

Governing Artificial Intelligence in Indonesian Higher Education: Academic Integrity and Regulatory Reconstruction

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Article History Received : 05-09-2026 Revised : 29-09-2026 Published : 05-10-2026 Keywords: <i>academic integrity, artificial intelligence, assessment design, educational governance, higher education law</i>	The rapid diffusion of generative artificial intelligence into higher education has destabilised the assumptions underpinning academic assessment, while Indonesian regulation continues to conceptualise academic misconduct through categories developed for an earlier technological era. This study aims to examine how existing Indonesian legal instruments conceptualise academic integrity, to identify normative principles suitable for contextual adaptation, and to formulate the regulatory and pedagogical reconstruction required for defensible institutional governance. The research applies normative juridical method combining statutory, conceptual, and comparative approaches, analysing primary legal materials including the National Education System Law, the Higher Education Law, the Personal Data Protection Law, and ministerial regulations on plagiarism and quality assurance, supported by international normative instruments and peer-reviewed scholarship. The findings demonstrate that the prevailing definition of plagiarism presupposes an identifiable antecedent author and therefore does not reach machine-generated text, producing a norm that is formally intact but functionally hollow; that detection-centred enforcement generates foreseeable injustice and unexamined data protection exposure; and that the protected interest requires reconceptualisation as the correspondence between a credential and a competence. The article proposes a principle of graduated authorial disclosure, under which required

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	disclosure is proportionate to the epistemic significance of assistance and impermissible use is defined by reference to the competence each assessment certifies. It recommends revision of the definitional architecture of integrity regulation, institutional adoption of tiered disclosure policies supported by data protection impact assessment, procedural guarantees against determination by detection score alone, and sustained investment in assessment redesign capability.

I. INTRODUCTION

The rapid diffusion of generative artificial intelligence (AI) into everyday academic practice has produced one of the most consequential disruptions in the recent history of higher education. Within months of the public release of large language models capable of producing fluent, argumentative, and apparently well-referenced prose, universities across the world found that the tacit assumptions underpinning their assessment regimes had become unstable.¹ What had previously been treated as a reliable proxy for student learning the independently written essay, the take-home examination, the undergraduate thesis could no longer be assumed to represent unaided cognitive work. The disruption is not merely technical. It reaches into the normative foundations of the academic enterprise: the meaning of authorship, the evidentiary basis of certification, and the moral relationship between a learner and the knowledge they claim to possess.²

In the Indonesian context, this disruption arrives at a moment when the higher education system is already absorbing several simultaneous reform agendas. The *Merdeka Belajar-Kampus Merdeka* policy has reoriented curricula toward flexible, experience-based learning; the quality assurance framework has been restructured around outcome-based accreditation; and institutions are under sustained pressure to increase scholarly productivity.³ Each of these reforms increases the volume of written deliverables that must be produced, submitted, and evaluated, while simultaneously reducing the amount of supervised contact time in which the authenticity of that work might be observed.

¹ Enkelejda Kasneci et al., "ChatGPT for Good? On Opportunities and Challenges of Large Language Models for Education," *Learning and Individual Differences* 103 (2023): 102274.

² Phillip Dawson, *Defending Assessment Security in a Digital World: Preventing E-Cheating and Supporting Academic Integrity in Higher Education* (London: Routledge, 2021), 3–14.

³ Permendikbudristek Nomor 53 Tahun 2023 tentang Penjaminan Mutu Pendidikan Tinggi, Pasal 3–5.

Generative AI therefore enters an environment that is structurally predisposed to adopt it, and institutionally underprepared to govern it.

The ideal condition envisaged by Indonesian education law is reasonably clear. Law Number 20 of 2003 on the National Education System defines education as a conscious and planned effort to develop learners' potential so that they possess spiritual strength, self-control, personality, intelligence, noble character, and the skills required by society.⁴ Law Number 12 of 2012 on Higher Education further specifies that higher education must be organised on principles that include truth-seeking, scientific autonomy, and academic integrity.⁵ The actual condition, however, is one in which the technological capacity to simulate the products of learning has outpaced both the regulatory instruments and the assessment literacy required to distinguish simulation from achievement. The existing anti-plagiarism regulation, Regulation of the Minister of National Education Number 17 of 2010, was drafted in an era when plagiarism meant the appropriation of an identifiable prior text by an identifiable prior author.⁶ Generative output has no prior author in this sense; it is statistically novel even when it is intellectually derivative. The regulation's definitional architecture, in other words, does not reach the conduct that now most threatens academic integrity.

