



Mapping Historical Potential and Biodiversity as Materials for Developing Bilingual Teaching Materials in Kemiren Tourism Village, Banyuwangi

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Abstract

This study aims to map the historical potential and biodiversity in Kemiren Tourism Village, Banyuwangi, and analyze its feasibility as a material for developing bilingual teaching materials (Indonesian-English). Kemiren Tourism Village possesses rich local history and high biodiversity; however, information regarding both aspects remains separately available and has not been integrated into bilingual teaching materials. This research employs an exploratory case study approach with participatory mapping methods, involving field observations, in-depth interviews with community leaders and tourism village managers, inventory of historical sites, flora, fauna, as well as analysis of village documents and environmental landscapes. The collected data were analyzed descriptively-qualitatively to identify local potentials that can be integrated into learning materials. The results show that Kemiren Tourism Village has various historical potentials, such as cultural sites and oral traditions, as well as biodiversity covering various species of locally distinctive plants and animals. All these potentials are considered feasible to be developed into contextual and relevant bilingual teaching materials that meet students' needs. This research contributes by providing a framework for developing bilingual teaching materials based on local history and biodiversity, which educators can use to create more meaningful and integrated learning experiences.

Keywords: potential mapping, local history, biodiversity, bilingual teaching materials, Kemiren Tourism Village

INTRODUCTION

Education in Indonesia currently faces significant challenges in integrating local potential into the learning curriculum. The Merdeka Curriculum, implemented nationally, provides

broader space for educators to develop teaching materials that are contextual and relevant to students' surrounding environments (Indrawati & Kuncoro, 2021). However, field implementation still shows that school learning tends to separate historical, environmental, and linguistic knowledge, when in fact these three areas can be developed through the same local topics (Adinugraha & Ratnapuri, 2020). The gap between abundant local potential and the availability of integrated teaching materials remains a major obstacle in realizing meaningful learning.

Field observations conducted in Kemiren Tourism Village, Banyuwangi, reveal that this area possesses remarkable historical wealth and biodiversity with great potential as a learning resource. Kemiren Village, located in Glagah District, Banyuwangi Regency, is an indigenous Osing village covering 177,052 hectares with a population of approximately 2,569 people (Kemenparekraf, 2020). Geographically, the village sits at an altitude of 144 meters above sea level with an average temperature of 22-26°C and annual rainfall of 2,000 mm, creating ecological conditions that support high biodiversity (Hariyono, 2012). The village is surrounded by two rivers, the Gulung and Sobo Rivers, flowing from west to east, forming a landscape rich in biodiversity.

From a historical perspective, Kemiren Village possesses a

long and fascinating narrative. The village emerged during the Dutch colonial period, around the 1830s, initially as expanses of green rice fields and forests belonging to residents of Cungking Village (Hariyono, 2012). Kemiren's history began with the fall of the Majapahit Kingdom around 1478 AD, when many of its inhabitants fled to various regions, including the eastern tip of Java, where they later established the Blambangan Kingdom ([Indonesia.travel](https://indonesia.travel), 2023). These self-exiled people later became known as the Osing people, a term meaning "no" in their language, referring to their refusal to return to Majapahit. The name "Kemiren" itself derives from "kemirian," referring to the candlenut (*Aleurites moluccanus*) and durian trees that once grew abundantly in the area, serving as natural markers and distinctive features of the region (Detik Travel, 2023).

Biodiversity in Kemiren Village is also remarkably rich. The area is dominated by forests and agricultural land that serve as habitats for various plant and animal species. The Osing people possess local wisdom in environmental management, reflected in various cultural practices, such as Osing batik motifs inspired by their agricultural environment, including Wader Kesit (river fish), Jajan Sebarong (bamboo), Kangkung Setingkes (local vegetables), and Kopi Pecah (coffee) patterns ([Indonesia.travel](https://indonesia.travel), 2023). Additionally, the traditional Barong Ider Bumi ritual, which has been practiced since the 1800s, reflects the close relationship between the community and their natural environment (Detik Travel, 2023).

