

AI integration in Literacy in Indonesian Language Education Literature : A Review Systematic and Digital Ethnopedagogy Model

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ABSTRACT

This study aims to analyze the trend of Artificial Intelligence (AI) utilization in Indonesian Language and Literature learning and formulate an AI-based Digital Ethnopedagogy model that is contextualized with local cultural values. The research background is based on the increasing adoption of generative AI in education, which demands a pedagogical framework that is not only technologically adaptive but also critical and ethical. This study uses the Systematic Literature Review (SLR) method with reference to the PRISMA guidelines to select and synthesize relevant articles related to AI and language learning. The selection process is carried out through the stages of identification, screening, eligibility, and inclusion based on thematic relevance and publication quality criteria. The results of the study indicate that AI contributes to improving digital literacy, literary creativity, and critical thinking skills, but also presents ethical challenges, potential dependency, and the risk of reducing originality. Based on the synthesis of findings, an AI-based Digital Ethnopedagogy model is formulated that integrates technological, cognitive-critical, creative, academic ethics, and local cultural context dimensions as the foundation of learning. This model emphasizes that AI needs to be positioned as a collaborative tool that strengthens reflection and the production of meaning, not as a substitute for the role of educators. This study recommends further empirical testing to measure the effectiveness of the model at various levels of education to strengthen its conceptual and implementative validity.

Keywords: Artificial Intelligence, Indonesian Language Education, Digital Ethnopedagogy

INTRODUCTION

Entering mid 2020s decade , practice learning language and literature in Indonesia shows increasing shift real going to integration intelligence Artificial Intelligence (AI) in activity academic daily . Improvement national internet penetration reached around 79.5% or ±221.6 million users in 2024 expand ecosystem digital learning and opening up room utilization technology generative in a way massive ¹. In the room class , AI does not Again used just as machine seeker information , but as partners cognitive For give bait reverse writing, compiling rubric assessment , designing multimodal activities , up to help exploration of creative ideas in literary writing . At the global level , the Teaching and Learning International Survey (TALIS) report shows that around one third until approach half educator has using AI for summarize material and compile activity learning , even though there is variation significant between countries and needs training strong ethics ².

¹ APJII, “ Number of Indonesian Internet Users Reach 221 Million People,” Indonesian Internet Service Providers Association , 2024, <https://apjii.or.id/berita/d/apjii-jumlah-pengguna-internet-indonesia-tembus-221-juta-orang>.

² OECD, *Results from TALIS 2024: The State of Teaching* , TALIS (OECD Publishing, 2025), <https://doi.org/10.1787/90df6235-en>.

This trend is also reflected in Indonesian context . Report academic show growth AI adoption in the sector education reach 47% in 2024 ³, while survey national in 2025 indicates that around 95% of students has utilizing AI in the learning process they ⁴. In the realm of Indonesian Language and Literature Education (PBSI), research latest report that 90.9% of students feel AI is helpful understanding material through personalization and feed come back instant ⁵. In a way policies , principles The use of human- centered AI and oriented towards digital literacy is emphasized in UNESCO's global guide to the use of Generative AI ⁶, as well as reinforced by the guide national use of GenAI in universities high published by the Ministry of Education, Culture, Research and ⁷Technology , which emphasizes personalization learning at a time fence ethics academic .

However , behind acceleration mentioned , literature international regarding Artificial Intelligence in Education (AIED) shows inequality quality proof between STEM fields and humanities , including language and literature. Systematic study latest take notes use Large Language Models (LLM) such as ChatGPT in education high , but exploration to literary literacy which includes appreciation , interpretation depth , and production creative , still relatively limited compared to skills write functional or administrative ⁸tasks . In addition , various institution international remind risk of shortcut learning, decrease depth reasoning , as well as potential disinformation if assessment and media literacy are not strengthened ⁹. In literary studies , the risk This become crucial Because literary literacy is based on sensitivity of interpretation, originality expression and reflection ethical .

The gap the more looks when AI is implemented in context pluralistic Indonesian culture . Although a number of report mention improvement skills writing and appreciation text through AI up to 39.5% ¹⁰, challenges still appears in understanding nuances culture , context sociolinguistics , and values local culture inherent in Indonesian literary works . Cultural research big data based also still emphasize the need development of more datasets sensitive to the diversity of social norms and languages of the archipelago so that AI does not let go from root humanistic ¹¹. With Thus , the problem main No just is AI effective , but how AI is integrated without shift close reading practice , criticism text , and production reflective work as well as responsible answer .

