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Archipelagic Consciousness: Reimagining National Identity Through Local and Maritime Histories in Indonesian Primary Education

Firzan Dahlan[1*], Grace Freya Purba[2], Farah Faiza[2], Amir Serikova[3], Danila Adi Sanjaya[4], Yuniarti Maretha Pasaribu[5], Susi Diana[6], Christian Napitupulu[7], Maya Enderson[8], Emir Abdullah[7]

[1]*Department of History Science, Enigma Institute, Palembang, Indonesia*
[2]*Department of Archeology, Enigma Institute, Palembang, Indonesia*
[3]*Department of Cultural and Heritage Preservation, Emeritus Research Center, Skopje, North Macedonia*
[4]*Department of Literature Science, CMHC Research Center, Palembang, Indonesia*
[5]*Department of Cultural Science, Enigma Institute, Palembang, Indonesia*
[6]*Department of Tourism and Cultural Heritage, Enigma Institute, Palembang, Indonesia*
[7]*Department of Constitutional Law, Sanskrit Institute, Jakarta, Indonesia*
[8]*Department of Architecture, Enigma Institute, Palembang, Indonesia*

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Corresponding author
Firzan Dahlan
firzan.dahlan@enigma.or.id

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0009-0003-1193-4431

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ABSTRACT

Background. Indonesia's school history has long favored a centralized, land-oriented national narrative that pushes local and maritime histories to the margins. Few studies test whether teaching them builds a more inclusive sense of nationhood in children.

Objective. To examine whether a primary-school module built on local and maritime histories was associated with higher "Archipelagic Consciousness" than standard instruction, and to explore how students experienced it.

Methods. A quasi-experimental, mixed-methods study ran for one 16-week semester in four public primary schools in Palembang and Surakarta. In each school, a coin toss assigned one fifth-grade class to the "Nusantara Bertutur" module and another to the standard curriculum (180 students: 92 experimental, 88 control). The 24-item Archipelagic Consciousness Inventory (ACI) was administered before and after. Qualitative data came from focus groups, capstone projects, and observations. Analyses used analysis of covariance (ANCOVA) with the pretest as covariate, and thematic analysis.

Results. The experimental group's mean total ACI score rose from 2.98 to 4.35, while the control group's moved from 2.95 to 3.10. The adjusted group effect was significant, $F(1, 177) = 94.28$, $p < 0.001$, partial $\eta^2 = 0.347$. Three themes emerged: the sea as a connector ("The Map Came Alive"), local stories as part of national history, and a shift from "Othering" to "Interdependence".

Conclusion. The module was associated with large gains in Archipelagic Consciousness, and students described the sea as a connector. Because classes were allocated, the instrument is new, and there was no follow-up, replication is needed before curriculum change.

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1. Introduction

Indonesia has more than 17,500 islands spread across three time zones, and it poses an unusual puzzle for the study of nationalism and education.[1–3] Its motto, Bhinneka Tunggal Ika (Unity in Diversity), expresses both an aspiration and a lasting difficulty.[4–6] How can one national identity be forged from a mosaic of ethnicities, languages, and cultures that the sea links together? For decades, the state has answered through history education, by promoting a grand national narrative.[4,7–10] Postcolonial nation-building needed such a story. But it has been mostly terrestrial, linear, and politically centralized. It dwells on the rise and fall of land-based kingdoms, the struggle for independence, and the consolidation of the unitary state.

Critics often call this conventional historiography Java-centric.[4,7–10] Some scholars say it has produced a 'continental mindset' in an archipelagic nation.[1,11–13] The sea covers over two-thirds of Indonesia's territory, and it has long carried trade, migration, and cultural exchange. Yet school textbooks often show it as a gap between islands, a source of danger, or a stage for naval battles.[4,7–10] Local port kingdoms, the sagas of Bugis, Mandar, and Malukan sailors, and the spice trade networks that tied the archipelago together, and to the wider world, tend to sit in footnotes to the larger political story. Leaving them out matters. Students whose local identities and histories barely appear in the national saga may feel alienated, which could fragment their sense of belonging instead of integrating it. It also fails to give the next generation a mental map that matches the geography and culture of their country, a maritime civilization.