Despite the significant historical and biodiversity potential in Kemiren Village, information regarding both aspects remains separately available and has not been integrated into bilingual educational materials (Marsyalita et al., 2023). Teaching materials that integrate local history, biodiversity, and English remain very limited, even though such an integrative approach is crucial for creating contextual and meaningful learning for students (Rahmawati et al., 2023). Previous research by Adinugraha & Ratnapuri (2020) developed a biodiversity module using a local wisdom and cultural approach in Purworejo Regency, but the module did not simultaneously integrate local history and language aspects.

Research on developing teaching materials based on local history has been conducted by several researchers. Research by Rina et al. (2023) shows that innovation in managing educational facilities and infrastructure, including developing teaching materials, is essential for improving learning quality. Other research by Antoni et al. (2023) identified challenges in Indonesia's education system regarding integrating local wisdom into the curriculum. Studies on ethnopedagogy conducted by Rahmawati et al.

(2023) demonstrate that local traditions can be integrated into biology learning, particularly in biodiversity, conservation, ecosystems, and environmental change topics. However, these studies remain focused on a single discipline and have not integrated three fields simultaneously: history, biology, and language.

Participatory mapping has been recognized as an effective method for identifying and documenting local resources. Klonner et al. (2020) demonstrated that participatory mapping and visualization of local knowledge can effectively integrate community knowledge into formal planning processes. Similarly, research on community asset mapping shows that this approach can empower local stakeholders and integrate indigenous and Western knowledge systems. In the context of education, participatory mapping has been used to develop undergraduate students' capacity for identifying and understanding community assets.

Ethnopedagogy, as a theoretical framework, emphasizes the importance of integrating local wisdom values into the learning process. Research by various scholars has shown that ethnopedagogy-based learning can improve student engagement and cultural awareness. In Indonesia, where there are over 250 traditional cultures, efforts to utilize these cultures in education are being increasingly pursued. The integration of ethnopedagogy in science learning has been shown to improve student engagement and cultural identity.

Place-based education has also emerged as a relevant approach for integrating local history and environmental education. Recent scoping reviews have examined place-based education in the context of environmental education, outdoor education, and history education. This approach emphasizes learning that is rooted in local places and communities, making it particularly relevant for developing teaching materials based on local history and biodiversity. Furthermore, integrating local history with English language teaching has been explored as a gateway to fostering global citizenship.

The research gap identified is the absence of a comprehensive mapping of historical and biodiversity potential in Kemiren Tourism Village specifically designed for developing bilingual teaching materials. Research on developing multilingual teaching materials based on local culture has been conducted by several researchers (Jurnal Citra Bakti, 2023), but it has focused on elementary school level materials and has not comprehensively covered historical and biodiversity aspects in an integrated manner. Additionally, research on utilizing local historical sites as learning resources remains limited to potential analysis without being followed by systematic teaching material development (Prasetyo, 2019).

The novelty of this research lies in simultaneously mapping historical and biodiversity potential in Kemiren Tourism Village and analyzing its feasibility for developing bilingual teaching materials. Unlike previous research that focused on only one aspect, this research integrates three dimensions simultaneously: local history, biodiversity, and language (Indonesian-English). The participatory mapping approach used in this research also provides novelty because it actively involves the local community in identifying and inventorying local potential.

This research is also relevant to the Merdeka Curriculum policy that encourages project-based and contextual learning. By mapping local potential that can serve as learning resources, this research makes a concrete contribution to providing teaching materials that suit the needs and characteristics of students in Banyuwangi. The bilingual approach applied also aligns with efforts to improve students' English competency without neglecting Indonesian language mastery and local cultural values.

Theoretically, this research is based on the concept of ethnopedagogy, which emphasizes the importance of integrating local wisdom values into the learning process (Oktavianti & Ratnasari, 2018). Ethnopedagogy is a form of actualizing learning by instilling local wisdom values that can empower students to recognize and love their own culture (Adinugraha, 2020). This approach also aligns with the concept of contextual learning that emphasizes the connection between learning materials and students' real-life experiences.