³ Erfan Maruf, "Indonesia's AI Adoption Soars 47%, But Big Firms Lag in Innovation: AWS Report," Jakarta Globe, 2025,

⁴ Agnes Z. Yonatan, "95% of Indonesian Students Use AI in the Learning Process ," GoodStats Data, 2025,.

⁵ Agilia Nuramadini , "The Influence of AI Chatbot Use on Learning Among Elementary School Teacher Education Students at Riau Islamic University," *International Journal of Learning and Instruction (IJLI)* 7, no. 2 (November 2025): 78–85, <https://doi.org/10.26418/ijli.v7i2.94712>.

⁶ Fengchun Miao and Wayne Holmes, "Guidance for Generative AI in Education and Research," Unecdoc Library, France: UNESCO, 2023, <https://doi.org/10.54675/EWZM9535>.

⁷ Sri Suning Kusumawardani et al., "Guidelines for the use of generative artificial intelligence in learning in higher education ," Monograph, Jakarta: Directorate Learning and Student Affairs , 2024, <https://repositori.kemendikdasmen.go.id/32289/>.

⁸ Muhammad Yasir Mustafa et al., "A Systematic Review of Literature Reviews on Artificial Intelligence in Education (AIED): A Roadmap to a Future Research Agenda," *Smart Learning Environments* 11, no. 1 (December 2024): 59, <https://doi.org/10.1186/s40561-024-00350-5>.

⁹ UNESCO, *Guidance for Generative AI in Education and Research*. (Prance, 2023).

¹⁰ "Young People and Teachers' Use of Generative AI to Support Literacy in 2025," National Literacy Trust, National Literacy Trust, 2025, <https://literacytrust.org.uk/research-services/research-reports/young-people-and-teachers-use-of-generative-ai-to-support-literacy-in-2025/>.

¹¹ BRIN, "BRIN Affirms AI Has Impact Deep Cultural and Social Impact," National Research and Innovation Agency , 2025,

Based on exposure empirical and reflective literature said, it appears that Not yet available synthesis systematically which special map implementation of AI in literary literacy Indonesian Language Education at the same time study effectiveness pedagogical, challenges ethical-cultural, and implications transformation literacy academic. Therefore that, research This aim For analyze literature about implementation of AI, especially Large Language Models (LLM)¹², in PBSI literary literacy to identify its effectiveness in analysis structure literary works, their role in stimulate creativity writing students, as well as shift literacy demanding academics strengthening ethics and reflection critical in the middle automation technology. In more specific, research This answer question as follows: (1) To what extent is LLM effective in support analysis and appreciation literary works in Indonesian Language Education? (2) How the role of AI in increase creativity student literary writing? and (3) How implications ethical and cultural AI integration into practice literary literacy in college tall?. With approach In this regard, the use of AI is positioned No as replacement capacity interpretive humans, but rather as amplifier literary literacy that encourages reading in-depth, critical interpretation, and production ethical creativity as well as contextual.

RESEARCH METHODS

Study This use Systematic Literature Review (SLR) approach to identify, evaluate, and synthesize findings study about Implementation of Artificial Intelligence (AI) in Indonesian Language and Literature Education. Procedure study referring to Kitchenham¹³ guidelines and Charters as well as follow standard PRISMA 2020 (Preferred Reporting Items for Systematic Reviews and Meta-Analyses) reporting to ensure transparency, replication, and accountability academic. Protocol study arranged before the search process literature started, includes formulation question research, search strategy, criteria inclusion – exclusion, as well as technique data analysis. Because the research This be in the realm education and not including study intervention clinical, protocol No registered with PROSPERO, but all over stages documented in a way systematic.

Search process literature conducted in January 2026 through the Scopus, DOAJ, SINTA, and Google Scholar databases with range 2021–2026 publication for ensure relevance to latest developments in Generative AI. Keywords used combined with Boolean operators, including: (“Artificial Intelligence” OR “ Artificial Intelligence” Artificial”) AND “Indonesian Language Education”, (“AI” AND “ Literary Literacy”), and (“Generative AI” AND “Creative Writing” AND “Indonesia”). Stage identification resulting in a total of 186 articles. After done deletion duplication as many as 34 articles, remaining 152 articles For stage filtering based on title and abstract. At stage this, 101 articles eliminated Because No relevant with the context of Indonesian Language and Literature Education or No discuss implementation of AI in explicit.

A total of 51 articles Then enter to stage eligibility and readability in a way full-text assessment. Articles were eliminated if No containing empirical data or framework clear conceptual, no is at in context formal education, or only discussing AI in detail general without dimensions linguistics and literature. A total of 26 articles issued at the stage this, so that amount end articles that meet the requirements criteria and analyzed in a way systematic is 24 articles. Complete flow of the selection process the presented in Table 1.