Indonesian education is changing.[14–16] The Kurikulum Merdeka (Independent Curriculum) allows more pedagogical flexibility and differentiation, and it asks teachers to build competencies around each student's interests and local context. The reform opens a real chance to rethink what history education

contains and what it is for. At the same time, a growing body of scholarship argues for a 'New Indonesian Historiography' with social, local, and maritime perspectives.[2,17] These scholars hold that a decentralized, inclusive historical narrative does not threaten national unity. They see it as the strongest foundation for unity. The theoretical and historiographical case is well developed. Empirical research on how it works in primary classrooms, and on what it achieves there, remains scarce.

Earlier educational research in Indonesia has mostly asked whether teaching methods such as cooperative learning or technology integration help students retain the standard historical content.[7,18,19] Other studies have examined textbooks for ideological bias.[7,18,19] Both lines of work are useful. Neither has asked what happens when the content itself changes. To our knowledge, no study has systematically examined the cognitive and affective outcomes of replacing, or adding to, the dominant national narrative with one rooted in local and maritime experience. This is a research gap. Little empirical evidence exists on how such a curricular shift affects a young child's idea of the nation, relationships with compatriots from other islands, and overall sense of national identity.

This study set out to fill that gap. We designed a new pedagogical approach and tested its effect on what we call 'Archipelagic Consciousness'. We define the construct as having four parts. The first is a cognitive understanding of the sea as a historical connector and not a divider. The second is an appreciation of how local and national histories depend on each other.[17,20] The third is a sense of shared identity and interdependence with people across the archipelago. The fourth is affective pride in Indonesia as a maritime nation. Our main aim was to examine how effective a pedagogical model centered on local and maritime histories is in fostering 'Archipelagic Consciousness' among fifth-grade primary school students in Indonesia. We wished to measure quantitatively how students' Archipelagic Consciousness changed after the intervention, compared with a control group taught by standard instruction. We also wished to explore qualitatively how students experienced the intervention, and how their understanding shifted regarding their local identity, the sea, and the Indonesian nation as a whole.

The contribution of the study is threefold. First, it moves from theoretical discussion to measurement by treating 'Archipelagic Consciousness' as an educational construct that can be measured. We developed and validated an instrument for this outcome, which gives educational researchers a new tool. Second, it presents and evaluates a replicable pedagogical model for teaching local and maritime history in primary school. Others have argued for such a shift. This research sets out the 'how', with a structured intervention that combines storytelling, project-based learning, and the use of local resources. Third, its mixed-methods design supplies empirical evidence on the cognitive and affective effects of this pedagogical shift. It offers a basis for a new approach to forming national identity in Indonesia, one woven from the historical threads of many islands and seas instead of imposed from the center. It also gives future curriculum policy and teacher professional development an evidence base.

2. Methods

2.1 Study design and setting

We used a quasi-experimental, mixed-methods design to investigate the impact of the pedagogical intervention. A non-equivalent control group with pretest and posttest measures was the most feasible and ethically sound choice for a school setting.[21,22] Whole classes, not individual students, were the units of allocation, which left established classroom structures undisturbed (Section 2.2). Focus groups and portfolio analysis formed the qualitative component. It added depth, context, and explanatory power to the quantitative findings. The study ran for a full academic semester of sixteen weeks. The population was fifth-grade students (typically aged 10–11) from four public primary schools in Indonesia. We chose this age group because its members are developing abstract thinking skills and an understanding of social identity.

2.2 Participants and sampling

Schools were selected by purposive sampling to ensure geographical and cultural diversity, which the Archipelagic Consciousness construct needs if it is to be tested. Two schools were in Palembang, South Sumatra, a city that was the center of the Srivijaya empire and whose region therefore has a rich maritime history. The other two were near Surakarta, Central Java. They represent the historically dominant Javanese agrarian narrative. This sampling let us examine the effect of the intervention on students with different levels of prior exposure to maritime culture. Purposive selection was necessary. We still took care to limit selection bias. In each of the four schools, a coin toss decided which one fifth-grade class went to the experimental group and which other class went to the control group. This reduced bias at the school level.

