ri Kajang contains various ancestral teachings whose substance is to guide humans to do good, live honestly and simply.

The things contained in Pasang ri Kajang are absolute things and have never changed from time to time. So the public is obliged to know the contents of the Pasang so that it can then be used as a guide and principle in everyday life, especially for the Ammatoa community. There are seven values contained in the Pasang ri Kajang which are the preamble or introduction to the Pasang, namely:

- a. *A'lemo Sibatu* (we are likened to an orange), *A'bulu Sipappa* (a bamboo stick) which means the orange is round in shape where the roundness symbolizes the unity around us like a family that avoids disintegration and the meaning of a bamboo stick is likened to the shape of bamboo which grows firmly so as to create character. honest and strong and useful in all things, this symbolizes how important unity is in goodness.
- b. *Manyu' Siparampe* (help from drowning), *Tallang Sipahua'* (help from drowning) which means mutual cooperation in times of difficulty and helping each other in goodness. In this post, we are reflected as social creatures who live with mutual respect and tolerance for each other.
- c. *Lingu Sipakainga* (reminding each other) means reminding each other in worldly life that this world is only temporary and we always remind each other of goodness. The tide here demands that we avoid all

negative actions or bad deeds that could be detrimental by reminding each other to move towards goodness in this world and the hereafter.

- d. *Bunting Sipabasa* (weddings that visit each other), *Mate Siroko* (the deceased person must be shrouded) means that in a wedding there must be the same event, for example after the wedding of the woman's family is finished, the next series of events will continue by visiting the groom's house as a form of organizing the event. the same thing, in this case the realization of friendship between the two parties, of course the relationship between the two families is maintained, while *mate siroko* in this case means that anyone who dies gets the same treatment by being wrapped in a shroud without exception and there should be no differences in the death ceremony process, in This involves recognizing equality by believing in each other's honor and dignity as servants of Allah SWT.
- e. *Anrai-Anrai Pammarentah Anrai Tokki, Kalau-Kalauki Pammarentah Kalau Tokki* (if the government shifts to the west or east then we are obliged to follow), meaning obeying the government and implementing all the rules made by the government. In this *Pasang*, the people of *Kajang* still recognize that the government has its own role in managing its community so that the traditional and district governments can run sustainably according to their respective laws.
- f. *Sallu' Rijoa, Ammulu' Riadahang* (equipment in gardening, following signs/instructions in plowing land) means that if you do something you have to follow the procedures and use of tools, for example in plowing land we have to use tools according to their use, people have to learn the rules and limitations in cultivating gardens to avoid losses so that they produce fruit. or quality vegetables, in this case we are obliged to obey and adhere to the norms of life.
- g. *Naki'pisona Mange Riturie' A'ra'na* (conveying desires to God who has a will) means that we are encouraged to always pray in our activities and in life we want to surrender to Allah SWT. This community connects everything that happens in *Tana Toa Village* to be closely related to the power of God.

The principle of life "Kamase-mase" in the *Ammatoa Kajang* indigenous community. The attitude of life adopted by the *Ammatoa* people, namely isolating themselves with the intention of avoiding all the deeds and actions listed in the tide, namely prioritizing living in world poverty in order to obtain wealth from the creator in the afterlife. This message is what is called the *Tallasa Kamase-mase* principle. The *Ammatoa Kajang* indigenous community adheres to the *kamase-mase* principle with the value system *lambusu* (honest), *gattung* (firm), *sabbara* (patience). The values contained in the *kamase-mase* principle guide the lives of indigenous peoples. they obediently carry out all the rules in the form of pairs that contain noble values.

The attitudes and behavior of the *Ammatoa* indigenous people who live on *Kamase-mase* land are guided by the teachings of the *Kajang ri tide*. These teachings are the views of society so that they can survive according to the *kamase-mase* principle of life. The principles of the *Ammatoa* community are used as guidelines in everyday life. Their rules of life do not become an obstacle to continuing to live their lives. Outside life does not attract them to abandon the principle of *tallasa kamase-mase* in their activities.