Scholarly debate on this problem has developed along three broadly separable lines. The first, largely technical, concerns detection: whether machine-generated text can be reliably identified, and whether detection tools are accurate enough to sustain disciplinary consequences.⁷ The second, pedagogical, argues that the appropriate institutional response is not surveillance but redesign that assessment should be reconstructed so that unaided authorship is neither required nor rewarded, and that the capacity to use AI critically becomes itself an assessable competence.⁸ The third, critical and political-economic, situates educational AI within broader structures of data extraction and platform power,

⁴ Undang-Undang Nomor 20 Tahun 2003 tentang Sistem Pendidikan Nasional, Pasal 1 angka 1.

⁵ Undang-Undang Nomor 12 Tahun 2012 tentang Pendidikan Tinggi, Pasal 6.

⁶ Peraturan Menteri Pendidikan Nasional Nomor 17 Tahun 2010 tentang Pencegahan dan Penanggulangan Plagiat di Perguruan Tinggi, Pasal 1 angka 1.

⁷ Debby R. E. Cotton, Peter A. Cotton, and J. Reuben Shipway, "Chatting and Cheating: Ensuring Academic Integrity in the Era of ChatGPT," *Innovations in Education and Teaching International* 61, no. 2 (2024): 228–239.

⁸ Neil Selwyn, *Should Robots Replace Teachers? AI and the Future of Education* (Cambridge: Polity Press, 2019), 108–126.

cautioning that the reorganisation of teaching around commercial systems transfers epistemic authority from academic communities to opaque corporate infrastructures.⁹

These three literatures are rarely brought into conversation with one another, and almost never within the specific institutional and regulatory conditions of Indonesian higher education. The research gap this article addresses is therefore twofold. Substantively, existing Indonesian scholarship on AI in education has concentrated on adoption, perceived usefulness, and student attitudes, producing a body of descriptive survey work that tells us how frequently the technology is used but very little about how it ought to be governed. Normatively, the legal and policy scholarship on academic integrity has not yet been systematically re-read against the characteristics of generative systems, with the result that institutional codes continue to be drafted using conceptual categories that the technology has rendered obsolete.

The significance of the research lies in its attempt to construct an integrated governance framework rather than to choose between prohibition and permissiveness. Its novelty consists in reading Indonesian higher education regulation, institutional integrity codes, and international normative instruments as a single, incompletely harmonised regulatory field, and in proposing a principle of *graduated authorial disclosure* as the organising norm of that field. Three research questions guide the analysis. First, how do existing Indonesian legal and regulatory instruments conceptualise academic integrity, and to what extent do those conceptualisations extend to generative AI? Second, what normative principles emerging from international instruments and comparative institutional practice are suitable for adaptation to the Indonesian context? Third, what pedagogical and regulatory reconstruction is required for higher education institutions to govern AI use in a manner consistent with both educational purpose and legal certainty?

II. LITERATURE REVIEW AND THEORETICAL FRAMEWORK

Research on artificial intelligence in education has a longer history than the current wave of public attention suggests. Systematic reviews of the field have shown that the majority of published work has concentrated on adaptive systems, automated assessment, and profiling, and] significantly that educators themselves have been largely absent from the design and evaluation of these systems.¹⁰ This absence matters for the present analysis

⁹ Ben Williamson and Rebecca Eynon, "Historical Threads, Missing Links, and Future Directions in AI in Education," *Learning, Media and Technology* 45, no. 3 (2020): 223–235.