¹² Muhammad Falensi Azmi et al., “ IndoSafety : Culturally Grounded Safety for LLMs in Indonesian Languages,” arXiv:2506.02573, preprint, arXiv, June 3, 2025, <https://doi.org/10.48550/arXiv.2506.02573>.

¹³ Barbara Kitchenham, *Kitchenham, B.: Guidelines for Performing Systematic Literature Reviews in Software Engineering. EBSE Technical Report EBSE-2007-01* (2007).

Table 1. Article Selection Flow Based on PRISMA Protocol

PRISMA Stage	Process Description	Number of Articles (n)
Identification	Identified articles through database search (Scopus, DOAJ, SINTA, Google Scholar)	186
	Duplication deleted	34
Screening	Remaining articles after duplication deleted	152
	Article eliminated based on title and abstract	101
Eligibility	Full-text articles are assessed its eligibility	51
	Full-text articles eliminated Because No fulfil criteria	26
Included	Articles that meet the requirements criteria and analyzed in synthesis qualitative	24

Table 2. Articles Supporting the Digital Ethnopedagogy Model

No	Author & Year	Focus of Study	Supported Model Elements	Status
1	Adhan & Azhar ¹⁴	AI Ethics in work scientific	Academic Ethics & Integrity	Inclusion
2	Apriliani ¹⁵	AI in Indonesian language learning	Pedagogical Integration	Inclusion
3	Astuty & Anggraini ¹⁶	ChatGPT & digital literacy	Digital Literacy	Inclusion
4	Badriello et al. ¹⁷	The impact of AI on Indonesian education	Transformation Systemic	Inclusion
5	Budi et al. ¹⁸	AI & Indonesian Language Curriculum	Curriculum Design Innovative	Inclusion
6	Fauziddin & Ningrum ¹⁹	The future of AI education	Transformation Pedagogical	Inclusion
7	Haetami ²⁰	AI & personalization learning	Personalization & Management	Inclusion
8	Harmilawati et al. ²¹	AI & thinking critical	Dimensions Reflective-Critical	Inclusion
9	Mills & Gutierrez ²²	Critical literacy & AI	Literacy Critical	Inclusion

¹⁴ Galuh Efnol Adzan and Azhar Azhar , “Ethics of Using Artificial Intelligence in Scientific Writing ,” *Journal Study Innovation* 4, no. 4 (November 2024): 2297–308, <https://doi.org/10.54082/jupin.874>.

¹⁵ Dini Apriliani, “ The Use of Artificial Intelligence in Indonesian Language Learning ,” *DIKBASTRA: Journal of Language and Literature Education* 7, no. 1 (August 2024), <https://doi.org/10.22437/dikbastra.v7i1.33262>.

¹⁶ Cindy Anggraeni, Elan Elan , and Sima Mulyadi, “Habitatment Methods for Embedding Character Discipline and Responsibility at RA Daarul Falaah Tasikmalaya ,” *AGAPEDIA PAUD JOURNAL* 5, no. 1 (October 2021): 100–109, <https://doi.org/10.17509/jpa.v5i1.39692>.

¹⁷ Badriello Chenny Waita, Trivena Apriska Yiswi , and Ariella Kristiahadi, “ The Impact of Artificial Intelligence (Ai) on Education in Indonesia,” *Indonesian Journal of Education* 6, no. 7 (July 2025): 3112–21, <https://doi.org/10.59141/japendi.v6i7.8433>.

¹⁸ Imanuel Budi et al., “The Role and Challenges of Using Artificial Intelligence in Innovation Development Curriculum Future Indonesian Language Learning ,” *LEARNING: Journal Innovation Research in Education and Learning* 4 (December 2024): 1188–94, <https://doi.org/10.51878/learning.v4i4.3767>.

¹⁹ Mohammad Fauziddin et al., "The Impact of AI on the Future of Education in Indonesia," *Educative: Journal Scientific Education* 3, no. 1 (January 2025): 11–16, <https://doi.org/10.70437/educative.v3i1.828>.

²⁰ Haetami Haetami , “AI-Driven Educational Transformation in Indonesia: From Learning Personalization to Institutional Management,” *AL-ISHLAH: Jurnal Pendidikan* 17, no. 2 (April 2025): 1819–32, <https://doi.org/10.35445/alishlah.v17i2.7448>.

²¹ Harmilawati , Rifqatussa'diyah , Amalia, P., Majid, H., & Sahrah, I., “The Role of AI Technology in Development Students' Critical Thinking Skills ,” *Proceedings Sentikjar* , 2024.