Tallasa kamase-mase is divided into two words, namely *tallasa* means life, and *kamase-mase* means poor or simple. *Tallasa kamase-mase* is living in poverty, but the principle of *Ammatoa* society, *tallasa kamase-mase* means living in simplicity, meaning living not too rich and not too poor. This part can be made clear in the tide which explicitly orders the *Kajang* people to live simply and modestly.

Schools in passing on the values of the traditional order of society function as service institutions to carry out social control mechanisms. In connection with the process of conserving regional cultural values, the function of schools is that they are used as a community institution to pass on the traditional values of a community. Schools as educational institutions play a very important role in developing and preserving local wisdom.

It is hoped that local wisdom inherited in the learning process can shape the conservation character of students who think globally but act locally. Local wisdom as one of the cultural values that lives and develops in society, by maintaining and implementing local wisdom values together with the ability to balance oneself with the times and technological advances, without abandoning the values of *Ammatoa* traditional local wisdom.

The process of inheriting the local wisdom values of the *Ammatoa* indigenous community through the role of teaching staff in inheriting the local wisdom values of the *Ammatoa* indigenous community at *SMA Negeri 18 Bulukumba* is a truly real role, both as demonstrators or innovators in instilling local wisdom values, teachers do not only giving instructions to students to implement local wisdom values, but teachers must also set

an example for their students. Support and commitment from various elements including the school principal, teaching staff and students' self-awareness of the importance of maintaining the noble values of Ammatoa customs is the key to the success of the process of inheriting local wisdom values.

This research is in line with research conducted by Hadi, 2020 [49] which states that local community wisdom can be developed into a source of social studies learning for students. The application of local wisdom values in social studies learning is done in many ways, including by inviting students to learn directly in the field, seeing how village communities implement their cultural values, discussing them in class, and trying to explore other potentials in the environment surroundings so that they can have added value for them and their environment.

This research is in line with research conducted by Faiz & Soleh, 2021 [50] which states that the cultivation of local wisdom values containing character has a high level of effectiveness. This local wisdom-based character development is an effort to prepare teenagers in the era of globalization by building character and love for the cultural values of local wisdom. In this case, local wisdom is a source of values, which is based on tradition so that it becomes a philosophy of life that is firmly adhered to by its adherents in order to carry out the continuity of traditional generations.

In the social studies learning process, local wisdom is the key to understanding the history, culture and values inherent in society. Including local traditions, folklore and values in the curriculum can provide a deeper and more relevant learning experience [51]. Apart from that, local wisdom is also the main capital in shaping the character of students [52]. Values such as mutual cooperation, tolerance and respect for others are an invaluable moral basis in the character education process. By combining local wisdom in social studies learning and character education, we not only create students who are academically intelligent, but also have strong moral integrity and are connected to their cultural roots.

The implications of this research are very significant in the context of education and cultural preservation. This research emphasizes the contribution of local wisdom values to education, especially in building national character, responding to the challenges of globalization, and improving students' social knowledge and attitudes. This also highlights the importance of traditional knowledge and local wisdom in preserving the environment and developing social studies learning models. Furthermore, the integration of local wisdom in education is seen as an appropriate method for developing basic school learning curricula and improving students' understanding and social behavior. Therefore, the implications of this article revolve around the relevance of incorporating local wisdom values into the education system to foster strong national character and respond to contemporary challenges. The limitations of articles discussing the integration of local wisdom values of the Ammatoa indigenous community in social interactions in high school may be limited to generalizations, limited empirical evidence, and limited understanding of the complexity of the topic..