The final sample had 180 students, 92 in the experimental group and 88 in the control group. Their mean age was 10.7 years. Baseline data confirmed equivalence on these variables. As the Results section shows (Table 1), the experimental and control groups did not differ significantly in age, gender, prior national achievement score, or pretest ACI score.

2.3 The "Nusantara Bertutur" module

The heart of the study was the design and delivery of the "Nusantara Bertutur" (The Archipelago Narrates) pedagogical module for the experimental group. It had sixteen weekly sessions of two 35-minute periods each. The control group meanwhile followed the standard government-prescribed history curriculum and its textbook, which concentrate on the chronology of national heroes and the key events of the independence struggle. The module had three linked thematic phases. In the first, "Pahlawanku, Ceritaku" (My Hero, My Story), students investigated local historical figures and events before meeting the wider national story, which validated their local identity. Activities included visits from local storytellers, analysis of local songs, and the making of a local history timeline. The second phase, "Laut Kita, Jalan Kita" (Our Sea, Our Road), explicitly reframed the sea as a connector. It used case studies of inter-island interactions and spice trade routes, and map-based activities in which students traced historical maritime networks. The final phase, "Satu Sauh, Satu Jangkar" (One Anchor, One Mooring), aimed to bring the local and national narratives together and tie them to contemporary identity. It ended in a capstone project. Working in groups, students created a digital story or a physical diorama titled "Indonesia, My Archipelagic Home", which required them to merge their local history with the broader maritime narrative they had learned. Teachers in the experimental group attended a two-day training workshop on the philosophy and methods of the module.

2.4 Instrument: the Archipelagic Consciousness Inventory

We used a mixed-methods approach to collect data. The quantitative instrument was the 'Archipelagic Consciousness Inventory' (ACI). The ACI is a 24-item questionnaire, developed and validated for this study, that measures the core components of the construct on a 5-point Likert scale. It has four subscales: Maritime Historical Knowledge, Inter-island Connectivity, Local-National Integration, and Affective Maritime Identity. Development took several stages. First, we generated initial items from a comprehensive literature review and from consultations with a panel of ten experts, among them historians, primary education specialists, and psychometricians. Next, we piloted the instrument with 60 fifth-grade students from a non-participating school to assess item clarity and comprehensibility. An exploratory factor analysis then supported the proposed four-

factor structure, which offers preliminary evidence of construct validity. Reliability was excellent: Cronbach's alpha was α = 0.92 for the total scale. The subscales were reliable too: Maritime Historical Knowledge (α = 0.87), Inter-island Connectivity (α = 0.89), Local-National Integration (α = 0.90), and Affective Maritime Identity (α = 0.88). Both groups completed the ACI before and after the intervention. A pilot of 60 students is small for a 24-item, four-factor instrument,[23,24] so the ACI is treated here as a provisional measure.

2.5 Qualitative data and implementation fidelity

Qualitative data came from three sources. These were semi-structured Focus Group Discussions (FGDs) with students from both groups after the intervention, analysis of the capstone projects of the experimental group, and periodic non-participant classroom observations. The observations served to ensure fidelity. A checklist monitored adherence to the key pedagogical principles and activities of the "Nusantara Bertutur" module. It indicated a high degree of fidelity (over 95% adherence) across the experimental classes. The observations also confirmed that control group teachers kept strictly to the standard curriculum, which minimized potential treatment contamination.

