



Sailing for Literacy: A Cost-Effective *Padewakang*-Based Floating Library Model for Coastal Communities in Indonesia

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ABSTRACT

Indonesia, as the world's largest archipelagic nation with over 13,000 islands, continues to face structural challenges in ensuring equitable access to literacy for coastal communities, particularly those on remote and outermost islands. Previous floating library initiatives led by the National Library of Indonesia since 2010 have encountered limitations, including high operational costs, limited adaptability to shallow waters, and limited service coverage. This study aims to examine alternative models and the economic costs of disseminating literacy in coastal communities using traditional *Padewakang* boats within the Armada Pustaka Mandar program. This study focuses on the coastal areas of the islands of Eastern Indonesia during the period 2010–2024. It uses a qualitative approach and various documentary data in the form of primary archives and secondary sources for this floating library service. The findings indicate that the literacy model disseminated using the *Padewakang* boat has proven effective in terms of service reach and operational efficiency, both for the boat and the literacy activists and human resources involved. Economically, compared to a typical modern boat, the *Padewakang* boat incurs 40–50% less operational costs, with a weekly service costing approximately 3 to 4 million rupiah. The most important aspect of utilizing the *Padewakang* boat as the Mandar Library Fleet is its accessibility, allowing it to reach various shallow and remote islands. These findings also demonstrate that integrating traditional maritime technology based on local knowledge with a community approach can be a solution to address literacy issues in the islands of eastern Indonesia and is potentially replicable elsewhere.

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1. Introduction.

From ancient times, Indonesia has been recognized as an archipelago who is made of maha large island and smaller islands, even recognized to be the largest archipelagic country in the whole wide world. There are more than 17,000 islands in the Indonesian archipelago with satellite - based mapping estimating that about 13,558 have been formally classified (Andréfouët et al., 2022). This would give rise to odd challenges in education and literacy, which has to reach all those splintered localities. Indonesia has an estimated population of 270 million, and at present around 60% live in one or other coastal area. Over a quarter of population are living on islands that can be very difficult to access (Rudiarto et al., 2018; Setiawati et al., 2023) So also with the availability of transportation and electricity network and internet, as well as other aspects of education facilities such as the availability of an educational institu-

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tion in these difficult natural landscape areas (Bappenas, 2020; Rahmatdin & Abdul, 2016) that have not been able to develop much because quality practice is poor because children can not afford by road carried out learning.

A key challenge is very limited access and services to books (“Pustaka” in Indonesia language) Committee across the country while implementation of various literacy activities, which is still a big concern in eastern region where most islands are geographically isolated by ocean. The report of the relevant authority, Ministry of Education and Culture of the Republic of Indonesia, said that these various limitations have a considerable impact on literacy rates are low interest in reading, this condition is a serious threat for children who will become successors to enter productive human resources in these challenging regions. According to UNESCO (2015), this condition will keep ongoing and if not faced ideally, it will increase the gap in education and literacy which is a very essential human resource development, socio-economic and political for any nation or state. In the formal education environment, especially in various areas which are often referred to as 3T Indonesia (border, outermost and underdeveloped), inequality or unequal access to education, learning and literacy will continue to be an ongoing problem that adversely affect the achievement of learning outcomes both between regions or nationally. This unfortunate gap has serious consequences that will make it difficult to attain Sustainable Development Goals, particularly number four targeted at inclusive development.

Facing this problem, the National Library of the Republic of Indonesia (Perpusnas RI) has an innovative and efficient strategy to conduct outreach to coastal communities and remote island dwellers through the floating library program that has been launched in 2010. This is where the project not only provides touch tables but also modern vessels with multimedia facilities that can be used by 20 users within one session. The program seeks to bring educational resources adapted for the local context, including knowledge of fisheries and health education and basic literacy materials (Christiani, 2020) This project is aligned with the international guidelines on inclusive education and library services that many countries have worked to embrace, recognizing the need for access to knowledge, ultimately regardless of geographic restrictions (IFLA, 2021; UNESCO, 2015). The dialogue on sustainability of coastal community also scrutinized the opportunity to shared social and coastal platforms and services (Shaiful et al., 2018).

