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Policy imaginaries and the readiness gap in Indonesian national policy on artificial intelligence in education

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Abstract

Indonesia has written artificial intelligence (AI) into national education policy within six years, yet few studies ask what problem these documents say AI solves. This article asks which problems four national policy documents represent when they address AI in education, and what they leave unexamined. I analyzed a national AI strategy (2020), a ministerial circular on AI ethics (2023), a university guide to generative AI (2024), and a joint decree of seven ministers on digital technology and AI in education (2026). Using Bacchi's "What's the problem represented to be?" (WPR) approach and the theory of sociotechnical imaginaries, I coded 20 excerpts and kept representations that recur in at least two documents. Four met that rule: education supplies AI talent, AI use is an ethics and integrity issue, readiness is a learner trait, and local culture is content or value. Together they place the work of readiness on students and teachers. The coded excerpts do not say who pays for that work, and they treat local knowledge as material to retrieve and not as a design input. Indonesian scores in the Programme for International Student Assessment (PISA) 2022 sit well below the average of the Organisation for Economic Co-operation and Development (OECD), which makes that silence matter. With one analyst and a small corpus, the study describes patterns, not effects. Policy writers can name the body that bears the cost of readiness, tie AI literacy to foundational skills, and give holders of local knowledge a role in design.

1 Introduction

Indonesia wrote AI into its education policy quickly. The national AI strategy appeared in 2020 [1]. A ministerial circular on AI ethics followed in 2023 [2]. The Directorate General of Higher Education issued a guide to generative AI (GenAI) for universities in 2024 [3]. In 2026, seven ministers signed a joint decree on digital technology and AI across formal, nonformal, and informal education [4]. Four documents in six years is a fast pace, and each one tells teachers and students what to do with AI. Each one also says, between the lines, what problem AI is supposed to solve.

Research on national AI policy shows why that second message matters. National AI strategies carry narratives about desirable futures, and those narratives shape what counts as a problem [5, 6]. Policy framing also decides which governance options look reasonable [7], and a large set of AI ethics guidelines converges on a short list of principles while leaving their meaning open [8, 9]. Education appears in national strategies in two ways: as a supplier of skilled people and as a field that needs ethical rules [10]. Universities have written their own GenAI rules, and reviews of those rules report a strong focus on academic integrity and on classroom use [11, 12]. Reviews of AI in higher education find little critical reflection on risks and little involvement of educators [13], and the discourse rarely takes up social context or the agency of students and teachers [14]. Williamson and Eynon traced how AI in education has long carried promises about the future that outrun its evidence [15], and Selwyn cautions that expectations run ahead of what these systems do [16]. Most of this work asks what policies allow or forbid. Few ask what problem a policy assumes before it allows or forbids anything.

The Indonesian setting sharpens the question. In the 2022 round of the Programme for International Student Assessment (PISA), Indonesian 15-year-olds averaged 359 points in reading, 366 in mathematics, and 383 in science, against averages of 476, 472, and 485 for the Organisation for Economic Co-operation and Development (OECD) (Fig. 1) [17]. Reading is the lowest Indonesian score in that domain since 2000 [18]. At the same time, global forecasts give the competitiveness argument for AI its numbers. The World Economic Forum projects 170 million jobs created and 92 million displaced between 2025 and 2030, a net gain of 78 million (Fig. 2) [19]. A policy that reads both facts through one lens, AI skills as the route to competitiveness, will describe the problem differently from a policy that starts from learning gaps.

Studies of Indonesian digital policy exist. Harahap and colleagues applied a problem-representation approach to the national digital literacy policy and found it more oriented to media than to literacy [21]. Indonesian studies of AI in higher education so far measure adoption. They report that students feel ready to use ChatGPT while worrying about its effect on critical thinking [22], and that expected usefulness and ease drive their intention to use it [23]. These studies treat readiness as something to measure in people. To my knowledge, no published study asks how national policy documents define readiness in the first place.

I ask three questions. First, which problems do four national documents represent when they address AI in education? Second, which presuppositions and silences sit behind those representations? Third, who carries the work of readiness under those representations? I answer them with Bacchi's problem-representation approach [24], read through sociotechnical imaginaries [25, 26]. The contribution is analytic. I show how the documents define readiness as something learners hold, and I name what that definition leaves out. The novelty of the article is that it is, to my knowledge, the first application of the WPR approach and sociotechnical imaginaries to Indonesia's AI-in-education documents. Section 2 sets out the theory, Section 3 the method, Section 4 the results, and Section 5 discusses them, with limits and implications.