This research aims to map the historical and biodiversity potential in Kemiren Tourism Village and analyze its feasibility for developing bilingual teaching materials. The results of this research are expected to serve as a reference framework for educators and curriculum developers in creating integrated, contextual, and relevant teaching materials that meet the needs of students in the era of globalization. Furthermore, this research is also expected to contribute to the preservation of local history and biodiversity through their utilization as meaningful learning resources.

MATERIALS AND METHODS

This research employs a qualitative approach with an exploratory case study type. The case study approach was chosen because it allows researchers to conduct in-depth exploration of phenomena within real-world contexts (Yin, 2018). Exploratory case studies are particularly suitable for research aimed at identifying and mapping potential that is not yet widely known, such as the historical and biodiversity

potential in Kemiren Tourism Village. This approach enables researchers to gain a comprehensive understanding of field conditions through various data sources and diverse data collection techniques.

Participatory mapping was used as the primary strategy in data collection. Participatory mapping is the process of uncovering and highlighting resources in a place, including those relevant to the investigation being conducted (STEM Teaching Tools, 2021). This method involves the active participation of local communities in identifying and documenting existing potential in their environment. In the context of this research, participatory mapping allowed researchers to explore local knowledge about historical sites, flora and fauna species, and cultural practices related to the environment. As stated by the Liverpool School of Architecture (2023), participatory mapping can serve as the foundation for action research frameworks exploring how landscapes themselves can become places of learning. Klonner et al. (2020) further demonstrated that participatory mapping and visualization of local knowledge can effectively integrate community perspectives into formal processes.

Research subjects consisted of community leaders, tourism village managers, and local youth who possess knowledge about the history and environment of Kemiren Village. The sampling technique used purposive sampling, where informants were selected based on specific criteria: having in-depth knowledge of village history, local culture, and biodiversity in the area. Additionally, data sources included historical sites, plants, animals, village documents, and environmental landscapes directly observed. The use of various data sources aimed to achieve data triangulation that would enhance the validity and credibility of research findings.

Data collection techniques included field observation, in-depth interviews, inventory, and document analysis. Field observation was conducted to directly observe the geographical conditions, historical sites, and biodiversity in Kemiren Village. In-depth interviews were conducted with key informants to explore information about village history, cultural traditions, and local ecological knowledge. Inventory was conducted to document plant and animal species found in the village area. Document analysis was performed on village documents, historical records, and related literature to complement data obtained from observation and interviews. All collected data were then analyzed descriptively-qualitatively through the stages of data reduction, data presentation, and conclusion drawing (Miles, Huberman, & Saldaña, 2020).

RESULTS AND DISCUSSION

This research produced a mapping of historical and biodiversity potential in Kemiren Tourism Village that can be grouped into several main categories. Based on field observations and interviews with key informants, six main

historical sites, 25 plant species, and 15 animal species were identified as having potential for development into bilingual teaching materials. The mapping was conducted using a participatory approach that involved the local community in the identification and documentation process.



Figure 1. Map of Historical and Biodiversity Potential in Kemiren Tourism Village

Based on the mapping conducted, historical sites in Kemiren Village possess high historical and cultural value. Buyut Cili Cemetery is the most revered site by the local community as it is believed to be the tomb of the first figure to settle in the area and serves as the guardian and protector of Kemiren Village (Detik Travel, 2023). Osing Traditional Houses, which

are still preserved in their original form, serve as evidence of traditional architecture reflecting local wisdom in responding to environmental conditions. These houses now serve dual functions: as residences and as homestays for tourists who wish to experience the authentic atmosphere of Osing community life (Detik Travel, 2023).