4. CONCLUSION

Based on research conducted in integrating the local wisdom values of the Ammatoa traditional community at SMAN 18 Bulukumba, it is greatly influenced by the teacher's efforts to take advantage of conditions and to gain the trust of students, in this case trust provides an example of attitude towards students wherever they are, so that can be a conscious effort that aims to pass on the local wisdom values of the Ammatoa indigenous people. The inherited values include Pammopporang, Sipakatau, Sipakainga and Tallasa Kamase-mase. The use of local wisdom in social studies learning and character education is to create a deep, meaningful and relevant learning environment for students, while providing a strong moral basis for forming quality character.

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REFERENCES

- [1] I. Zwir *et al.*, "Evolution of genetic networks for human creativity," *Mol. Psychiatry*, vol. 27, no. 1, pp. 354–376, 2022, doi: 10.1038/s41380-021-01097-y.
- [2] B. S. Eko and H. Putranto, "The Role of Intercultural Competence and Local Wisdom in Building Intercultural and Inter-religious Tolerance," *J. Intercult. Commun. Res.*, vol. 48, no. 4, pp. 341–369, 2019, doi: 10.1080/17475759.2019.1639535.
- [3] B. S. Eko and H. Putranto, "Face Negotiation Strategy Based on Local Wisdom and Intercultural Competence to Promote Inter-ethnic Conflict Resolution: Case Study of Balinuraga, Lampung," *J. Intercult. Commun. Res.*, vol. 50, no. 5, pp. 506–540, 2021, doi: 10.1080/17475759.2021.1898450.
- [4] J. A. Cervantes, S. López, L. F. Rodríguez, S. Cervantes, F. Cervantes, and F. Ramos, *Artificial Moral Agents: A Survey of the Current Status*, vol. 26, no. 2. Springer Netherlands, 2020.