¹⁰ Olaf Zawacki-Richter et al., "Systematic Review of Research on Artificial Intelligence Applications in Higher Education Where Are the Educators?" *International Journal of Educational Technology in Higher Education* 16, no. 1 (2019): 1–27, <https://doi.org/10.1186/s41239-019-0171-0>.

because it indicates a structural tendency in the field: technological capability tends to define the problem space before pedagogical or normative reasoning is brought to bear. Luckin's account of machine learning and human intelligence pushes against this tendency, arguing that the educational value of AI depends entirely on whether it is deployed to develop learners' metacognitive capacities or merely to automate the delivery of content.¹¹

A second body of literature addresses the ethical and political dimensions of educational technology. Williamson's analysis of datafication demonstrates how the introduction of digital systems into schooling reconfigures governance, rendering learning visible in particular ways and invisible in others.¹² Zuboff's broader account of surveillance capitalism supplies the political-economic frame within which such reconfiguration occurs, identifying the extraction of behavioural data as the core commercial logic of contemporary platforms.¹³ O'Neil's work on algorithmic harm and Noble's analysis of search bias together establish that automated systems reproduce and amplify the inequities embedded in their training data, a finding with direct implications for any institution contemplating the use of AI in admissions, grading, or integrity detection.¹⁴

The third strand concerns assessment theory. Sadler's foundational account of formative assessment holds that learners can only improve if they possess a concept of the standard being aimed for, can compare their current performance against that standard, and can act to close the gap.¹⁵ Generative AI intervenes precisely at the third of these operations: it can close the gap on the student's behalf without the student ever having internalised the standard. Carless's work on assessment for learning and Dawson's on assessment security converge on the conclusion that integrity cannot be secured by policing alone, and must instead be designed into the architecture of the task.¹⁶

The theoretical framework adopted in this article draws these strands together around three concepts. The first is Biesta's distinction between the three domains of

¹¹ Rose Luckin, *Machine Learning and Human Intelligence: The Future of Education for the 21st Century* (London: UCL Institute of Education Press, 2018), 71–95.

¹² Ben Williamson, *Big Data in Education: The Digital Future of Learning, Policy and Practice* (London: SAGE, 2017), 4–22.

¹³ Shoshana Zuboff, *The Age of Surveillance Capitalism: The Fight for a Human Future at the New Frontier of Power* (New York: PublicAffairs, 2019), 63–97.

¹⁴ Cathy O'Neil, *Weapons of Math Destruction: How Big Data Increases Inequality and Threatens Democracy* (New York: Crown, 2016), 50–73; Safiya Umoja Noble, *Algorithms of Oppression: How Search Engines Reinforce Racism* (New York: New York University Press, 2018), 15–40.

¹⁵ D. Royce Sadler, "Formative Assessment and the Design of Instructional Systems," *Instructional Science* 18, no. 2 (1989): 119–144.

¹⁶ David Carless, *Excellence in University Assessment: Learning from Award-Winning Practice* (London: Routledge, 2015), 33–52; Dawson, *Defending Assessment Security*, 88–104.

educational purpose qualification, socialisation, and subjectification and his insistence that education is not a process of production but a relational encounter involving irreducible risk.¹⁷ If subjectification the emergence of the student as a responsible subject capable of independent judgement is a genuine educational aim, then the delegation of judgement to a machine is not a neutral efficiency but a substantive educational loss. The second is Lessig's proposition that behaviour in digital environments is regulated by four modalities operating in combination: law, social norms, markets, and architecture or code.¹⁸ This supplies an analytical vocabulary for explaining why purely legal responses to AI misuse are predictably ineffective: the architecture of the technology and the market incentives surrounding it exert regulatory force that formal rules alone cannot counteract. The third is the principle-based approach to AI ethics articulated by Floridi and Cowls, which consolidates the proliferation of ethical guidelines into beneficence, non-maleficence, autonomy, justice, and explicability.¹⁹

The theoretical gap this article addresses lies in the absence of a synthesis capable of operating at the institutional level. Biesta supplies a philosophy of educational purpose but not a regulatory design; Lessig supplies a regulatory theory not specifically adapted to educational institutions; Floridi and Cowls supply principles that require substantial translation before they can govern a faculty examination committee. This article proposes that translation.