2 Theoretical framework

2.1 Sociotechnical imaginaries and co-production

Jasanoff and Kim introduced sociotechnical imaginaries to explain how nations tie scientific progress to ideas of the good society [25]. Jasanoff later defined them as "collectively held, institutionally stabilized, and publicly performed visions of desirable futures" [26]. The definition appears on page 4 of her 2015 chapter. Two words in it matter here. "Institutionally stabilized" points to documents such as strategies and decrees, where a vision hardens into rules and budgets. "Publicly performed" means the vision is staged for audiences, including teachers and students. Reviews of sociotechnical change place imaginaries among several concepts that explain how visions steer technology [27].

The idiom of co-production adds that knowledge and social order form each other [28]. A policy that defines AI readiness also defines who counts as ready. Bareis and Katzenbach showed that national AI strategies work this way: they narrate AI into being as a national project and then act on that narrative [5]. Sartori and Theodorou add that narratives about AI also shape inequalities and who keeps control [6]. I treat the four Indonesian documents as sites where such a narrative takes shape for education.

2.2 Policy as problem representation

Bacchi's “What's the problem represented to be?” (WPR) approach starts from a plain claim: a policy does not respond to a problem that already exists. It shapes the problem by proposing a fix [24]. Bacchi later argued that studying problematizations makes politics visible, because it shows which options a policy leaves out of view [29]. The method asks six questions and adds a seventh step, in which the analyst applies the same questions to her own work. The questions cover the problem as represented, its presuppositions, its history, what the representation leaves unproblematic, its effects, and how it is produced and defended. The fourth and fifth questions suit my aim. They direct attention to silences and to who bears the effects. Harahap and colleagues used the approach on Indonesian digital literacy policy and showed that it fits Indonesian policy texts [21].

2.3 AI in education policy research

Schiff compared national AI strategies and found that they speak more about educating people for AI than about using AI in education [10]. Chan proposed a policy framework for universities that covers teaching, governance, and operations [11]. Jin and colleagues reviewed institutional GenAI policies worldwide [12]. Williamson and Eynon cautioned that the field repeats old promises [15]. Two further strands sit close to this study. One treats ethics. Holmes and colleagues argue that AI in education needs its own ethical framework and cannot rely on general AI ethics alone [30], and Cath reviews the legal, ethical, and technical options for governing AI [31]. The other treats generative tools and academic integrity. Kasneci and colleagues set out opportunities and challenges of large language models for education [32], and Cotton and colleagues discuss how to protect academic integrity in the era of ChatGPT [33]. Williamson and colleagues call for continued critical study of AI, automation, and datafication in education [34]. Reviews of the field show rapid growth and recurring gaps. Crompton and Burke found that publications on AI in higher education roughly doubled to tripled in 2021 and 2022 [35], and Bond and colleagues called for more ethical, methodological, and contextual attention [36]. Students report both benefits and concerns about generative AI [37]. International guidance asks governments to plan rules and training for generative AI in education [38].

A closer body of work reads institutional GenAI policies as texts. Moorhouse and colleagues found that slightly fewer than half of 50 top-ranked universities had published assessment guidelines, centered on academic integrity, assessment design, and communication with students [39]. Wang and colleagues found a receptive but careful stance in leading American universities, with ethics, reliability, and privacy as the main concerns [40]. Dabis and Csáki found that universities keep humans responsible for AI-related misconduct [41], and Perkins argued that misconduct turns on disclosure more than on use [42]. Luo came closest to the present approach. Reviewing the policies of 20 universities, she found that they represent the problem as students submitting work that is not original [43]. These studies share a feature. Most describe what policies contain. I add a question about what a policy takes for granted when it says what AI is for.

2.4 Readiness and local knowledge

Policy talk about readiness often rests on the digital native idea, the belief that young people who grew up with devices already hold digital skills [44]. Kirschner and De Bruyckere found little evidence for it [45]. Selwyn and Bennett and colleagues reached a similar view, finding little support for a uniform generation of skilled young users [46, 47], and Scheerder and colleagues showed that differences in skills and uses persist beyond access [48]. Ease with a device is not the same as skill in judging what the device produces. If policy treats readiness as something learners already hold, it needs a way to measure it, and it needs an owner for the gap.