- [5] Astalini, Darmaji, D. A. Kurniawan, F. P. Sinaga, M. Z. Azzahra, and E. Triani, "Identification the 2013 Curriculum Teacher 's Book to Determine the Character Values of Class X Students on Circular Motion Material," *J. Pendidik. Sains Indones.*, vol. 11, no. 3, pp. 545–558, 2023, doi: <https://doi.org/10.24815/jpsi.v11i3.28567>.
- [6] H. H. Martono, "Teaching journalism ethics: Constructing model for teaching journalism ethics on the basis of local wisdom to create peace journalism," *Cogent Arts Humanit.*, vol. 4, no. 1, pp. 1–15, 2017, doi: [10.1080/23311983.2017.1334982](https://doi.org/10.1080/23311983.2017.1334982).
- [7] M. H. Nguyen, V. P. La, T. T. Le, and Q. H. Vuong, "Introduction to Bayesian Mindsponge Framework analytics: An innovative method for social and psychological research," *MethodsX*, vol. 9, p. 101808, 2022, doi: [10.1016/j.mex.2022.101808](https://doi.org/10.1016/j.mex.2022.101808).
- [8] J. McFadden, "Integrating information in the brain's EM field: The cemi field theory of consciousness," *Neurosci. Conscious.*, vol. 2020, no. 1, pp. 1–13, 2020, doi: [10.1093/NC/NIAA016](https://doi.org/10.1093/NC/NIAA016).
- [9] Q. H. Vuong *et al.*, "Covid-19 vaccines production and societal immunization under the serendipity-mindsponge-3D knowledge management theory and conceptual framework," *Humanit. Soc. Sci. Commun.*, vol. 9, no. 1, pp. 1–12, 2022, doi: [10.1057/s41599-022-01034-6](https://doi.org/10.1057/s41599-022-01034-6).
- [10] H. Kopnina, "Education for the future? Critical evaluation of education for sustainable development goals," *J. Environ. Educ.*, vol. 51, no. 4, pp. 280–291, 2020, doi: [10.1080/00958964.2019.1710444](https://doi.org/10.1080/00958964.2019.1710444).
- [11] J. C. A. Sandoval-Rivera, "Environmental education and indigenous knowledge: Towards the connection of local wisdom with international agendas in the framework of the Sustainable Development Goals (SDGs)," *Diaspora, Indig. Minor. Educ.*, vol. 14, no. 1, pp. 14–24, 2020, doi: [10.1080/15595692.2019.1652588](https://doi.org/10.1080/15595692.2019.1652588).
- [12] R. Nishant, M. Kennedy, and J. Corbett, "Artificial intelligence for sustainability: Challenges, opportunities, and a research agenda," *Int. J. Inf. Manage.*, vol. 53, no. March, p. 102104, 2020, doi: [10.1016/j.ijinfomgt.2020.102104](https://doi.org/10.1016/j.ijinfomgt.2020.102104).
- [13] L. M. Kipper *et al.*, "Scientific mapping to identify competencies required by industry 4.0," *Technol. Soc.*, vol. 64, no. October 2020, 2021, doi: [10.1016/j.techsoc.2020.101454](https://doi.org/10.1016/j.techsoc.2020.101454).
- [14] M. T. Fuertes-Camacho, C. Dulsat-Ortiz, and I. Álvarez-Cánovas, "Reflective practice in times of COVID-19: A tool to improve education for sustainable development in pre-service teacher training," *Sustain.*, vol. 13, no. 11, 2021, doi: [10.3390/su13116261](https://doi.org/10.3390/su13116261).
- [15] M. Oberländer, A. Beinicke, and T. Bipp, "Digital competencies: A review of the literature and applications in the workplace," *Comput. Educ.*, vol. 146, p. 103752, 2020, doi: [10.1016/j.compedu.2019.103752](https://doi.org/10.1016/j.compedu.2019.103752).
- [16] M. J. Vansteensel, G. Kristo, E. J. Aarnoutse, and N. F. Ramsey, "The brain-computer interface researcher's questionnaire: from research to application," *Brain-Computer Interfaces*, vol. 4, no. 4, pp. 236–247, 2017, doi: [10.1080/2326263X.2017.1366237](https://doi.org/10.1080/2326263X.2017.1366237).
- [17] T. Wulandari, M. Amin, S. Zubaidah, and M. IAM, "Students' Critical Thinking Improvement Through PDEODE and STAD Combination in The Nutrition and Health Lecture," *Int. J. Eval. Res. Educ.*, vol. 6, no. 2, p. 110, 2017, doi: [10.11591/ijere.v6i2.7589](https://doi.org/10.11591/ijere.v6i2.7589).