III. RESEARCH METHODS

This study employs normative juridical research, supported by a doctrinal analysis of educational regulation and a comparative reading of institutional and international normative instruments. Normative juridical research treats law as a system of norms contained in legislation, regulation, principle, and doctrine, and proceeds by examining the internal coherence of that system and its adequacy to the social facts it purports to govern.²⁰ The choice of method follows from the nature of the research problem: the question is not how frequently Indonesian students use generative AI, which is an empirical question, but how the existing normative framework conceptualises the conduct in question and whether that conceptualisation is defensible.

¹⁷ Gert Biesta, *The Beautiful Risk of Education* (Boulder: Paradigm Publishers, 2014), 1–17; see also Gert Biesta, *Good Education in an Age of Measurement: Ethics, Politics, Democracy* (Boulder: Paradigm Publishers, 2010), 19–27.

¹⁸ Lawrence Lessig, *Code: And Other Laws of Cyberspace, Version 2.0* (New York: Basic Books, 2006), 120–137.

¹⁹ Luciano Floridi and Josh Cowls, "A Unified Framework of Five Principles for AI in Society," *Harvard Data Science Review* 1, no. 1 (2019): 1–15.

²⁰ Peter Mahmud Marzuki, *Penelitian Hukum*, rev. ed. (Jakarta: Kencana Prenada Media, 2017), 133–142.

Three approaches are combined. The statutory approach examines the relevant legislation and subordinate regulation governing higher education and academic integrity. The conceptual approach interrogates the doctrinal categories of authorship, plagiarism, and academic honesty as those categories appear in legal instruments and in scholarly literature, testing whether they retain analytical purchase when applied to machine-generated text. The comparative approach examines normative instruments and institutional policies developed in other jurisdictions, not to transplant them but to identify principles capable of contextual adaptation.

The legal materials analysed are organised in three tiers. Primary legal materials comprise Law Number 20 of 2003 on the National Education System; Law Number 12 of 2012 on Higher Education; Law Number 28 of 2014 on Copyright; Law Number 27 of 2022 on Personal Data Protection; Law Number 19 of 2016 amending Law Number 11 of 2008 on Electronic Information and Transactions; Regulation of the Minister of National Education Number 17 of 2010 on the Prevention and Handling of Plagiarism in Higher Education; and Regulation of the Minister of Education, Culture, Research and Technology Number 53 of 2023 on Higher Education Quality Assurance. Secondary legal materials comprise peer-reviewed scholarship in education, law, and science and technology studies, together with authoritative monographs. Supporting materials comprise international normative instruments, in particular the UNESCO Recommendation on the Ethics of Artificial Intelligence and the UNESCO guidance on generative AI in education and research, as well as comparative policy documents issued by higher education regulators and institutions in other jurisdictions.²¹

Analysis proceeds through prescriptive legal reasoning. Norms are first interpreted using grammatical, systematic, and teleological methods; they are then tested against the characteristics of generative systems to identify definitional gaps; and the resulting gaps are addressed through the construction of principles derived from the theoretical framework. The analysis is qualitative and interpretive throughout; no statistical inference is claimed, and the findings are offered as normative propositions open to contestation rather than as empirical generalisations.

²¹ UNESCO, *Recommendation on the Ethics of Artificial Intelligence* (Paris: UNESCO, 2021); UNESCO, *Guidance for Generative AI in Education and Research* (Paris: UNESCO, 2023).

IV. RESULTS AND DISCUSSION

A. The Definitional Gap in Indonesian Academic Integrity Regulation

The Indonesian regulatory framework conceptualises threats to academic integrity almost entirely through the lens of misappropriation. Regulation Number 17 of 2010 defines plagiarism as an intentional or unintentional act of obtaining or attempting to obtain credit or value for a scientific work by quoting part or all of the work or scientific work of another party that is acknowledged as one's own work, without stating the source adequately and sufficiently.²² Every element of this definition presupposes an antecedent work with an identifiable author. The regulation's enumerated forms of plagiarism quoting words or sentences, ideas, opinions, or theories without adequate attribution, and submitting a work produced by another as one's own are similarly structured around the relation between two human authors.²³

Generative output does not fit this structure. A language model does not reproduce a prior text; it generates a novel sequence that is statistically conditioned by a corpus which the user has neither seen nor can identify. The student who submits such output has not appropriated any particular author's expression, and a conventional similarity check will frequently return a low score. On a strict grammatical reading, the conduct falls outside the regulation. Yet the conduct plainly offends the interest the regulation exists to protect namely, the reliability of the relationship between an academic credential and the competence it certifies. The result is a norm that is formally intact but functionally hollow.