Table 2. Inventory of Historical Sites in Kemiren Tourism Village

No	Site Name	Type	Location	Historical/Cultural Value	Teaching Material Potential
1	Buyut Cili Cemetery	Religious site	Kemiren Hamlet	Village founder, nyekar ritual	Local history, spiritual values
2	Osing Traditional House	Traditional architecture	Throughout village	Distinctive architecture, cultural homestay	Culture, architecture, social life
3	Village Hall	Public building	Village center	Center for traditional and deliberation activities	Governance system, deliberation
4	Gandrung Dance Studio	Arts studio	Kemiren Hamlet	Traditional dance, distinctive music	Arts and culture, local wisdom
5	Barong Ider Bumi Location	Ritual site	Around village	Annual ritual since 1800s	Tradition, beliefs, conservation
6	Blambangan Heritage Site	Historical site	Village border	Blambangan Kingdom heritage	Kingdom history, struggle

In terms of biodiversity, Kemiren Village possesses diverse flora and fauna. Based on the inventory conducted, 25 plant species were identified, consisting of food plants, medicinal plants, and ornamental plants. Some dominant species

include candlenut trees (*Aleurites moluccanus*), durian (*Durio zibethinus*), and various agricultural crops such as rice, corn, and vegetables. Candlenut and durian trees hold historical value as they are the origin of the village's name, making them

highly potential for teaching materials that integrate history and biology.

Table 3. Inventory of Potential Flora in Kemiren Tourism Village

No	Species	Local Name	Use	Status	Teaching Material Potential
1	<i>Aleurites moluccanus</i>	Kemiri	Food, industry	Cultivated	Village history, plant uses
2	<i>Durio zibethinus</i>	Durian/Duren	Food	Cultivated	Village history, biodiversity
3	<i>Oryza sativa</i>	Padi	Staple food	Cultivated	Agriculture, food security
4	<i>Zea mays</i>	Jagung	Food	Cultivated	Agriculture, economy
5	<i>Ipomoea aquatica</i>	Kangkung	Vegetable	Cultivated	Batik motif, local food
6	<i>Coffea sp.</i>	Kopi	Beverage	Cultivated	Batik motif, creative economy
7	<i>Bambusa sp.</i>	Bambu/Jajan	Construction, crafts	Wild/cultivated	Batik motif, local wisdom
8	<i>Caesalpinia sappan</i>	Secang	Natural dye	Wild	Batik, traditional dyeing
9	<i>Mangifera indica</i>	Mangga	Food	Cultivated	Natural dye, food
10	<i>Cocos nucifera</i>	Kelapa	Multipurpose	Cultivated	Food, crafts, economy

The fauna identified in Kemiren Village includes 15 species consisting of birds, fish, and insects. The Gulung and Sobo Rivers flowing through the village serve as habitats for various fish species, including the wader fish that inspired

Osing batik motifs. The presence of this fauna is not only ecologically important but also culturally valuable, as reflected in various practices and arts of the Osing people.

Table 4. Inventory of Potential Fauna in Kemiren Tourism Village

No	Species	Local Name	Habitat	Status	Teaching Material Potential
1	<i>Rasbora sp.</i>	Wader	River	Wild	Batik motif, aquatic ecosystem
2	<i>Channa striata</i>	Gabus	River, rice fields	Wild	Food, ecosystem
3	<i>Clarias batrachus</i>	Lele	River, cultivated	Wild/cultivated	Cultivation, food
4	<i>Oreochromis niloticus</i>	Nila	Cultivated	Cultivated	Cultivation, food
5	<i>Passer montanus</i>	Burung gereja	Settlements	Wild	Ecosystem, diversity
6	<i>Eudynamys scolopaceus</i>	Tuwu	Forest	Wild	Mythology, culture
7	<i>Gallus gallus</i>	Ayam hutan	Forest	Wild	Conservation, diversity
8	<i>Apis cerana</i>	Lebah madu	Forest/cultivated	Wild/cultivated	Honey, pollination
9	<i>Papilio sp.</i>	Kupu-kupu	Forest/garden	Wild	Pollination, natural beauty
10	<i>Varanus salvator</i>	Biawak	River/swamp	Wild	Ecosystem, conservation