2.6 Data analysis

We analyzed the quantitative ACI data in IBM SPSS Statistics. An analysis of covariance (ANCOVA) on posttest ACI scores used group as the independent variable and pretest scores as the covariate, to control for pre-existing differences.[25,26] ANCOVA assumptions were tested first. FGD transcripts and observation notes underwent a six-phase thematic analysis to identify emergent themes.[27,28] Two researchers independently coded a subset of the transcripts to establish inter-coder reliability, and NVivo 12 was used to manage and code the data. We then triangulated the findings to produce a comprehensive interpretation.[29,30]

2.7 Ethical considerations

Before the study began, ethical clearance was obtained from Ethical Committee of Social Research, Enigma Institute, Indonesia (Approval Number 2024/019). Principals, teachers, and parents gave informed consent, and the students themselves gave assent.

3. Results

3.1 Baseline equivalence

The experimental and control groups were comparable on the baseline demographic and academic variables (Table 1). This equivalence supports attributing posttest differences to the intervention, although differences that were not measured cannot be excluded in a non-randomized design. Table 2 gives the descriptive statistics for Archipelagic Consciousness before and after the intervention.

Table 1. Baseline characteristics of the experimental and control groups.

Variable	Experimental (*n* = 92)	Control (*n* = 88)	Test statistic	*p*
Age (years), mean (SD)	10.7 (0.6)	10.6 (0.7)	$t(178) = 0.98$	0.328
Female, %	51.1	48.9	$\chi^2(1) = 0.09$	0.761
Prior national achievement score, mean (SD)	78.5 (5.2)	77.9 (5.5)	$t(178) = 0.74$	0.460
Pretest ACI total score, mean (SD)	2.98 (0.55)	2.95 (0.58)	$t(178) = 0.36$	0.719

Note. Values are mean (SD) or percentage; group differences were tested with independent-samples *t* tests or χ^2; SD = standard deviation.

3.2 Quantitative outcomes

As Table 2 shows, the two groups began at nearly the same level, and after the intervention the control group gained little, with its total ACI score moving from 2.95 to 3.10. The experimental group's total ACI score, by contrast, jumped from 2.98 to 4.35. Its largest gains came in the inter-island connectivity and local-national integration subscales. These gains are in line with the core aims of the module, which were to reframe the sea as a connector and to validate local identities.

Table 2. Descriptive statistics for the Archipelagic Consciousness Inventory (ACI) by group and time.

Variable / construct	Experimental pretest M (SD)	Experimental posttest M (SD)	Control pretest M (SD)	Control posttest M (SD)
ACI total score	2.98 (0.55)	4.35 (0.48)	2.95 (0.58)	3.10 (n.r.)
ACI subscales				
Maritime Historical Knowledge	3.05 (0.61)	4.28 (0.53)	n.r.	n.r.
Inter-island Connectivity	2.89 (0.70)	4.51 (0.49)	n.r.	n.r.
Local-National Integration	2.91 (0.65)	4.47 (0.51)	n.r.	n.r.
Affective Maritime Identity	3.07 (0.58)	4.14 (0.55)	n.r.	n.r.

Note. SD = standard deviation; n.r. = not reported in the submitted manuscript. Scores are on a 5-point Likert scale (1 = strongly disagree, 5 = strongly agree); higher scores indicate higher levels of the construct.

To test whether the difference was statistically significant while controlling for pretest scores, we ran an ANCOVA whose assumptions were met: the covariate and the dependent variable were linearly related, and Levene's test indicated homogeneity of variances ($p > 0.05$). The most important check was homogeneity of regression slopes. It was also met, since the interaction between the pretest covariate and group was not significant, $F(1, 176) = 1.12$,$p = 0.291$. Table 3 gives the ANCOVA results.

Table 3. Results of the analysis of covariance (ANCOVA) for posttest ACI total scores.

Source	Sum of squares	df	Mean square	*F*	*p*	Partial η^2
Pretest ACI score (covariate)	3.58	1	3.58	15.67	< 0.001	0.081
Group (intervention)	21.54	1	21.54	94.28	< 0.001	0.347
Error	40.44	177	0.23			
Total	66.86	179				

Note. Dependent variable = posttest ACI total score; covariate = pretest ACI total score.