This is not a drafting oversight so much as a conceptual limitation. The regulation protects authorship as a proprietary interest, a framing reinforced by the copyright law's protection of original expression fixed by a human creator.²⁴ What the current situation requires is protection of a different interest: not the author's property in a text, but the institution's warrant that a credential corresponds to a capability. Law Number 12 of 2012 gestures toward this interest when it requires that higher education be conducted on the principle of academic integrity and when it provides for the revocation of degrees obtained unlawfully, but the operational content of that principle is nowhere specified.²⁵ The consequence is that institutions must improvise, and improvisation under conditions of legal uncertainty tends to produce either paralysis or arbitrariness.

²² Permendiknas Nomor 17 Tahun 2010, Pasal 1 angka 1.

²³ Permendiknas Nomor 17 Tahun 2010, Pasal 2 ayat (1).

²⁴ Undang-Undang Nomor 28 Tahun 2014 tentang Hak Cipta, Pasal 1 angka 2 dan Pasal 40.

²⁵ Undang-Undang Nomor 12 Tahun 2012, Pasal 6 dan Pasal 42 ayat (4).

Comparative practice illustrates the alternative. A number of higher education systems have moved away from defining the offence by reference to the source of the text and toward defining it by reference to the misrepresentation of the process by which the work was produced. On this framing, the wrong is not that the words came from elsewhere but that the student has asserted, expressly or by implication, a process of production that did not occur. This reframing has three analytical advantages. It captures generative AI use without requiring the identification of a prior author; it captures contract cheating, which the Indonesian framework also addresses only obliquely; and it leaves room for legitimate assisted authorship provided the assistance is disclosed.

B. Datafication, Data Protection, and the Limits of Detection

Institutional responses to generative AI have frequently begun with detection software, on the assumption that a technological problem admits a technological solution. The assumption is doubtful. Detection tools operate probabilistically, and their error rates are not symmetrically distributed: text produced by writers for whom the language of instruction is an additional language is disproportionately flagged as machine-generated.²⁶ In a system where English-medium writing is increasingly required for publication and graduation, this asymmetry is not a marginal technical defect but a foreseeable source of systematic injustice, engaging the principle of justice in the Floridi–Cowls framework directly.

There is a further legal dimension. The deployment of detection systems involves the transfer of student work frequently containing personal data, and sometimes containing research data subject to confidentiality obligations to third-party processors, often located outside Indonesian jurisdiction. Law Number 27 of 2022 on Personal Data Protection requires a lawful basis for processing, imposes obligations of purpose limitation and data minimisation, and regulates cross-border transfer by reference to the adequacy of protection in the destination jurisdiction.²⁷ Universities that have adopted integrity-detection platforms without conducting a data protection impact assessment, without a documented lawful basis, and without informing students of the transfer are exposed to a compliance risk that has so far attracted almost no scholarly attention. The irony is considerable: an institution may breach the personal data rights of its students in the course of enforcing a norm of academic honesty.

²⁶ Cotton, Cotton, and Shipway, “Chatting and Cheating,” 233–235.

²⁷ Undang-Undang Nomor 27 Tahun 2022 tentang Pelindungan Data Pribadi, Pasal 20, Pasal 16 ayat (2), dan Pasal 56.