AI literacy has its own literature. Ng and colleagues reviewed it and proposed four aspects: knowing and understanding AI, using and applying it, evaluating and creating with it, and ethical issues [49]. Long and Magerko listed competencies and design considerations for AI literacy [50]. These definitions describe abilities, and a policy that borrows them can place readiness in the learner.

Local knowledge raises a second question. Moll and colleagues described the knowledge in students' homes and communities as a resource that teachers can draw on to shape teaching [51]. Culturally responsive and culturally relevant teaching make a related claim: students' cultural knowledge should shape pedagogy [52, 53]. Decolonial work on AI warns that AI systems carry the assumptions of the places that build them [54]. Birhane, Couldry and Mejias, and Adams describe how AI and data practices can repeat colonial patterns [55–57]. Zembylas applied that warning to university teaching [58], and Ofosu-Asare argued that indigenous epistemologies can counter bias in AI [59]. Noble documents how commercial search engines reproduce racist and sexist representations [60], and Buolamwini and Gebru found that commercial gender classifiers performed worst on darker-skinned women [61]. These works suggest a test for policy: does local knowledge only fill content, or does it also shape design?

3 Data and method

3.1 Design

This is a qualitative documentary policy analysis. I used Bacchi's problem-representation approach [24] with thematic coding [62]. The unit of analysis is the excerpt: a passage that states a problem, a goal, a duty, or a risk about AI or digital technology in education. I read the results through sociotechnical imaginaries [25, 26]. The study analyzes public documents and involves no human participants.

3.2 Corpus and selection

I selected documents that met four criteria. The issuer is an Indonesian national government body. The text addresses AI or digital technology in education, or sets the national AI agenda to which education policy refers. The full text is public on an official or archived source. The document was current on 19 October 2026. I located documents through the legal information network (JDIH) of the communications ministry, the websites of the Ministry of Primary and Secondary Education and the Ministry of Higher Education, Science, and Technology, the press page of the Coordinating Ministry for Human Development and Culture, and the site of the national AI research and innovation collaboration (KORIKA), which hosts the national strategy. The version

analyzed is the one available at the direct link on the access date. Four documents met these criteria (Table 1), and Table 2 gives the direct link to each document and to the two public data sources behind Figs. 1 and 2. I did not include the Merdeka Curriculum instruments. They address school levels, they form a family of regulations, and I could not tie the analysis to a single text on AI. I also left out regulations on online learning, which do not address AI, and the GenAI policies of individual universities, which are institutional and not national. Those policies deserve a separate study [39, 43]. Two documents set the national AI agenda and address education within it, one addresses higher education, and one covers all levels of education. The title therefore speaks of AI-in-education policy and not of higher education alone.

Table 1
Policy documents analyzed

No.	Document	Issuer	Year	Type	Ref.
1	*Strategi Nasional Kecerdasan Artifisial Indonesia 2020–2045*	Badan Pengkajian dan Penerapan Teknologi (BPPT), working group of experts	2020	National strategy	[1]
2	*Surat Edaran Menteri Komunikasi dan Informatika No. 9/2023 tentang Etika Kecerdasan Artifisial*	Ministry of Communication and Informatics	2023	Circular	[2]
3	*Panduan Penggunaan GenAI pada Pembelajaran di Perguruan Tinggi*	Directorate of Learning and Student Affairs, Directorate General of Higher Education, Research and Technology	2024	Guide	[3]
4	*Keputusan Bersama tentang Pedoman Pemanfaatan dan Pembelajaran Teknologi Digital dan Kecerdasan Artifisial di Jalur Pendidikan Formal, Nonformal, dan Informal*	Seven ministries (interior, religious affairs, primary and secondary education, higher education, communication and digital, population and family development, women's empowerment and child protection)	2026	Joint decree	[4]

BPPT = Badan Pengkajian dan Penerapan Teknologi. Direct links appear in Table 2. The Coordinating Ministry for Human Development and Culture coordinates the decree under its operative clause, but it is not a signatory [4, 63]. A secondary summary of the strategy appears in [64]

A note on the joint decree. A press release describes the Coordinating Ministry for Human Development and Culture as coordinating the decree [63]. The primary text lists seven ministries as signatories and assigns coordination to that ministry in the fifth operative clause (*Diktum KELIMA*) [4]. I rely on the primary text.