However, despite the National Library of Indonesias floating library program plus operations the innovation does find itself facing significant difficulties and challenges. Another problem is the reliance on expensive, fuel-hungry technology and systems to do this, which create more logistical challenges, particularly in regions with variable weather conditions like eastern Indonesia. Ships have a limited carrying capacity, which constrains how many and what types of books can be carried on board to serve the needs of diverse readership in coastal and remote communities. Marine Search for control and security Nowadays, the maritime domain is under significant stress of modernization which leads to discussions about efficiency versus capacity, similar concerns as those developing in many also

(Ramaraju et al., 2025).

In addition to physical bottleneck and constraints, these technical challenges also lead to the difficulties in implementation of any literacy programs and activities which creates some limitations requiring a solution. Extreme weather at sea and coastal weather are responsible for ship damages from wave and swells. Also, ships find it difficult to move into shallow coastal waters, which constrains the operational range of the program. Technical limitations also make matters worse. There are fewer books being delivered in the months when weather conditions do not allow for boats to dock, and ships have been damaged. Ships may also struggle to reach shallow waters nearer the coast, limiting access to small islands requiring travel by boat, another challenge for its Floating Library program executed by the National Library of Indonesia. In order to solve those problems, National Library of Indonesia tries to collaborate with the agencies such as Navy, Water Police (Polairud), and other agen perisai laut. These undertakings have not performed significant results and are not suitable for long-lasting necessities. As a result, although the program has successfully promoted permanent literacy increases for children and coastal communities to some extent it has limited effects. This justifies the need for literacy interventions to balance innovation and cost (OECD, 2020).

The concept of floating libraries is not at all a novel one in the world. Historical documents indicate that a maritime literacy service was first started in 1822, whereby the British Sailors’ Society acted as an informal floating library service through naval institutions as early as the mid-19th Century. With continuing projects like GBA Ships’ Logos Hope show, floating libraries are alive and kicking as mobile knowledge platforms, reaching communities around the world. This is evidence of how valuable floating libraries can be for increasing access to literacy, but their effectiveness hinges on both good operations and meaningful connections with local socio-cultural circumstances. Similarly, traditional knowledge of shipbuilding discovered in historical maritime heritage shows relevance for supporting local community innovation today (Shaheen et al., 2023).

The rest of the content is well known in the Indonesian context but there are some developing alternative and more contextualised methods. One very promising innovation in this regard is the floating library operated on traditional Padewakang boats within the Armada Pustaka Mandar program. Historically, these boats have been used by sailors to sail long-distance trade routes between Mandar (South Sulawesi), the Bugis and Makassar since the 17th century in search of marine products (sea cucumbers) or even for war. Padewakang boats are wooden vessels that led the way for the Pinisi boat, bearing rectangular tanjaq sails, low construction costs with relatively high fuel efficiency and ease in shallow water navigation. Some sources even describe an ability for these boats to make it as far as Australia, thus making them very suitable for island environments (Widayat et al., 2022; Wu, 2016; Zazzaro et al., 2022). Initial research indicates that, such vessels could save operating costs by as much as 40% over comparable modern vessels and would always facilitate sufficient space to provide basic literacy services. In addition to their economic efficiency, the use of typical

traditional fishing boats strengthens local maritime identities and local cultural relevance as advocated by the principles of contextual and culturally responsive education (Tilaar, 2002). In addition, studies on regional connectivity and the Thailand Land Bridge project further underscore that complementarity of land-based transport connections with maritime routes and local logistics systems can contribute to sustainable development processes along coastal areas (Jeevan et al., 2025).