Lessig's four-modality framework clarifies why detection-centred strategies underperform. Law prohibits; but architecture enables, markets incentivise, and norms remain unsettled. So long as the technology is frictionlessly available, the marginal cost of misuse is effectively zero, and peer norms treat use as ordinary rather than deviant, a prohibitory rule enforced by imperfect detection will generate three predictable effects: widespread undetected non-compliance, occasional severe punishment of those detected, and a corrosive perception of arbitrariness. The regulatory literature calls this outcome enforcement lottery, and it is corrosive of institutional legitimacy precisely because it is experienced as unfair by both the compliant and the sanctioned.

The implication is not that institutions should abandon integrity enforcement. It is that enforcement must be repositioned as one modality among four, and the remaining three must be deliberately engaged: architecture through assessment design, markets through the provision of institutionally sanctioned tools that reduce the incentive to use unmonitored ones, and norms through explicit, discipline-specific socialisation into scholarly practice.

C. Graduated Authorial Disclosure as an Organising Principle

The principle proposed here is that institutional regulation should require the disclosure of assistance proportionate to its epistemic significance, and should calibrate permissible assistance to the competence being assessed. Four tiers may be distinguished.

At the first tier, assistance that does not bear on the competence under assessment requires no disclosure. Where a task assesses analytical reasoning, the use of a tool to correct orthography or to format references does not misrepresent the process of production in any material respect, and a disclosure requirement would impose administrative burden without protecting any genuine interest.

At the second tier, assistance that shapes the form of the work but not its substance requires general disclosure. Where a model has been used to restructure an argument the student has already constructed, or to improve the clarity of prose the student has already drafted, a brief statement of the assistance received preserves transparency without implying misconduct. This tier is especially significant for Indonesian scholars writing in English, for whom linguistic assistance has always been a legitimate feature of scholarly production and for whom a blanket prohibition would be both unrealistic and inequitable.

At the third tier, assistance that generates substantive content requires specific disclosure, including the prompts used and the extent of subsequent verification. Here the student remains the author in the sense that they have exercised judgement over what to

retain, but the reader cannot evaluate the work without knowing how it was produced. This tier corresponds most closely to the practice now emerging in scholarly publishing, where the use of generative tools must be declared in a methods or acknowledgements statement and where such tools may not be listed as authors because they cannot bear responsibility for the work.

At the fourth tier, assistance that substitutes for the competence being assessed is prohibited, and its concealment constitutes misconduct. Where a task assesses the capacity to construct a legal argument, the submission of a machine-constructed argument is not assisted authorship but substitution, irrespective of disclosure. The critical drafting insight is that this tier cannot be defined in the abstract: it depends entirely on what the assessment purports to certify. A regulation that attempts to specify prohibited AI uses without reference to assessed competences will either prohibit too much or too little.

This graduated structure satisfies several normative requirements simultaneously. It provides the legal certainty that a purely discretionary standard lacks, which matters because disciplinary proceedings engage students' interests seriously enough to require foreseeability. It avoids the over-inclusiveness that would follow from prohibiting all use, a position that is in any case unenforceable and that would disadvantage students who comply. And it locates responsibility where the theoretical framework suggests it belongs with the human author who must be able to answer for the work, which is precisely what Biesta's account of subjectification requires and what the impossibility of machine authorship in copyright doctrine already implies.²⁸

D. Pedagogical Reconstruction and Institutional Capacity

Regulatory reform without pedagogical reconstruction will fail, because the underlying vulnerability is in the assessment architecture rather than in student conduct. Where an assessment can be satisfactorily completed by a machine, the assessment was probably measuring something other than what it claimed to measure even before the machine existed. Generative AI has thus performed an unintended diagnostic service, exposing the extent to which higher education has relied on the written product as a proxy for cognitive processes it does not directly observe.

Three directions of reconstruction follow from the analysis. The first is the relocation of evaluative weight toward processes that are observable and interactive: supervised oral defence, progressive submission of drafts with documented revision, in-class analytical

²⁸ Undang-Undang Nomor 28 Tahun 2014, Pasal 1 angka 2, which defines a creator as a person or persons who individually or jointly produce a distinctive and personal creation.

tasks, and assessment of the student's capacity to critique and correct machine-generated material. The last of these deserves emphasis, because it converts the technology from a threat into an object of study. A student who can identify the doctrinal errors, fabricated citations, and contextual insensitivity in a machine-generated analysis of Indonesian law has demonstrated exactly the disciplinary judgement that the degree is supposed to certify.