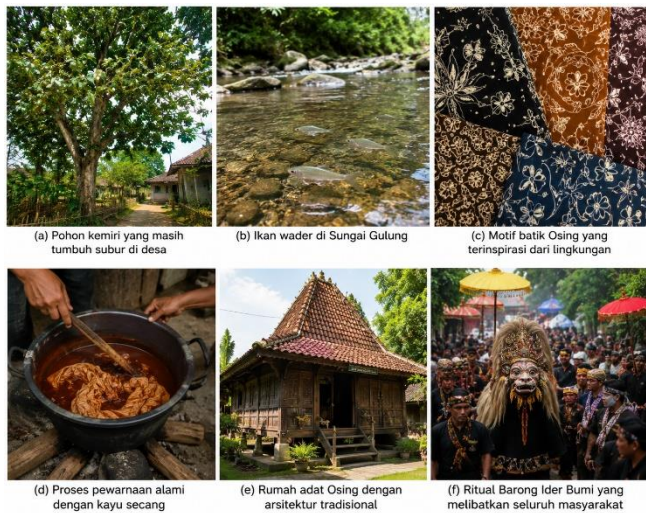


Figure 2. Documentation of Biodiversity in Kemiren Tourism Village

Feasibility analysis of historical and biodiversity potential for developing bilingual teaching materials was conducted using the following criteria: (1) curriculum relevance, (2) data and information availability, (3) connection to students' lives, (4) language integration potential, and (5) educational value.

Table 5. Feasibility Analysis of Potential for Bilingual Teaching Materials

No	Potential Type	Curriculum Relevance	Data Availability	Student Connection	Language Potential	Educational Value	Feasibility
1	Historical Sites	Very High	High	Very High	High	Very High	Feasible
2	Oral Traditions	High	Medium	High	Very High	Very High	Feasible
3	Flora	Very High	High	Very High	High	High	Feasible
4	Fauna	Very High	Medium	High	High	High	Feasible
5	Landscape	High	High	Very High	Medium	High	Feasible
6	Cultural Practices	High	Medium	Very High	Very High	Very High	Feasible

Discussion

The results of this research demonstrate that Kemiren Tourism Village possesses remarkably rich historical and biodiversity potential for development into bilingual teaching materials. This finding aligns with previous research by Adinugraha & Ratnapuri (2020), which developed a biodiversity module using a local wisdom and cultural approach. However, this research goes further by integrating three dimensions simultaneously: local history, biodiversity, and language (Indonesian-English). This integration is important because school learning has tended to separate historical, environmental, and linguistic knowledge, when in fact these three areas can be developed through the same local topics (Adinugraha & Ratnapuri, 2020).

The historical value of Kemiren Village, originating from the

Based on these criteria, all identified potentials were deemed feasible for development into bilingual teaching materials. Historical sites such as Buyut Cili Cemetery and Osing Traditional Houses possess high educational value as they can teach local history, cultural values, and local wisdom. The identified flora and fauna also have great potential as they can be used to teach biodiversity concepts, ecosystems, and conservation.

The application of the participatory mapping model in this research involved the local community at every stage. The community not only served as information sources but also participated in the identification, verification, and validation processes. This approach proved effective because the community possesses deep local knowledge about their village's history and environment. As stated by Adinugraha (2020), local wisdom and culture can be integrated into biology learning through ethnobiological and ethnopedagogical approaches. This approach also enables the creation of more meaningful learning because the material taught aligns with students' life contexts. Participatory asset mapping has been shown to be an effective approach for empowering communities and integrating indigenous and local knowledge.

fall of the Majapahit Kingdom and the establishment of the Blambangan Kingdom, provides a rich context for local history learning ([Indonesia.travel](https://indonesia.travel), 2023). This history is not only academically important but also holds value for character building and cultural identity formation. Research by Rina et al. (2023) shows that innovation in managing educational facilities and infrastructure, including developing teaching materials based on local history, is essential for improving learning quality. By integrating local history into teaching materials, students can develop pride and love for their own culture.

Participatory mapping, as employed in this study, has proven to be an effective method for identifying and documenting local potential. As articulated by STEM Teaching Tools (2021), community asset mapping is the process of uncovering and highlighting resources in a place. This approach enables the

community to actively participate in the identification and verification process, resulting in more accurate and comprehensive findings. Research by the Liverpool School of Architecture (2023) also demonstrates that participatory mapping can serve as the foundation for action research frameworks exploring how landscapes themselves can become places of learning. Klonner et al. (2020) confirmed that participatory mapping and visualization of local knowledge can effectively integrate community perspectives into formal planning and educational processes.