- [18] J. Vartiainen and K. Kumpulainen, "Playing with science: manifestation of scientific play in early science inquiry," *Eur. Early Child. Educ. Res. J.*, vol. 28, no. 4, pp. 490–503, 2020, doi: [10.1080/1350293X.2020.1783924](https://doi.org/10.1080/1350293X.2020.1783924).
- [19] D. de Scally and B. Doberstein, "Local knowledge in climate change adaptation in the Cook Islands," *Clim. Dev.*, vol. 14, no. 4, pp. 360–373, 2022, doi: [10.1080/17565529.2021.1927658](https://doi.org/10.1080/17565529.2021.1927658).
- [20] C. D. Stylinski, K. Peterman, T. Phillips, J. Linhart, and R. Becker-Klein, "Assessing science inquiry skills of citizen science volunteers: a snapshot of the field," *Int. J. Sci. Educ. Part B Commun. Public Engagem.*, vol. 10, no. 1, pp. 77–92, 2020, doi: [10.1080/21548455.2020.1719288](https://doi.org/10.1080/21548455.2020.1719288).
- [21] A. Stender, M. Schwichow, C. Zimmerman, and H. Härtig, "Making inquiry-based science learning visible: the influence of CVS and cognitive skills on content knowledge learning in guided inquiry," *Int. J. Sci. Educ.*, vol. 40, no. 15, pp. 1812–1831, 2018, doi: [10.1080/09500693.2018.1504346](https://doi.org/10.1080/09500693.2018.1504346).
- [22] K. Sadeghi and F. Ghaderi, "Pre-task planning and explicit instruction: Effects on CALF in an oral jigsaw task and gains in linguistic knowledge," *South. African Linguist. Appl. Lang. Stud.*, vol. 36, no. 4, pp. 365–378, 2018, doi: [10.2989/16073614.2018.1548298](https://doi.org/10.2989/16073614.2018.1548298).
- [23] F. Almeida, I. Superior, P. Gaya, A. Queirós, and D. Faria, "Strengths and Limitations of Qualitative and Quantitative Research Methods Innovation and Entrepreneurship View project Observatory of Portuguese Academic Spin-offs View project European Journal of Education Studies Strengths and Limitations of Qualitativ," pp. 369–387, 2017, doi: [10.5281/zenodo.887089](https://doi.org/10.5281/zenodo.887089).
- [24] P. M. Kruit, R. J. Oostdam, E. van den Berg, and J. A. Schuitema, "Assessing students' ability in performing scientific inquiry: instruments for measuring science skills in primary education," *Res. Sci. Technol. Educ.*, vol. 36, no. 4, pp. 413–439, 2018, doi: [10.1080/02635143.2017.1421530](https://doi.org/10.1080/02635143.2017.1421530).
- [25] W. L. Chang and V. Benson, "Jigsaw teaching method for collaboration on cloud platforms," *Innov. Educ. Teach. Int.*, vol. 00, no. 00, pp. 1–13, 2020, doi: [10.1080/14703297.2020.1792332](https://doi.org/10.1080/14703297.2020.1792332).
- [26] O. D. Apuke, "Quantitative Research Methods : A Synopsis Approach," *Kuwait Chapter Arab. J. Bus. Manag. Rev.*, vol. 6, no. 11, pp. 40–47, 2017, doi: [10.12816/0040336](https://doi.org/10.12816/0040336).
- [27] P. Garg, B. Gupta, A. K. Chauhan, U. Sivarajah, S. Gupta, and S. Modgil, "Measuring the perceived benefits of implementing blockchain technology in the banking sector," *Technol. Forecast. Soc. Change*, vol. 163, no. October, p. 120407, 2021, doi: [10.1016/j.techfore.2020.120407](https://doi.org/10.1016/j.techfore.2020.120407).
- [28] J. Johnes, M. Portela, and E. Thanassoulis, "Efficiency in education," *J. Oper. Res. Soc.*, 2017, doi: [10.1057/s41274-016-0109-z](https://doi.org/10.1057/s41274-016-0109-z).
- [29] Chumdari, S. Anitah, Budiyo, and N. Suryani, "Implementation of Thematic Instructional Model in Elementary School," *Int. J. Educ. Res. Rev.*, vol. 3, no. 4, pp. 23–31, 2018, doi: [10.24331/ijere.424241](https://doi.org/10.24331/ijere.424241).
- [30] K. D. Fellner, "Embodying Decoloniality: Indigenizing Curriculum and Pedagogy," *Am. J. Community Psychol.*, vol. 62, no. 3–4, pp. 283–293, 2018, doi: [10.1002/ajcp.12286](https://doi.org/10.1002/ajcp.12286).