Table 2
Direct links to the documents and data used in the study (accessed 28 October 2026)

Source	Used for	Direct link
National AI strategy 2020–2045 (BPPT) [1]	Corpus document 1	https://korika.id/wp-content/uploads/2024/07/stranas-ka-2045.pdf
Circular No. 9/2023 on AI ethics (Ministry of Communication and Informatics) [2]	Corpus document 2	Record and full text: https://jdih.komdigi.go.id/produk_hukum/view/id/883/t/surat+edaran+menteri+komunikasi+dan+informatika+nomor+9+ta file: https://jdih.komdigi.go.id/produk_hukum/unduh/id/883/t/surat+edaran+menteri+komunikasi+dan+informatika+nomor+9+
Guide to GenAI in university learning (Directorate General of Higher Education, Research and Technology) [3]	Corpus document 3	https://kemdiktisaintek.go.id/api/file/humas-production/2025/05/Buku-Panduan-_-Penggunaan-Generative-AI-pada-Pembe Perguruan-Tinggi-cetak.pdf
Joint decree of seven ministers on digital technology and AI in education [4]	Corpus document 4	Announcement: https://www.kemendikdasmen.go.id/pengumuman/14932-skb-pedoman-pemanfaatan-dan-pembelajaran-digital-dan-ka; file: https://www.kemendikdasmen.go.id/download/file/1697
PISA 2022 database and results (OECD) [17, 20]	Figure 1	https://www.oecd.org/en/data/datasets/pisa-2022-database; https://doi.org/10.1787/53f23881-en
Future of Jobs Report 2025 (World Economic Forum) [19]	Figure 2	https://www.weforum.org/publications/the-future-of-jobs-report-2025/

The coded excerpts drawn from documents 1 to 4 are in Online Resource 1

3.3 Analytic procedure

I worked in five steps. First, I read each document in Indonesian. Second, I extracted excerpts that state a problem, goal, duty, or risk. Third, I coded each excerpt with five of Bacchi's questions: the problem as represented (Q1), its presuppositions (Q2), its history (Q3), what it leaves unproblematic (Q4), and its effects (Q5). Fourth, I grouped codes into representations. Fifth, I kept a representation only if it appeared in at least two of the four documents. I did not apply the sixth question, on how a representation is produced and defended, because it needs data on drafting that the documents do not give. Online Resource 1 lists the 20 excerpts I retained as evidence, each with its document, locator, verbatim Indonesian text, and my English translation.

I coded alone, so the study has no intercoder check. To keep coding consistent, I wrote a decision rule for each representation before the final pass and applied it to every excerpt. The rules sit in the Codebook sheet of Online Resource 1, so other researchers can recode the excerpts and compare. I describe the single-coder limit in Section 5.5. An AI assistant helped locate candidate passages in machine-extracted text. I checked each retained excerpt against the source document and made all coding decisions. All translations are mine. I report page numbers as printed in each document. For the joint decree recital I cite the clause because the cover pages carry no page number.

3.4 Reflexivity and trustworthiness

I teach at an Indonesian public university, and that position shapes how I read the word “readiness.” In my doctoral work I am also developing an AI-assisted learning design that draws on local culture. That gives me a stake in how policy treats local knowledge, and it may incline me to notice where documents leave it out. Bacchi's seventh step asks me to apply the questions to my own framing. The phrase “readiness gap” in my title also represents a problem: it can suggest that learners fall short. I use it as an analytic question about how documents define readiness, and I do not measure learner readiness anywhere in this article. To support trustworthiness, I keep verbatim excerpts with locators in Online Resource 1, I state the selection criteria and exclusions, and I report one counter-example in Section 4.3 that cuts against my reading.

4 Results

The 20 excerpts support four problem representations. Each appears in at least two documents (Table 3). Excerpts are quoted in Indonesian with my translation.

Table 3
Problem representations, excerpt counts, and documents

Code	Problem represented	Excerpts	Documents	Source
R1	Education supplies AI talent	4	3	[1–3]
R2	AI use is an ethics and integrity issue	7	3	[2–4]
R3	Readiness is a learner trait	5	2	[3, 4]
R4	Local culture is content or value	4	3	[1, 3, 4]

Counts come from Online Resource 1. A representation needs at least two documents to count

4.1 Education supplies AI talent (R1)

The national strategy lists a gap in its strength-and-weakness table: *“Sistem pendidikan sekolah belum memperkenalkan bidang kecerdasan artifisial dalam kurikulum pendidikan”* (“School education has not yet introduced the field of artificial intelligence into the curriculum”; [1], p. 23). The problem here is a missing supply of AI-capable people, and the curriculum is the missing link. The university guide makes the same move from the graduate's side. It states that AI use will grow more important across industry sectors and that graduates need AI literacy ([3], p. 37, section on career readiness). The circular describes AI in education as a way to help learning and research, and it places that use next to efficiency, innovation, and productivity ([2], section 1).