Similarly, another complementary program is the floating library operating in Sumatra Island, western Indonesia, by the Water Police Unit (Ditpolairud) of Lampung Regional Police. The program puts books in the hands of kids in coastal and island communities on smaller, simpler-to-operate boats. Although limited in its scale and requiring community collaboration, the institutional relief offered is internal flexibility at a small level with potential scalability (data by Lampung Regional Police year 2021). Several earlier studies indicate that in order to create more impact, sustainability and efficacy of non-formal education programs, this is especially relevant for marginalized communities, participation from the community level up is required (Bray, 1996; Williams & Cummings, 2005).

In particular, this paper will attempt to answer the following questions: (1) What are the operational and financial challenges faced in implementing the National Library program of National Library of Indonesia? (2) How innovative and cost-efficient is the traditional Padewakang boat, as opposed to other modern-day vessels? (3) To what extent does the Mandar Fleet floating library program with Padewakang boat design replicable in other coastal areas?

This study aims to design sustainable and contextually integrated floating library program model by incorporating the use of local resources (infrastructures), traditional community knowledge systems, and participatory approach that are appropriate to the geographical characteristics of west and east coastal areas in Indonesia. The model created is believed to also improve reading and literacy access in both coastal or island areas, and 3T regions across Indonesia alongside fostering a sense of cultural identity and community as reading volunteers. Finally, this paper is anticipated to enhance the equitable quality of education, literacy, submarine library innovation and human resource development in island environments and geophysics areas.

2. Methodology.

2.1. Research Design.

This research aims to critically review the limitations of floating libraries around the model established by the National Library of the Republic of Indonesia (Perpusnas), and at the same time proposes an alternative community-based matching model with the Mandar Library Fleet Padewakang traditional boats. The following article assesses the operational difficulties of implementing a locally and culturally based floating library model in Eastern Indonesian coastal communities, focusing on cost-effectiveness and relevance issues as well as broader social impacts.

To achieve the above-mentioned objectives, this study has utilized a qualitative exploratory research design coupled with a microhistorical approach, in order to examine different primary sources and secondary documentation. The qualitative design facilitated a deep understanding of the complex phenomena of access to literacy, community participation, and local adaptation in geographically constrained contexts.

A microhistorical approach is a historical research method that focuses on the events of very small, clearly defined and bounded units (individuals, families, village communities, coastal regions (special places), specific events) to explore broader social issues (Magnússon & Szijártó, 2013). In turn, this also needs to reveal wider structural and cultural dynamics. This dual approach is highly relevant for the research topic of contextual embedding and integration in culture- and community-based solutions that cannot be answered by qualitative methods alone.

2.2. Data Collection & Analysis.

We used the data from both primary and secondary sources for this study to ensure depth of analysis and triangulation. The major data were: (1) Documentation of results from semi-structured interviews with stakeholders, particularly literacy activists and community members implementing the program; local librarians; maritime actors related to the practice of floating library initiatives; (2) Field observations on the practices of floating libraries especially in Mandar Literacy Fleet which utilizes locally traditional Padewakang boats; and (3) Analysis methods to various documents, reports, archives related to these studies regarding library boat program and community-based literacy initiatives.

Secondary Data refer to (1) peer-reviewed journal articles, policy documents, and institutional reports on literacy, mobile libraries, and education in the 3T region; (2) historical / ethnographic literature on maritime traditions featured by some cultural practices particularly regarding Padewakang boats; and (3) global framework for inclusive education in coastal areas / remote islands/micro-practice/model of mobile library services / publications.

This article follows a microhistorical approach that is modeled on Carlo Ginzburg (himself inspired by Giovanni Levi, of an Italian school of thought) The term appears to have been used by American scholar George R. Stewart (1959) (Ginzburg et al., 1993), who concentrated on describing of local practices and specific cases which illustrate the ways that literacy reforms were enacted and adapted in communities. Thematic analysis was used to analyze the data, permitting the detection of significant themes and areas that were inductively conceived of—derived from the very data. The following key dimensions were analyzed:

1. Hurdles in implementing the operation of the floating library program and logistics.
2. Comparison of cost efficiency between the use of modern boats and Padewakang boats.
3. Acceptance from the community and cultural relevance.