After adjusting for pretest scores, the group effect on posttest ACI scores was statistically significant, $F(1, 177) = 94.28$, $p < 0.001$. The partial eta squared (partial $\eta^2 = 0.347$) indicates a large effect: group membership accounted for 34.7% of the variance in posttest scores that the pretest did not explain.[31–33] A p value this small means that a difference as large as this would be very unlikely if the groups did not differ. It does not show that the module alone produced the difference.[31–33]

3.3 Qualitative themes

Theme 1: "The Map Came Alive"

Thematic analysis of the focus group discussions and the student portfolios produced rich data that explained the quantitative findings and showed clear differences between the two groups. The first theme concerned how students conceived of their nation's geography. In the experimental group, students moved from a static view to a dynamic one. The theme was called "The Map Came Alive". Control group students typically described Indonesia as a collection of islands separated by a vast and empty sea. One of them said, "To go to Kalimantan, you have to cross the sea. It's far away". Experimental students described a different perspective: the sea was no longer empty space but a network of historical pathways. A student named R explained it this way: "Before, I thought the sea was just for fish. Now, I know it was the highway of our ancestors... The sea didn't separate us; it was the road that connected us. The map in my head now has lines, like roads, all over the water". The new mental map was full of activity and connections, which suggests a shift toward an integrated view of the maritime network.

Theme 2: "My Grandpa's Story is History Too"

A second, more personal theme concerned the validation of students' own heritage. It was titled "My Grandpa's Story is History Too". Control group students almost exclusively named national figures when asked about important history, and they saw local stories as separate and less significant. Experimental students wove their local narratives into the wider national story. A student from Surakarta, B, put it this way: "We learned about Prince Diponegoro, but we also learned how the farmers in my village used to trade their rice with merchants from the coast, who then sailed to other islands. It made me feel like my village, even though it's far from the sea, was part of the big story too... my grandpa's story about the river trade is also Indonesian history". Seeing their own world as part of the national story appeared to create a strong emotional connection and to reduce the psychological distance between local and national identity.

Theme 3: From "Othering" to "Interdependence"

The final theme was a shift in social perspective from 'Othering' to 'Interdependence'. The Spice Trade activities and the study of inter-island sailors were linked to a sense of shared destiny, and students came to appreciate what different cultures contribute. A Javanese student, D, reflected on her new understanding of the Bugis people: "I used to think people from other islands were very different. But when we learned about the Bugis sailors, how brave they were and how they had special knowledge about the stars and the wind, I thought they were so cool... We all needed each other". The discovery of "needing each other", of historical and economic interdependence, replaced stereotypes with a concrete picture of mutual dependence and gave students a sense of belonging to one interconnected archipelagic family.

4. Discussion

4.1 Principal findings

The quantitative effects were large and the qualitative data were rich. Together they suggest that the "Nusantara Bertutur" module was associated with substantial gains in students' Archipelagic Consciousness, an important competency for citizens of a diverse nation-state. The qualitative accounts point to several linked processes that may have contributed. The module appeared to restructure students' mental maps of their nation, to validate their personal identities as a prerequisite for building a collective one, to reduce intergroup barriers by fostering a sense of interdependence, and to spark an emotional connection to a reimagined national story. These processes were not measured directly, so they are offered as interpretations of the interview accounts and not as tested mechanisms.

4.2 Cognitive restructuring of national space

The module's main contribution appears to have been a cognitive restructuring of national space. Conventional curricula often present maps as static pictures of landmasses divided by an empty blue void. "Nusantara Bertutur" challenged that dichotomy directly. It filled the sea with stories of trade, migration, and cultural exchange and turned a barrier into a schema of connection. Theories of cognitive mapping hold that our understanding of space is a subjective construction shaped by narrative and cultural significance.[34,35] In line with them, students moved from a static, 'Euclidean' map to a dynamic, 'hodological' map built on pathways. R's statement that the map in her head "now has lines, like roads, all over the water" illustrates this shift. In the new mental model, islands are nodes in a historical network. Such a model could supply the foundation on which an integrated archipelagic identity can be built.