The presupposition (Q2) is that AI skill is scarce and decides national competitiveness. That presupposition matches the global forecasts in Fig. 2 [19], although the documents I coded do not cite them. The representation makes education a supplier to the labor market. Learning for its own sake, or learning that AI changes how people know, does not appear in these excerpts.

4.2 AI use is an ethics and integrity issue (R2)

Ethics organizes three of the four documents. The circular carries it in its title, *Etika Kecerdasan Artifisial* [2]. The university guide lists among its aims *“Melindungi integritas akademis mahasiswa dan dosen”* (“Protect the academic integrity of students and lecturers”; [3], p. 4). Its table of dos and don'ts names concealment of GenAI use for plagiarism as a misstep ([3], p. 29), and it calls academic integrity *“perwujudan dari nilai-nilai utama sebuah perguruan tinggi”* (“the embodiment of the core values of a university”; p. 39). The joint decree defines being ethical as use that follows *“pola perilaku”* (patterns of conduct; [4], p. 14) and requires use that is in line with ethics and academic integrity (p. 14).

The problem here sits in individual conduct: a user who hides, copies, or misuses. The presupposition (Q2) is that good conduct follows once people know the rules. The effect (Q5) is that responsibility lands on the user. The excerpts I coded do not describe sanctions, so I make no claim about enforcement.

4.3 Readiness is a learner trait (R3)

The university guide defines AI literacy as *“kemampuan untuk memahami, menilai, berinteraksi, dan membuat keputusan”* (“the ability to understand, assess, interact, and make decisions”; [3], p. 35). It adds that *“Mahasiswa perlu memiliki keahlian berpikir kritis terutama dalam mengevaluasi kekuatan dan kelemahan teknologi AI”* (“Students need critical thinking skill, especially in evaluating the strengths and weaknesses of AI technology”; p. 36). Both sentences name the

student as the one who holds the ability. The joint decree adds that use and learning *"harus disesuaikan dengan kesiapan peserta didik"* ("must be adjusted to the readiness of learners"; [4], p. 16), and it asks the higher education ministry to strengthen *"kemampuan berpikir kritis dan kolaborasi sivitas akademika"* (critical thinking and collaboration skills of the academic community; section IV.D).

The decree sentence leaves open who adjusts, and by what measure. It treats readiness as a given attribute of learners, to which instruction adapts. One counter-example cuts against a stronger reading. The decree also states that use and learning must be accessible (*"dapat diakses"*, p. 15) as part of its inclusion principle. So the decree does name access. The coded excerpt gives no mechanism and no owner for it.

4.4 Local culture is content or value (R4)

Local culture appears in three documents. The national strategy cites Indonesia's *"keberagaman budaya dan kearifan lokal"* ("cultural diversity and local wisdom"; [1], p. 13). The university guide says GenAI can be used *"untuk menggali konsep kearifan lokal dalam pemanfaatan sumber daya alam"* ("to dig into the concept of local wisdom in the use of natural resources"; [3], p. 27) and should produce material that respects *"budaya dan tradisi beragam"* (diverse cultures and traditions; p. 28). The decree speaks of *"memperkaya ekspresi budaya nasional"* (enriching national cultural expression; [4], p. 14).

The verbs matter. Local wisdom is something to dig into, respect, or enrich. In the excerpts I coded, no document gives local communities or knowledge holders a role in deciding how AI tools are built, chosen, or tested. Local culture serves as content and as a value to honor. That pattern fits a supplement role, and I call it a supplement representation.

4.5 What the representations leave open

Bacchi's fourth and fifth questions turn to silences and effects. I found two silences in the 20 retained excerpts. I base each on the passages cited above, and Section 5.5 notes that a keyword check of the full texts would test them further.

The first silence is cost. R3 defines readiness as a trait that instruction must meet, and R2 places responsibility on the user. The excerpts do not say which institution pays for the work of getting students ready, such as devices, connectivity, training, or time. The effect (Q5) is that this work moves to lecturers and students by default.