The second is investment in academic staff capability. The evidence from earlier waves of educational technology is unambiguous: implementation fails where it is treated as the adoption of a tool rather than as a change in professional practice requiring sustained support.²⁹ Assessment redesign is skilled work. A lecturer who has taught through end-of-semester essays for two decades cannot be expected to design authentic, process-visible assessment without structured development, exemplars, and moderated practice. The resource implications are significant and are routinely underestimated in policy documents that call for redesign without funding it.

The third is institutional infrastructure. This includes a published institutional policy that distinguishes the four tiers above and maps them onto disciplinary procedures; a data protection impact assessment for any detection or AI service processing student work; provision of an institutionally governed tool, which both reduces recourse to unmonitored services and allows the institution to model responsible use; and a procedural guarantee that allegations of AI misconduct are determined on the balance of evidence as a whole, never on the output of a detection tool alone. The last point is a matter of elementary procedural fairness: a probabilistic score is evidence, not proof, and an institution that treats it as dispositive will eventually sanction a student who did nothing wrong.

Underlying all three is a normative commitment that deserves explicit statement. The purpose of governing AI in higher education is not to preserve the convenience of existing assessment practice, nor to defend academic labour against automation, but to protect the conditions under which a person can become capable of independent judgement. Where a technology is used in a manner that develops that capacity, it serves educational purpose; where it is used in a manner that substitutes for it, it does not. Every operational rule proposed here is an attempt to render that distinction administrable.

E. A Comparative Reading and an Implementation Matrix

Placing the Indonesian position alongside the regulatory strategies adopted elsewhere clarifies both what is distinctive about the national situation and what is

²⁹ Michael Fullan, *The New Meaning of Educational Change*, 5th ed. (New York: Teachers College Press, 2016), 55–81.

transferable. Four broad models can be distinguished in current comparative practice, and each carries characteristic strengths and failure modes.

The prohibitionist model treats any use of generative systems in assessed work as misconduct. Its attraction is clarity, and in the short term it preserves the comparability of assessment across cohorts. Its failure mode is enforcement: because compliance cannot be verified, the rule is honoured by the scrupulous and ignored by others, producing precisely the inequity it was designed to prevent. Where such rules have been adopted, they have generally been softened within a single academic cycle.

The permissive-disclosure model requires declaration of use but imposes few substantive limits. It is administratively light and it respects student autonomy, but it decouples the declaration from the purpose of the assessment: a student may truthfully declare that a model generated the analysis, and the institution is left without a principled basis for deciding whether that matters. Disclosure without calibration is transparency in form and evasion in substance.

The competence-calibrated model, which this article endorses, defines permissible use by reference to what each assessment certifies, and requires disclosure proportionate to the epistemic weight of the assistance. Its cost is that it demands assessment literacy from academic staff, since the rule cannot be written centrally in a form that applies uniformly across a law faculty, an engineering faculty, and a school of fine art. Its benefit is that it is the only model that remains coherent as the technology improves, because it regulates the relationship between claim and capability rather than the state of the tools.

The infrastructural model, which is complementary rather than alternative, concentrates on the provision of institutionally governed systems and on data governance rather than on conduct rules. Its significance for Indonesia is considerable, given the obligations now imposed by the Personal Data Protection Law and the near-total absence of institutional data protection impact assessment practice in the sector.

Table 1. Regulatory Models for Generative AI in Higher Education Assessment

Model	Regulatory Focus	Principal Strength	Characteristic Failure
Prohibitionist	Conduct of the student	Clarity of the rule	Unverifiable; punishes the detected rather than the culpable

Model	Regulatory Focus	Principal Strength	Characteristic Failure
Permissive-disclosure	Declaration of use	Low administrative burden	Disclosure uncoupled from assessed competence
Competence-calibrated	Relation of claim to capability	Coherent as technology changes	Requires assessment literacy and staff development
Infrastructural	Systems and data governance	Addresses data protection exposure	Insufficient alone to govern conduct

Source: Author's analysis of comparative institutional and regulatory practice, 2026.