This analysis facilitates a systematic interpretation of local innovations through the lens of broader conversations about educational equity and sustainable literacy efforts.

2.3. Narrative Construction and Interpretation.

Findings of this study presents an analytical narrative approach, integrating empirical evidence and contextual deductions. Instead of restating the events, the research weaves a narrative that ties local experiences to larger, structural questions about access and development in education. Following Robert A. Rosenstone and Lynn Hunt, this narrative-writing or historiography to the micro-historical perspective understands that a phenomenon at small and localized level can tell us something deeper about social transformation (Cohen, 1996). The Padewakang-based floating library model, on the other hand, is not only considered a technical innovation, but also a socio-cultural process in the West Flores community that symbolises their resilience and local knowledge system as an adaptive-response strategy of the community to educational disparity.

This study ultimately synthesizes available field data to assess the extent to which a novel, culturally based and low-cost floating library model can represent an economically sustainable intervention for improving literacy access among island, coastal and far-off regions in Indonesia.

3. Results and Discussion.

This exploration provides you with a study based on qualitative exploratory design of analysis with my improvements, how it can be applied through mini history methods that would help further described in this whole piece of work. Lastly, the analysis notes other examples of state-sponsored literacy programs from Lampung Regional Police Water Unit in western Indonesia. These were collected through documents, semi-structured interviews with various informants in each participating province, field observation at Armada Pustaka Mandar who implement a just floated library program in South Sulawesi Province and the Floating Library ran by Lampung Regional Police Water Police Directorate in Lampung Province West, and a variety of secondary sources from social media reporting related to 2 programs (controlled and described more at the methods section).

Data were analyzed using thematic analysis, which entails data reduction the data or organizing the transcripts into themes or categories followed by coding and interpretation. The outputs produced and showcased in this chapter build upon key themes that we identified across our multiple data sources, thus allowing for triangulation of the analysis and increasing its reliability. To ensure consistency with the main questions underlying this research, we structure result and discussion around the five themes.

3.1. Floating Libraries, Urban Studies and Transportation in Indonesia's Coastal Regions: Infrastructural Themes.

Before discussing the significance of this Padangekang model, it is essential to provide exposition on the shortcomings of existing floating library initiatives throughout Indonesia. One of

them is a floating library program initiated by National Library of Indonesia (Perpusnas RI) in 2010. This is also true for the program that will broaden opportunity access literature among coastal communities especially for fishing families and children in remote islands where its wingspan through conventional public library existing on land are limited (Law of the Republic of Indonesia Number 43 of 2007 concerning Libraries). This was the most clear indicator of a seriousness about equitable education, but it came with such a set of operational challenges that it could not sustain long-term in this form.

The biggest challenge is to actually buy ships and maintain them. An affordable cost for a modern vessel to use as floating library (Li, 2001), even more daunting for local governments and institutions with limited budgets is the annual operating cost of fuel, maintenance and crewing, estimated at \$162 million/year each (for a crew of four plus) for something the size of a 290-foot vessel. This is compounded by a reliance on modern engines and fuel-thirsty systems, along with fuel shortages, making it more inefficient and vulnerable to shifts in energy prices.

The situation is worlds apart from that of the floating library operations in Finland which enjoys the highest literacy rate in the world. In this example, their floating library was used to create a relaxed atmosphere of searching within themselves and build national reading culture (Flood, 2016). Apart from financial problems, floating library programs are also limited in their reach due to technical or geographical constraints. Many of the new craft cannot pass through coastal waters that are not very deep, nor rest near islands that are less accessible, and thus it was difficult for literacy activists to cross into those more isolating communities; because of this low demand for area authorities' written words program services haspt been noted.