- [31] P. B. Adnyana and D. M. Citrawathi, "The Effectiveness of Question-Based Inquiry Module in Learning Biological Knowledge and Science Process Skills," *Int. J. Environ. Sci. Educ.*, vol. 12, no. 8, pp. 1871–1878, 2017.
- [32] O. D. Kolawole, "Twenty reasons why local knowledge will remain relevant to development," *Dev. Pract.*, vol. 25, no. 8, pp. 1189–1195, 2015, doi: 10.1080/09614524.2015.1078777.
- [33] A. Addiarrahman, "Kearifan Lokal dan Aktifitas Filantropi Perantau Sulit Air Sepakat (SAS) dalam Menghadapi Revolusi Industri 4.0," [Local Wisdom and Philanthropic Activities of Difficult Water Agencies (SAS) in Facing the Industrial Revolution 4.0], *INFERENSI J. Penelit. Sos. Keagamaan*, vol. 13, no. 1, pp. 177–200, 2019, doi: 10.18326/infsl3.v13i1.177-200.
- [34] A. Fuhai, "The Basis for Integrating Local Knowledge into the School Curriculum for Tibetans in Southern Gansu," *Chinese Educ. Soc.*, vol. 50, no. 1, pp. 12–17, 2017, doi: 10.1080/10611932.2016.1262182.
- [35] R. P. Lejano and D. Stokols, "Analytics for local knowledge: exploring a community's experience of risk," *J. Risk Res.*, vol. 24, no. 7, pp. 833–852, 2021, doi: 10.1080/13669877.2018.1476902.
- [36] N. F. Istiawati, "Pendidikan Karakter Berbasis Nilai-Nilai Kearifan Lokal Adat Ammatoa Dalam Menumbuhkan Karakter Konservasi," [Character Education Based on Ammatoa Indigenous Local Wisdom Values in Developing Conservation Character], *CENDEKIA J. Educ. Teach.*, vol. 10, no. 1, pp. 1–18, 2016, doi: 10.30957/cendekia.v10i1.78.
- [37] R. Rastegar and L. Ruhanen, "A safe space for local knowledge sharing in sustainable tourism: an organisational justice perspective," *J. Sustain. Tour.*, vol. 31, no. 4, pp. 997–1013, 2023, doi: 10.1080/09669582.2021.1929261.
- [38] A. R. Embas and J. Nas, "Analisis Sistem Pemerintahan Desa Adat Ammatoa dalam Pelestarian Lingkungan Hidup di Kecamatan Kajang, Kabupaten Bulukumba," [Analysis of the Ammatoa Traditional Village Government System in Environmental Conservation in Kajang District, Bulukumba Regency], *J. Ilmu Pemerintah.*, vol. 10, no. 1, pp. 30–37, 2017, doi: <https://doi.org/10.31947/jgov.v10i1.8035>.
- [39] A. Widodo, "Nilai Budaya Ritual Perang Topat Sebagai Sumber Pembelajaran IPS Berbasis Kearifan Lokal di Sekolah Dasar," [The Cultural Value of the Topat War Ritual as a Social Sciences Learning Source Based on Local Wisdom in Elementary Schools], *GulawentahJurnal Stud. Sos.*, vol. 5, no. 1, pp. 1–16, 2020, doi: 10.25273/gulawentah.v5i1.6359.
- [40] A. Miranti, L. Lilik, R. Winarni, and A. Surya, "Representasi Pendidikan Karakter Berbasis Kearifan Lokal dalam Motif Batik Wahyu Ngawiyatan sebagai Muatan Pendidikan Senirupa di Sekolah Dasar," [Representation of Character Education Based on Local Wisdom in the Wahyu Ngawiyatan Batik Motif as Content of Fine Arts Education in Elementary Schools], *J. Basicedu*, vol. 5, no. 2, pp. 546–560, 2021, doi: 10.31004/basicedu.v5i2.763.
- [41] N. Lailiyah, F. Kurwidaria, F. I. W, and Sumarlam, "Analisis Wacana Kritis Monolog Dalam Talk Show Mata Najwa Edisi 'Menanti Terawan,'" [Critical Discourse Analysis of Monologues in Mata Najwa's Talk Show Edition 'Waiting for Terawan'], *Efektor*, vol. 8, no. 1, pp. 34–44, 2021, doi: 10.29407/e.v8i1.15481.