The second silence is the link between AI literacy and foundational skills. The guide's definition of AI literacy lists understanding, assessing, and deciding (p. 35). Those capacities draw on reading and reasoning. Indonesian PISA 2022 scores in reading, mathematics, and science fall well below the OECD averages (Fig. 1) [17]. In the coded excerpts, no document ties the AI literacy aim to these foundations. This is a gap in how the documents are written. It does not show that students lack AI skills, and I make no such claim.

5 Discussion

5.1 What the four representations say together

The four representations form one story. Education should supply AI talent (R1). Individuals should use AI ethically (R2). Learners hold or lack the readiness that makes both possible (R3). Local culture can decorate the result (R4). The story is consistent with the competitiveness imaginary that Bareis and Katzenbach found in national AI strategies [5]. It also fits Schiff's finding that strategies speak of educating for AI more than of AI in education [10]. The weight on integrity matches the attention that reviews of university GenAI policy report [11, 12], and the stress on ethics echoes the principle-based ethics that guideline reviews describe [8, 9]. R2 also resembles what Luo found in university policies, where the problem is unoriginal student work [43], and what Dabis and Csáki found, where humans stay responsible for misconduct [41]. The Indonesian documents carry that framing from the university level to the national level. The Indonesian documents differ in one respect: they set readiness inside the learner, where Chan's framework spreads responsibility across teaching, governance, and operations [11].

5.2 The readiness gap as an analytic claim

I use "readiness gap" for the distance between how the documents define readiness and what delivering it takes. The documents define it as a learner trait. Delivering it takes devices, connectivity, teacher time, and a measure of readiness. The first is a statement about people. The second is a list of institutional duties. This article does not measure learner readiness, so it cannot say how large the distance is on the ground. It says only that the documents, as coded, do not assign the duties. Kirschner and De Bruyckere warn that ease with devices should not stand in for skill [45]. A policy that adapts instruction to learner readiness needs more than that assumption.

5.3 Local knowledge as supplement

R4 fits the concern in decolonial work on AI that local knowledge enters as material and not as authority [54, 58, 59]. The guide's wording, to "dig into" local wisdom, treats knowledge as a resource to extract. Moll and colleagues describe a different relation, in which community knowledge shapes what and how teachers teach [51]. Evidence that commercial systems reproduce bias [60, 61] gives a policy that wants AI to serve Indonesian classrooms a reason to give knowledge holders a say in design and testing. I do not claim that the documents cause any gap in classrooms. I claim that the documents' wording is consistent with the supplement role. Tuck and Yang warn that decolonization is not a metaphor for broader inclusion [65]. I therefore use "supplement" as an analytic term for how the documents place local knowledge, and I do not offer decolonial change as a remedy.

5.4 Implications

Three changes follow for those who write policy. First, name the body that bears the cost of readiness, in the same clause that defines it. Second, tie AI literacy aims to foundational skills, and use national assessment data to say how. Third, give holders of local knowledge a role in choosing and testing AI

tools, not only in supplying content. For universities, the findings suggest writing integrity rules together with support for staff and students, so that rules do not stand alone.

5.5 Limitations

The study has five limits. One analyst coded the material, with no intercoder check. The corpus has four documents, and other instruments, such as regional rules or institutional policies, may tell a different story. The evidence is a set of excerpts, some of them fragments, and my translations carry my judgment. The study analyzes texts and has no data on how teachers and students receive them. The silences depend on the excerpts I retained, and a keyword check of the full texts or a longer text set might fill them. Future work can add a second coder, interviews with lecturers and students, and a comparison with institutional policies.

6 Conclusion

Four Indonesian policy documents represent AI in education as a supply problem, an ethics problem, a readiness problem located in the learner, and a cultural matter. These representations put the work of readiness on students and teachers and leave open who pays for it. They also treat local knowledge as content. The analysis describes patterns in the texts and makes no claim about classroom outcomes. Policy writers can change the picture with small steps: assign cost to a named body, link AI literacy to foundational skills, and give local knowledge holders a role in design.

Declarations

Supplementary Information

Online Resource 1 (Online_Resource_1.xlsx). Coding matrix of the 20 retained excerpts, with document, locator, verbatim Indonesian text, English translation, WPR questions, code, representation, and verification note; a summary sheet with excerpt and document counts per representation; and the codebook with the decision rule for each representation

Competing interests.