Unpredictable East Indonesian weather change will disrupt program ecofriendly. The waves of Sulawesi waters are influenced by monsoon, strong wind, storm and seasonal wave in Sulawesi waters the Makassar Strait and East of Sulawesi Waters. And it's not unusual for sailing plans to be disrupted due such conditions with sailings being delayed and/or cancelled.

The lack of adequate number, volume, and quality of book collections constitutes another recurring issue, not only in floating libraries but also in academic and university libraries. A kind of best solution, 500 to maybe a thousand volumes is what one ship needs generally for a trip. However, the books do not respond to information needs and books availability title does not reflect coastal communities literacy process. In fact, coastal communities need reading material for children and books related to health and entrepreneurship, fisheries agriculture other maritime skills (Ferreira et al., 2021). Local supply and demand prospects misalign, making it a dismal teaching opportunity.

We seek partnership with institutions that can complement and build up the program. PNRI aims to facilitate skilled and safe mobility through collaboration with stakeholders, especially the Indonesian Navy and Coast Guard (data by National Library of Indonesia year 2015). Unfortunately, this co-operation does not help solve the problem of medium-term finances. High operational costs Coverage and/or frequency of service not suffi-

cient

However, it appears that also the similar problem does not only retire on the coastal area floating library program in Indonesia. However, from the 19th century onward, floating libraries were also a little less easily located on ships (benches inside the hold in a ship are not only limited in space and light, but they also seldom make habitable environments for book collections), and the charitable British Sailor's Society[en] has sent books decorating with free floats to sailors everywhere. Including even a library ship that sank on the way here. And it happened on the backside of this building next to a canal with the unusual name *Achtergracht*, Amsterdam as far back as 1971. They reflect the challenges posed by technical failures and frictions to collections but render floating library services inoperable (Manguel, 2006). They are different, but these examples demonstrate that floating libraries, too, have crashed and burned structurally or logistically.

Finally, Indonesia's experience and free library programs outside the country indicate that these types of program are affordable, technology appropriate, and geographically sensitive. In this regard, specific local and culturally embedded solutions such as the Padewakang model gain further relevance in providing sustainable delivery systems for these widely distributed coastal populations of Indonesia.

3.2. *The Efficiency of the Padewakang Model.*

The strongest argument for Padewakang as a floating library model has to be its cost effectiveness. The Padewakang is thus far more economical than the modern ships that would be deployed in other government schemes but does not sacrifice mobility or community accessibility. That these and longer voyages to Australian ports have been undertaken by Sulawesi sailors (using this type of wooden vessel at least since the seventeenth century) indicates that much about local maritime technology is still pertinent in twenty-first-century social service planning and management (Ammarell, 1999; Horridge, 1981).

This gives the Padewakang an economic edge when looking at operational costs. A week-long Padewakang tour will cost around Rp 3 million to Rp 4 million (roughly USD 197–262) per person, a study of the East Asian Studies found. By contrast, the operational cost of a modern floating library ship operated by the Research and Technology Ministry on South Sumatra and Jakarta stations in 2017 could reach Rp 50 million to Rp 70 million per unit. Due to the relatively large gap new vessels may be environmentally friendlier, particularly in areas relying on scarce public funding and community donations for literacy services (Liebner, 2014).

This has come into effect due to several different reasons. Second, Padewakang had simple construction design and a simple sail system that could reduce fuel consumption. Thirdly, due to its small design and lightweight construction, thirdly onboard are also capable of operating in shallow coastlines as well as limited channels and even small island ports that avoid larger vessels (Southon 1994). This enables direct access to communities often neglected by conventional outreach programs.

It is still useful for the Armada Pustaka Mandar program, which was prepared in the Movlib campaign (Moving Library Indonesia). In Larantuka, East Flores, emerged the Padewakang in December 2019, travelled hundreds of kilometers from Makassar and passing through a number of ports on Sulawesi and East Nusa Tenggara to Maluku (Tempo, 2020) The journey not only demonstrated the ruggedness of the boat, but also its ability to provide low-cost, long-distance literacy services, global bridges between communities.