The biodiversity in Kemiren Village, encompassing 25 plant species and 15 animal species, indicates that this area has great potential for biology and environmental learning. Research by Rahmawati et al. (2023) demonstrates that local wisdom can be integrated into biology learning in biodiversity, conservation, ecosystems, and environmental change topics. This finding is reinforced by research by Antoni et al. (2023), which identified that integrating local wisdom into the curriculum is one of the main challenges in Indonesia's education system. Therefore, mapping biodiversity potential in Kemiren Village is an important initial step in addressing this challenge. Studies on ethnoecological potential have similarly highlighted the need to develop structured teaching materials based on local wisdom to support the integration of ethnoecology into biology education.

Osing batik motifs inspired by the agricultural environment demonstrate the close relationship between culture and biodiversity ([Indonesia.travel](#), 2023). The Wader Kesit (river fish), Jajan Sebarong (bamboo), Kangkung Setingkes (local vegetables), and Kopi Pecah (coffee) patterns reflect how the Osing people integrate environmental knowledge into their cultural expressions. This aligns with the concept of ethnopedagogy proposed by Oktavianti & Ratnasari (2018), which emphasizes the importance of integrating local wisdom values into the learning process. By making batik motifs a bilingual teaching material, students can learn about biology, culture, and language in an integrated manner. The integration of ethnopedagogy in science learning has been shown to improve student engagement and cultural awareness.

The Barong Ider Bumi ritual, which has been practiced since the 1800s, represents a form of local wisdom reflecting the harmonious relationship between the community and their environment (Detik Travel, 2023). This ritual holds not only spiritual value but also ecological value, as it teaches the importance of maintaining natural balance. Research by Rahmawati et al. (2023) shows that local traditions like this can function as a form of environmental conservation. By

making this ritual a bilingual teaching material, students can learn about conservation values that have been practiced by their ancestors for generations.

Place-based education provides a relevant theoretical framework for this research. Recent scoping reviews have examined place-based education in the context of environmental education, outdoor education, and history education. This approach emphasizes learning rooted in local places and communities, making it particularly relevant for developing teaching materials based on local history and biodiversity. Furthermore, integrating local history with English language teaching has been explored as a gateway to fostering global citizenship. This aligns with the bilingual approach of this research, which aims to improve students' English competency while maintaining connection to local culture.

The feasibility analysis conducted shows that all identified potentials are feasible for development into bilingual teaching materials. The criteria used included curriculum relevance, data availability, connection to students' lives, language integration potential, and educational value. This aligns with research by Jurnal Citra Bakti (2023), which developed multilingual teaching materials based on local culture using the ADDIE model. Systematic development models like this can ensure that the resulting teaching materials are of good quality and meet students' needs. Research on developing bilingual teaching materials based on local wisdom has similarly shown effectiveness in improving students' learning outcomes.

Developing bilingual teaching materials based on local history and biodiversity offers several advantages over conventional teaching materials. First, these materials are more contextual because they use examples close to students' lives. Second, they are more meaningful because they integrate various disciplines into one theme. Third, they can improve students' English literacy without neglecting Indonesian language mastery and local cultural values. These advantages align with research by Indrawati & Kuncoro (2021), which emphasizes the importance of human resource development through contextual and relevant education. Contextual teaching and learning has been shown to be important for helping students connect what they learn with how the knowledge will be used.

This research also has practical implications for curriculum development at the school level. With the availability of local potential mapping, teachers can develop teaching materials that suit the characteristics and needs of students in their respective regions. This aligns with the spirit of the Merdeka Curriculum, which provides flexibility for educators to

develop contextual and student-centered learning (Rahmawati et al., 2023). Teachers can use the results of this mapping as a foundation for developing various types of teaching materials, such as modules, booklets, or digital media. The development of local history-based teaching materials using various approaches has been shown to be effective in increasing students' understanding of local history.