4.3 Local identity as a foundation

Second, the model drew on the philosophies of John Dewey and Lev Vygotsky.[36,37] Both argued that education should connect to the learner's lived experience. The module began deliberately with the child's tangible world, not with the abstract nation: local heroes and local stories. Students came to see that their own heritage was a foundational building block of the national story and not a peripheral one. This validation can be read as a Vygotskian scaffold. Familiar local history lets the student reach a zone of proximal development for understanding the larger, more complex national history. B's quote shows how linking the personal narrative to the grand narrative fostered a nested identity structure. In it, being Javanese or Palembangese is a specific and valued way of being Indonesian. The higher Local-National Integration subscale means in the experimental group are consistent with this interpretation, although no subscale test was reported.[17,20]

4.4 Interdependence and a superordinate identity

Third, the intervention dismantled intergroup barriers by building a sense of historical and cultural interdependence. This bears on Social Identity Theory, which explains how people form in-groups and out-groups.[38,39] A traditional curriculum

can reinforce those distinctions without meaning to. "Nusantara Bertutur" worked against them. Its study of inter-island trade and migration created a superordinate identity, that of an "Archipelagic People". In the Spice Trade activity, students from different "islands" had to trade to obtain resources, so they experienced interdependence at first hand. D's reflection that "We all needed each other" points to a discovery of historical interdependence. Students learned that cultural differences were not marks of otherness but specialized assets that serve the whole. Recategorization of this kind is a strategy described in the literature for reducing intergroup bias and building cohesion,[38,39] and the high Inter-island Connectivity means are consistent with it.

4.5 Affective engagement

Finally, the affective domain of learning also matters.[40,41] The study showed a clear path from cognitive understanding to emotional investment. Through its focus on narrative and human agency, "Nusantara Bertutur" appeared to kindle an emotional bond with the past. Students expressed pride and excitement ("our kingdom," "so cool"). The higher Affective Maritime Identity means suggest a sense of ownership. This affective engagement, grounded in historical empathy, may turn an academic concept into a lived and felt identity.[40,41] The dioramas and digital stories that students created were more than academic exercises. They were creative expressions of a reimagined relationship with the nation. Storytelling and project-based work, which the module combined, are widely used in primary education to engage pupils and deepen understanding.[42,43]

4.6 Comparison with recent studies

These findings are in line with recent Indonesian work on local content and national identity. Studies of local-history teaching in primary schools describe it as shaping children's identity, character, and cultural awareness from an early age,[44] and teachers who bring local wisdom into the Merdeka Curriculum report that context-based, differentiated learning is workable in practice.[16,45] Research on civic education in elementary schools likewise describes the formation of national identity as a gap between normative expectations and classroom practice,[46] and analyses of maritime policy note that national development has long favored land-based sectors over maritime heritage.[3] The present study adds a structured module and a comparison with a control group to this largely descriptive literature. Evidence from other countries also links historical thinking to national identity among adolescents,[47] although the age group and context differ from ours.

4.7 Interpreting the size of the effect

The size of the effect needs careful reading. A partial η^2 of 0.347 is much larger than the effects usually reported for educational interventions, which tend to be small to moderate when outcomes are measured by independent assessments.[48,49] Effects of this size are more often seen when the outcome is closely aligned with the intervention, when the instrument is developed by the study team, or when the groups are not equivalent in ways the baseline tests cannot detect. All three conditions may apply here: the ACI was written for this module, pupils in the experimental classes were taught by trained teachers, and group membership was assigned at class level. The effect size should therefore be treated as a promising estimate that requires replication with independent measures, and not as a settled magnitude.[31–33]