The programme, above all else, was not just about providing books. At each of the stops, organizers hosted reading events and hands-on literacy activities for children in the community. Its founder Mahammad Ridwan Alimuddin said many of the children appeared enthusiastic. Some even re-told stories they had just heard, others eagerly explored new texts and study materials (Ruhana, 2017). What these responses suggest is: a little cash can go a long way to inducing large educational gains if the programs are designed in close accord with local needs.

Models of padewakang bear a close resemblance to these early floating library plans; expect the nineteenth century British Sailors' Society staff used crude craft for those purposes, carrying books to sailors for little or no cost (Black, 1996). The Padewakang may have an edge, though, in its easy access to Indonesia's maritime heritage. Offering culturally identifiable data helps local acceptance, participation and ownership of the community.

3.3. *Replicable Padewakang Model in New Coastal Areas.*

Padewakang's floating library project success indicates that this model has tremendous potential to be implemented in other Indonesian coastal communities. Despite being a very large archipelagic multi-island, populated country, with high access to books (and educational services and literacy infrastructure), Indonesia is still struggling with inequalities in access. In a manner of speaking, there is a real opportunity to help access those communities that are still not well served by classical land-based services with this model of library on mobile and attractive conditions in the seaside.

We find that some areas like Maluku, Nusa Tenggara and sector pieces of Kalimantan are probably the most potential locations for replication. One such reason is that 'the social environment', meaning that the Padewakang and traditional vessels are already ingrained in local maritime culture in many eastern Indonesian communities. Operating such vessels however is already part of local ship building styles and practice, may not even require full investment in entirely new vessels as proposed by Southon,(1994) use a combination of known materials and skills to meet scaled up costs while maintaining aspects of the local heritage (Southon, 1994).

Another benefit is operational affordability. Third, unlike modern floating library ships providing writing tools running Cost of Padewakang is much lesser than modern type so that local governments, society groups and NGOs can pay for the service (Sutarno, 2004). And it provides an opening for smaller institutions to lead the way with funding their own literacy programs or to collaborate with others so they can.

It is also geographically flexible. However, thanks to its shallow draft and low-sill hull, it can access islands that a larger vessel would struggle to contain. So, this was also suitable system for the island clusters, thousand islands and North Maluku, as well as coast settlements that is quite low density population and limit of transport infrastructure (data by Indonesian Ministry of Transportation year 2020). The mobile maritime services are particularly useful in those areas where there is no road, or permanent library buildings.

Armada Pustaka Mandar also proves that the ship's proper implementation does not fully depend on the vessel, as community involvement is needed. It has been using local volunteers and sailors who already have skills to row traditional boats. Not only does it cost them less in labour but also makes for greater local ownership and trust. But we do not replicate cavalierly. This answer also requires some basic technical elements: How do you teach library science at the crew level, how to side-step repetition at the local school or learning center, and how do you refresh materials in a regular timeframe? Having local partnerships with national and civil society organizations is more sustainable in the long term. Conversely, in Larantuka, sustained visits were backed by institutions at the local level (for example, logistical assistance and funding was sought from and received via the Simpasio Institute). Lessons for future events examined how the community engaged in these are even more limited if they need public and need to rent acceptance.

At the same time, each one of the regions is different not only in culture but also in education. Local maritime traditions or how well the language is spoken and written will impact the adaptations required in the model. Therefore, these replication efforts should involve early reading training for children accompanied with mentor teams of trained volunteers and books in the local language provided to match the materials (Cummins, 2000; Team, 2020).

Conclusions.