Theoretically, this research enriches the concept of ethnopedagogy by demonstrating how local wisdom values can be integrated into language and science learning. Research by Adinugraha (2020) shows that the local wisdom and cultural approach in biology learning is an approach that integrates local wisdom and cultural values using ethnobiological and ethnopedagogical studies. This research expands the scope of ethnopedagogy by integrating language aspects, thereby creating a more holistic and integrated approach. Ethnopedagogy-oriented learning models have been developed to improve prospective teachers' teaching ability.

This research also has implications for preserving local history and biodiversity. By making local potential a teaching material, the younger generation will become more familiar with and appreciate their cultural and natural heritage. This aligns with research by Iskandar (2017), which emphasizes the importance of ethnobiology as a scientific study of population knowledge related to biology. By documenting local knowledge about plants, animals, and the environment, this research contributes to preserving traditional knowledge that is increasingly threatened with extinction. The role of schools as an opportunity for transmitting local knowledge about useful plants has been documented in various contexts.

The limitation of this research is that the scope is limited to Kemiren Tourism Village, so the results may not be generalizable to other regions. However, the participatory mapping methodology used can be adapted to identify local potential in other areas. Future research could expand the scope or directly develop teaching materials based on the results of this mapping. Research could also be conducted to test the effectiveness of the developed teaching materials in improving students' understanding and skills. The development of booklets and other teaching materials based on local wisdom has been shown to be valid and practical for use in learning.

This research also opens opportunities for collaboration among various stakeholders, including academics, teachers, communities, and local governments. This collaboration is important to ensure that the developed teaching materials

truly meet students' needs and characteristics. As expressed by Rahmawati et al. (2023), commitment across stakeholders through school-community collaboration and continuous evaluation is needed to ensure real impact on learning, environmental management, and strengthening cultural identity.

The findings of this research contribute to the growing body of literature on integrating local knowledge into formal education. Studies have shown that linking biology lessons with the ecological practices of indigenous communities cultivates meaningful learning experiences. The management of coastal biodiversity based on social-cultural values in constructing conservation character education has demonstrated that local communities possess rich local knowledge of natural resources. This research extends these findings by demonstrating how historical and biodiversity knowledge can be simultaneously mapped and integrated into bilingual teaching materials.

Furthermore, the bilingual aspect of this research addresses the need for developing students' English competency while maintaining connection to local culture. Research on bilingual education practices that combine local and national or international languages, along with local wisdom content, has proven effective in shaping students' character, identity, and competitiveness. This research provides a practical framework for achieving this integration through the development of bilingual teaching materials based on local history and biodiversity.

The participatory nature of this research also addresses the need for community engagement in educational development. Asset-Based Community Development (ABCD) approaches have been shown to be effective in educational settings. By involving the community in identifying and documenting local potential, this research ensures that the resulting teaching materials are grounded in authentic local knowledge and responsive to community needs. This approach also empowers the community by recognizing and valuing their knowledge and contributions to education.

CONCLUSION

This research successfully mapped the historical and biodiversity potential in Kemiren Tourism Village, Banyuwangi, encompassing six main historical sites, 25 plant species, and 15 animal species. All identified potentials were deemed feasible for development into bilingual teaching materials (Indonesian–English) based on criteria of curriculum relevance, data availability, connection to students' lives, language integration potential, and educational value. Participatory mapping involving the local community proved

effective in comprehensively identifying and documenting local potential. This research contributes a framework for developing bilingual teaching materials based on local history and biodiversity that educators can use to create more meaningful and integrated learning experiences.

The implications of this research include the need for further development of teaching materials based on the mapping results. Teachers and curriculum developers can use the results of this research as a foundation for developing modules, booklets, or bilingual learning media that integrate local history, biodiversity, and English. Future research should be conducted to test the effectiveness of the developed teaching materials in improving students' conceptual understanding, language literacy, and environmental awareness. Additionally, similar research should be conducted in other regions to enrich the repository of teaching materials based on local wisdom in Indonesia.

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