The author has no competing interests to declare.

Ethics approval and consent to participate.

Not applicable. The study analyzes publicly available policy documents and involves no human participants or their data.

Consent for publication.

Not applicable.

Use of AI tools.

The author used an AI assistant (Claude, Anthropic) to help locate candidate passages in machine-extracted policy text, draft and edit text, check reference metadata, build the figures, and format the manuscript. The author checked every excerpt and reference against its source, made all analytic decisions, and takes full responsibility for the content.

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Author Contribution

A.F. and Y.R. wrote the main manuscript text, N. analysis and methodology, A.F. prepared figures 1-3. All authors reviewed the manuscript.

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None.

Data Availability

All data generated or analysed during this study are included in this published article and its supplementary information files.

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Figures

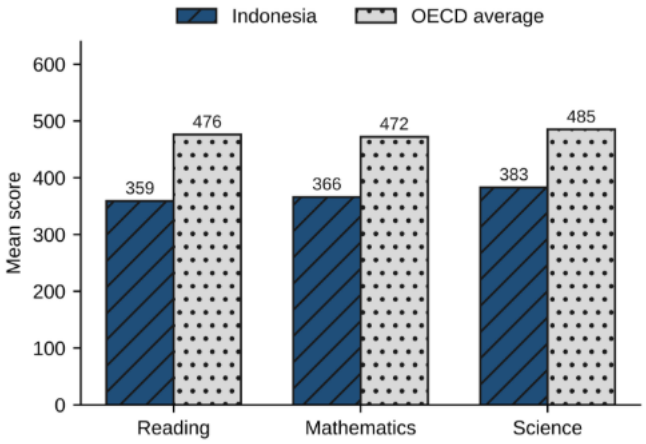


Figure 1

Mean PISA 2022 scores of Indonesia (hatched bars) and the OECD average (dotted bars) in reading, mathematics, and science. Data from OECD [17, 20]

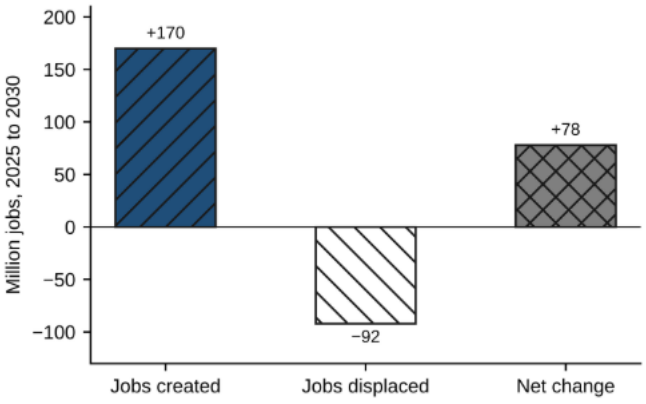


Figure 2

Projected global employment change, 2025 to 2030, in million jobs: jobs created, jobs displaced, and net change. Data from World Economic Forum [19]

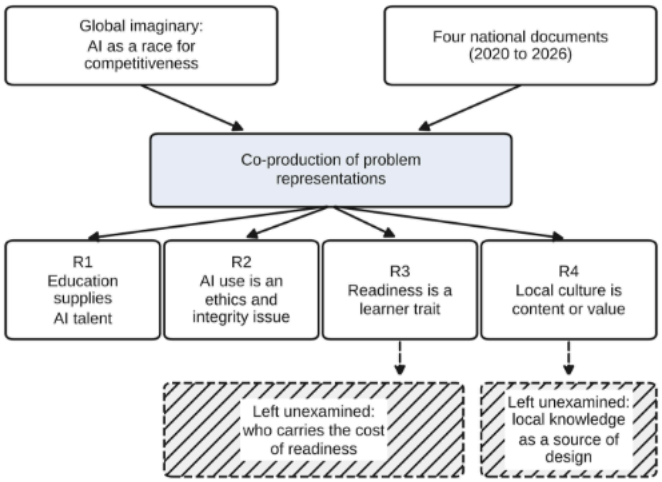


Figure 3

Analytic framework. The global imaginary and the four national documents co-produce four problem representations (R1 to R4). Dashed, hatched boxes mark the two silences that follow from R3 and R4

Supplementary Files

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- OnlineResource1.xlsx