Research has found that floating libraries can successfully reach these areas on coastal and remote islands in Indonesia. Historical library boat programs are expensive to operate, often carrying only few books, and the boats struggled in shallow coastal waters which limited access. Then through a traditional Indonesian boat called the Padewakang, the solution has come. This ship has several benefits: (1) it is cheaper to operate; (2) it can access small islands and shallow waters easier than a large ship; (3) its high cultural value encourages communities to accept this help and stimulate pride on site.

The model demonstrates that with the help of volunteers and community members, literacy programs can have a large impact at a low cost. Literacy programs success in coastal areas also does not only based by book but how the local way or local culture. The model of partnership in the Padewakang is decentralized, locally based; this type of flexible approach has the potential to scale more broadly and construct a literary ecosystem resilient enough for Indonesia.

References.

- Ammarell, G. (1999). *Bugis Navigation*. Yale University Southeast Asian Studies.
- Andréfouët, S., Paul, M., & Farhan, A. R. (2022). Indonesia's 13,558 islands: A new census from space and a first step towards a One Map for Small Islands Policy. *Marine Policy*, 135(January). <https://doi.org/10.1016/j.marpol.2021.104848>
- Bappenas. (2020). *Rencana Pembangunan Jangka Menengah Nasional 2020-2024*. Lampiran Peraturan Presiden Republik Indonesia Nomor 18 Tahun 2020.
- Black, A. M. (1996). *A New History of the English Public Library: Social and Intellectual Contexts, 1850-1914*. Leicester University Press.
- Bray, M. (1996). *Decentralization of Education: Community Financing*. World Bank.
- Christiani, L. (2020). Preservasi, Konservasi dan Restorasi Dokumen di Rekso Pustaka. *ANUVA*, 4(3), 371–382.
- Cohen, S. (1996). Postmodernism, the new cultural history, film: Resisting images of education. *Paedagogica Historica*, 32(2), 395–420. <https://doi.org/10.1080/0030923960320206>
- Cummins, J. (2000). *Language, Power, and Pedagogy: Bilingual Children in the Crossfire*. Multilingual Matters.
- Ferreira, J. C., Vasconcelos, L., Monteiro, R., Silva, F. Z., Duarte, C. M., & Ferreira, F. (2021). Ocean literacy to promote sustainable development goals and agenda 2030 in coastal communities. *Education Sciences*, 11(2), 1–21. <https://doi.org/10.3390/educsci11020062>
- Flood, A. (2016). Finland ranked world's most literate nation. *Guardian*, 1–5.
- Ginzburg, C., Tedeschi, J., & Tedeschi, A. C. (1993). Microhistory: two or three things that I know about it. *Critical Inquiry*, 20(1), 10–35. https://doi.org/10.1163/9789004274709_012
- Horridge, G. A. (1981). *The Prah: Traditional Sailing Boat of Indonesia*. Oxford University Press.
- IFLA. (2021). *IFLA World Library and Information Congress, 86th IFLA General Conference*.
- Jeevan, J., Haqimin, N., Salleh, M., Ngah, A. H., Ahmad, A. U., Autsadee, Y., & Boon, M. T. (2025). Synthesising the competency of the Thailand land bridge venture as the new overland intersections in the global trade. *Journal of Maritime Research*, XXII(I), 59–74.
- Li, K.-J. (2001). Maritime safety culture and development of ship and offshore installations design standards in the 21st century. *Practical Design of Ships and Other Floating Structures*, I, 3–11. <https://doi.org/10.1016/b978-008043950-1/50001-6>
- Liebner, H. H. (2014). *The Siren of Cirebon: A Tenth-Century Trading Vessel Lost in the Java Sea* [Doctoral dissertation]. University of Leeds.
- Magnússon, S. G., & Szijártó, I. M. (2013). *What is Microhistory? Theory and Practice*. Routledge. <https://doi.org/10.4324/9780203500637>
- Manguel, A. (2006). *The Library at Night*. Yale University Press.