4.8 Limitations

The limitations of the study deserve attention. One is a possible Hawthorne effect.[50] The novelty of the intervention and the extra attention given to the experimental group may have contributed to their gains, whatever the specific content of the module. In addition, the quasi-experimental design cannot fully separate two things.[21,22] One is the historical content (local and maritime narratives). The other is the pedagogy (project-based learning, storytelling, student-centered activities). The control group followed a traditional, textbook-driven curriculum. So it is unclear whether the active ingredient was the change of historical focus, the engaging teaching methods, or both together. We argue that content and pedagogy are inseparable in the "Nusantara Bertutur" model. The maritime narrative lends itself to dynamic, project-based exploration. Even so, this remains a confound. The authors also acknowledge the limits inherent in a quasi-experimental design. Steps were taken to ensure baseline equivalence, but the design is still more exposed to threats to internal validity than a randomized controlled trial is. The study ran for a full academic semester, so unobserved community or school-wide events (a history threat) or natural developmental change in students (a maturation threat) could have affected the outcomes. The study did not systematically record such events, so their influence cannot be ruled out. Further limitations concern the analysis and the measurement. Pupils were nested in eight classes with different teachers, and only the experimental teachers received training, so the pupil-level analysis may overstate precision.[51,52] The ACI is a new instrument that was piloted on 60 pupils, and children aged 10–11 may differ in comprehension and social desirability when answering a self-report questionnaire;[53] posttest means close to the top of the 5-point scale (4.14–4.51) also leave little room for further gain. The study covered one semester without follow-up and two sites (Palembang and Surakarta), so durability and generalizability are unknown, and the control group's qualitative data were less extensive than those of the experimental group.

4.9 Future research and implications

Future research should try to isolate these variables. A four-group design could compare (1) new content with new pedagogy (the present intervention), (2) new content with traditional pedagogy, (3) traditional content with new pedagogy, and (4) a business-as-usual control. Such a design would identify the main drivers of change more precisely. Future studies should also use random assignment of classes or schools, a multilevel analysis, independent or delayed measures, and a confirmatory validation of the ACI. For practice, the findings support piloting the module in more schools with teacher training and with an evaluation that includes follow-up; they do not yet justify changing the national curriculum.

5. Conclusion

This study set out to reimagine Indonesian national identity from the ground up, starting in the primary school classroom. It challenged a terrestrial, centralized historical narrative. In its place it tested an alternative rooted in the local and maritime realities of the archipelago. Students who took part in the module, which built on local histories and on the sea as a great connector, showed larger gains in Archipelagic Consciousness than students who followed the standard curriculum, and they described their nation in a more integrated, nuanced, and emotionally resonant way. They learned to see diversity as the product of a long history of interaction. They also learned to see the seas as links between communities.

These findings are promising but preliminary. Classes rather than students were allocated, the instrument is new, and no follow-up was carried out. Replication with independent measures and longer follow-up is therefore needed. If the results hold, teaching children to look first at the history of their own harbor, river, and coast may help them build a map of the nation that reflects the spirit of Bhinneka Tunggal Ika in the 21st century.

Declaration

Artificial Intelligence Use Statement

No generative artificial intelligence tool was used to write or revise the text, analyze the data, create images, or generate any other scholarly content of this manuscript.

Author Contribution Statement

Conceptualization, F.D. and G.F.P.; methodology, F.D., G.F.P., and A.S.; validation, A.S. and D.A.S.; formal analysis, G.F.P. and F.F.; investigation, F.F., Y.M.P., S.D., and C.N.; resources, M.E.; data curation, F.F. and E.A.; writing – original draft, F.D.; writing – review and editing, D.A.S., Y.M.P., S.D., C.N., M.E., and E.A.; visualization, E.A.; supervision, F.D.; project administration, F.D. All authors read and approved the final manuscript.

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Conflict of Interest / Competing Interests

The authors declare that they have no competing financial or non-financial interests related to this work.

Ethics Approval and Consent to Participate

Before the study began, ethical clearance was obtained from Ethical Committee of Social Research, Enigma Institute, Indonesia (Approval Number 2024/019). Principals, teachers, and parents gave informed consent, and the students gave assent.

Consent for Publication

Quotations from students are reported with a single initial and no other identifying information. All parents and students are consented to the publication of anonymized quotations.

Data Availability Statement

The datasets generated and analyzed during this study can be obtained from the corresponding author on reasonable request.

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None.

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