- [42] A. L. Abbott, "Fostering student interest development: An engagement intervention," *Middle Sch. J.*, vol. 48, no. 3, pp. 34–45, 2017, doi: 10.1080/00940771.2017.1297666.
- [43] D. Assyakurrohman, D. Ikhrum, R. A. Sirodj, and M. W. Afgani, "Metode Studi Kasus dalam Penelitian Kualitatif," [Case Study Method in Qualitative Research], *J. Pendidik. Sains dan Komput.*, vol. 3, no. 01, pp. 1–9, 2022, doi: 10.47709/jpsk.v3i01.1951.
- [44] H. D. Kriswanto, A. S. Anissa, and T. Hasdiani, "Peran Mahasiswa dalam Mendukung Masyarakat Pentingnya Menjaga Lingkungan dan Gaya Hidup Sehat Selama Pandemi Covid-19," [The Role of Students in Educating the Community on the Importance of Maintaining the Environment and a Healthy Lifestyle During the Covid-19 Pandemic], *J. Nonform. Educ. Community Empower.*, vol. 5, no. 2, pp. 179–184, 2021, doi: 10.15294/jnece.v5i2.52689.
- [45] S. Bahri, M. Ramly, A. Gani, and S. Sukmawati, "Organizational Commitment and Civil Servants Performance: The Contribution of Intelligence, Local Wisdom and Organizational Culture," *Eur. J. Bus. Manag. Res.*, vol. 6, no. 1, pp. 128–134, 2021, doi: 10.24018/ejbm.2021.6.1.720.
- [46] S. Wanto *et al.*, "Kupas Tuntas Penelitian Pengembangan Model Borg & Gall," [Complete research on the development of the Borg & Gall model], *Wahana Dedik. J. PkM Ilmu Kependidikan*, vol. 3, no. 2, pp. 46–55, 2020, doi: 10.31851/dedikasi.v3i1.5340.
- [47] T. N. Cholifah, I. N. S. Degeng, and S. Utaya, "Pengaruh Latar Belakang Tingkat Pendidikan Orangtua dan Gaya Belajar Terhadap Hasil Belajar Siswa pada Kelas IV SDN Kecamatan Sananwetan Kota Blitar," [The Influence of Parents' Educational Level Background and Learning Style on Student Learning Outcomes in Class IV of SDN Sananwetan District, Blitar City], *J. Pendidik.*, vol. 1, no. 3, pp. 486–491, 2016, doi: <http://dx.doi.org/10.17977/jp.v1i3.6177>.
- [48] I. Asakir and F. Mahmudah, "Kreativitas dan Inisiatif Guru dalam Pengembangan Mutu Pembelajaran Online," [Teacher Creativity and Initiative in Developing the Quality of Online Learning], *J. Stud. Guru dan Pembelajaran*, vol. 5, no. 1, pp. 31–40, 2022, doi: 10.30605/jsgp.5.1.2022.1541.
- [49] E. S. Hadi, "Penerapan Nilai-Nilai Kearifan Lokal Dalam Budaya Masyarakat Desa Pakisrejo Tangunggunung Sebagai Sumber Pembelajaran IPS," [Application of Local Wisdom Values in the Culture of the Pakisrejo Tangunggunung Village Community as a Social Sciences Learning Source], *INSPIRASI ; J. Ilmu-ilmu Sos.*, vol. 17, no. 1, pp. 254–260, 2020.
- [50] A. Faiz and B. Soleh, "Implementasi pendidikan karakter berbasis kearifan lokal," [Implementation of character education based on local wisdom], *JINoP (Jurnal Inov. Pembelajaran)*, vol. 7, no. 1, pp. 68–77, 2021, doi: 10.22219/jinop.v7i1.14250.
- [51] M. F. Iskandar, D. A. Dewi, and R. S. Hayat, "Pentingnya Literasi Budaya dalam Pendidikan Anak SD: Sebuah Kajian Literatur," [The Importance of Cultural Literacy in Elementary School Children's Education: A Literature Review], *Indo-MathEdu Intellectuals J.*, vol. 5, no. 1, pp. 785–794, 2024, doi: <http://doi.org/10.54373/imeij.v5i1.723>.
- [52] F. Nugrahani, A. Imron, and M. Widayati, "School Literation Movement Based on Local Wisdom and its Contribution to Character Education," *Widyaparwa J. Ilm. Kebahasaan dan Kesastraan*, vol. 48, no. 1, pp. 82–95, 2020.