- OECD. (2020). *Building a High-Quality Early Childhood Education and Care Workforce*. OECD iLibrary.
- Rahmatdin, M. N., & Abdul, N. S. F. (2016). The influential factors of the feeder service development in Malaysia towards its sustainability. *Journal of Maritime Research*, XIII(III), 77–84.
- Ramaraju, S., Vairavan, C., & Manigandan, K. (2025). Digital dystopia: The challenges and opportunities for the budding mariners in the present scenario. *Journal of Maritime Research*, XXII(I), 192–196.
- Rudiarto, I., Handayani, W., & Setyono, J. S. (2018). A regional perspective on urbanization and climate-related disasters in the northern coastal region of central Java, Indonesia. *Land*, 7(1). <https://doi.org/10.3390/land7010034>
- Ruhana, E. I. (2017). *Cerita di Balik Perahu Padewakang di Museum La Boveire Belgia*. National Geographic Indonesia.
- Setiawati, M. D., Chatterjee, U., Djamil, Y. S., Alifatri, L. O., Nandika, M. R., Rachman, H. A., Supriyadi, I. H., Hanifa, N. R., Muslim, A. M., Eguchi, T., Prayudha, B., Oktaviani, A., Adi, N. S., Renyaan, J., Sulha, S., Wouthuyzen, S., Pal, S. C., Islam, A. R. M. T., Alam, E., & Islam, M. K. (2023). Seribu Islands in the megacities of Jakarta on the frontlines of the climate crisis. *Frontiers in Environmental Science*, 11(November), 1–17. <https://doi.org/10.3389/fenvs.2023.1280268>
- Shaheen, M. A., Ashikur, M. R., Rupom, R. S., & Rahaman, M. (2023). A historical evaluation of shipbuilding heritage in the Bengal region: A geographical perspective. *Journal of Maritime Research*, XX(I), 46–58.
- Shaiful, N., Abdul, F., Othman, M. K., & Ismail, A. (2018). Introduction of floating vessel breakwater system for coastal and tourism sustainability using re-use vessel. *Journal of Maritime Research*, XIII(I), 46–57.
- Southon, M. (1994). *The Navel of the Perahu: Meaning and Values in the Maritime Trading Economy of a Butonese Village* [Doctoral dissertation]. Australian National University.
- Sutarno. (2004). *Manajemen Perpustakaan: Suatu Pendekatan Praktik* (1st ed.). Sagung Seto.
- Team, G. E. M. R. (2020). Global education monitoring report, 2020: Inclusion and education: all means all. In *Inclusive Education Across Cultures: Crossing Boundaries, Sharing Ideas*. <https://doi.org/10.4135/9788132108320.n14>
- Tempo. (2020, February). Padewakang, Ekspedisi Merawat Kenangan. *Tempo.co*.
- Tilaar. (2002). *Perubahan Sosial dan Pendidikan: Pengantar Pedagogik Transformatif untuk Indonesia*.
- UNESCO. (2015). *Education 2030: Incheon Declaration and Framework for Action*. UNESCO.
- Widayat, J., Syarif, M., Yusri, A., Dollah, A. S., Latif, S., & Nur, K. W. (2022). Perpustakaan terapung Danau Mawang dengan pendekatan desain tropis. *LOSARI, Jurnal Arsitektur Kota Dan Pemukiman*, 7(2), 205–220. <https://doi.org/10.33096/losari.v7i2.424>
- Williams, J. H., & Cummings, W. K. (2005). *Policy-Making for Education Reform in Developing Countries: Contexts and Processes* (Vol. 1).
- Wu, C. (2016). *Early Navigation in the Asia-Pacific Region: A Maritime Archaeological Perspective*. Springer.
- Zazzaro, C., Liebner, H., Soriente, A., Ferraioli, G., & Purnawibawa, A. G. (2022). The construction of an historical boat in South Sulawesi (Indonesia): The Padewakang. *Journal of Maritime Archaeology*, 17(4), 507–557. <https://doi.org/10.1007/s11457-022-09332-5>