The matrix suggests that the productive question for Indonesian institutions is not which model to adopt but how to sequence the combination. Competence calibration supplies the substantive norm; disclosure supplies the procedural mechanism through which the norm is administered; and infrastructural governance supplies the legal compliance layer without which the other two expose the institution to liability under the Personal Data Protection Law. Prohibition retains a residual role, but only in its properly limited form as the fourth tier of the graduated scheme, applying where assistance substitutes for the assessed competence.

Two contextual factors specific to Indonesia deserve emphasis in any transplantation exercise. The first is linguistic. A very large proportion of Indonesian academic writing intended for international circulation is produced in a language that is not the author's first, and language assistance has long been an accepted and often institutionally funded feature of scholarly production. Regulatory models developed in Anglophone systems, where such assistance is exceptional rather than normal, will systematically over-criminalise Indonesian practice unless the second tier of the graduated scheme is drafted with deliberate breadth. The second is infrastructural asymmetry. Access to paid, institutionally licensed tools is unevenly distributed across Indonesian higher education, and a policy that presumes such access will impose its heaviest burdens on students and institutions with the fewest resources. Equity considerations therefore argue for institutional provision, not merely institutional permission.

Finally, the comparative exercise exposes a limitation that no regulatory model resolves. All four models presuppose that the institution knows what its assessments certify. Where learning outcomes are drafted as compliance artefacts for accreditation rather than as operative statements of intended capability, competence calibration has nothing to calibrate against. The quality assurance framework established under Regulation Number 53 of 2023 therefore acquires an unexpected significance: the seriousness with which an institution specifies its learning outcomes now determines, directly, whether it can govern AI use coherently at all.³⁰

V. CONCLUSION

This article has argued that Indonesian higher education confronts a governance gap rather than merely a technological challenge. The analysis of primary legal materials demonstrates that the prevailing regulatory conception of academic integrity is constructed around the misappropriation of an identifiable prior author's work, and that this conception does not reach generative output, which is statistically novel and attributable to no antecedent author. The regulatory framework is therefore formally intact but functionally hollow in relation to the conduct that now most seriously threatens the reliability of academic credentials.

In response to the first research question, the conceptual foundation of Indonesian academic integrity regulation requires reconstruction: the protected interest should be reconceived as the correspondence between a credential and a competence, and the regulated wrong as the misrepresentation of the process by which work was produced. In response to the second, the international instruments examined supply usable principles in particular explicability, justice, and human responsibility but require contextual translation before they can operate at the level of a faculty examination committee, and their adoption must be accompanied by attention to the data protection obligations that Law Number 27 of 2022 now imposes on any institution processing student work through third-party systems. In response to the third, the article proposes a principle of graduated authorial disclosure, under which the disclosure required is proportionate to the epistemic significance of the assistance received, and the boundary of impermissible use is defined by reference to the competence each assessment purports to certify.

The theoretical implication is that educational AI governance cannot be derived from technology policy alone. It requires a prior account of educational purpose, because the question of which uses are acceptable cannot be answered without knowing what the

³⁰ Permendikbudristek Nomor 53 Tahun 2023, Pasal 4 dan Pasal 10.

education in question is for. The practical implications are addressed to three audiences. Regulators should revise the definitional architecture of academic integrity regulation so that it captures process misrepresentation rather than textual appropriation alone. Institutions should publish tiered policies, conduct data protection impact assessments before deploying detection systems, guarantee that no allegation is determined on a detection score alone, and fund the assessment redesign that any credible policy presupposes. Academic staff should treat the capacity to evaluate and correct machine-generated work as an assessable disciplinary competence rather than as a contaminant to be excluded.

Further research should pursue three directions: empirical investigation of how Indonesian institutions are in fact exercising discretion in AI-related integrity cases; comparative study of the effect of tiered disclosure regimes on student conduct in systems that have adopted them; and normative work on the intersection between personal data protection law and institutional integrity enforcement, which remains almost entirely unexamined in Indonesian scholarship.

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