²² Kathy A. Mills and Amanda Gutierrez, *Critical Literacy in an AI World* (London: Routledge, 2025),

10	Nezhyva et al. ²³	AI & content literary	Literary Creativity	Inclusion
11	OECD ²⁴	Use of AI by teachers	Context Implementation	Inclusion
12	Mariyadi et al. ²⁵	ChatGPT & write poetry	Creativity & Literary Production	Inclusion
13	Alliya Fajriati et al. ²⁶	AI & digital literacy	Digital Literacy	Inclusion
14	Pamungkas et al. ²⁷	Psycholiterary learning	Literacy Narrative-Emotional	Inclusion
15	Rahmadhani & Supriadi ²⁸	Literacy digital speaking	Assessment & Literacy	Inclusion
16	Tegar Pratama Basuki Putra ²⁹	GenAI Indonesian	LLM in language local	Inclusion
17	Sucianingtyas et al. ³⁰	educational AI	Classification Technology	Inclusion
18	Sukrin & Ihlal ³¹	Integration of ethnopedagogy & AI	Dimensions Local Culture	Strong Inclusion
19	Bahar Amal, et.al ³²	AI & short stories	Literary Creativity	Inclusion
20	UNESCO ³³	GenAI Guide	Ethics & Human-centered	Inclusion
21	Wang et al. ³⁴	SLR AI in Education	Trends & Research Gaps	Inclusion
22	Princess Anggriani ³⁵	AI & efficiency write creative	Productivity Creative	Inclusion
23	Yasmin et al. ³⁶	AI & thinking critical	Reflective-Critical	Inclusion
24	David Benny ³⁷	AI & stimulation think critical	Dimensions Cognitive	Inclusion

²³ Liudmyla L. Nezhyva et al., "AI Tools for Sustainable Primary Teacher Education: Literary-Artistic Content Generation," May 14, 2024, 134–48, <https://ceur-ws.org/Vol-3918/paper304.pdf>.

²⁴ OECD, *Results from TALIS 2024*.

²⁵ Mariyadi et al., "Perception Student To Utilization of ChatGPT in the Learning Process In Higher Education," *Didactics : Journal Education* 13, no. 4 November (November 2024): 5423–38, <https://doi.org/10.58230/27454312.1210>.

²⁶ Alliya Fajriati, Wisroni Wisroni, and Ciptro Handrianto, "Utilization Artificial Intelligence (AI) Technology in Learning Based Students in the Digital Era," *WAHANA PEDAGOGIKA: Journal Scientific Education and Learning* 6 (December 2024): 71–85, <https://doi.org/10.52166/wp.v6i2.7890>.

²⁷ Onok Dear Pamungkas et al., *Augmented Reality-Based Psycholiterary Learning: Enhancing Emotional and Narrative Literacy in Higher Education | Research Journal in Advanced Humanities*, 6, no. 3 (2025),

²⁸ Maitri Rahmadhani and Supriadi Supriadi, "Developing Digital-Based Speaking Literacy Assessment Using PLOMP Model to Support the National Literacy Movement," *IDEAS: Journal on English Language Teaching and Learning, Linguistics and Literature* 10, no. 2 (December 2022): 2251–60,

²⁹ Tegar Pratama Basuki Putra and Sapto Hermawan, "Legal Certainty of the Use of Artificial Intelligence in Legal Education," *SENADIKA PROCEEDINGS : National Academic Seminar 2*, no. 1 (November 2025): 285–97,

³⁰ Laukhin Rosyida Falistya Richa Sucianingtyas Seftiyan Praise, Arditya Prayogi, Sigit Dwi Laksana, *Study of Various Artificial Intelligence (AI) in Education*, February 15, 2025,.

³¹ Integration of Ethnopedagogy and Artificial Intelligence : An Approach Innovative in Indonesian Language Learning Based on Local Wisdom, 2 *Journals Innovation in Primary and Secondary Education* 1 (2025),

³² Bahar Amal et al., "The Role of Artificial Intelligence as References in Creating Short Story Literary Works," *Stylistics : Journal of Language and Arts Education* 13, no. 1 (November 2024): 148–58,

³³ UNESCO, *Guidance for Generative AI in Education and Research*.

³⁴ "Artificial Intelligence in Education : : A Systematic Literature Review: Expert Systems with Applications: An International Journal: Vol 252, No PA," Expert Systems with Applications: An International Journal, accessed March 1, 2026,

³⁵ Putri Anggraini Novita, "The Influence of Workload, Work Balance, and Organizational Justice" Employee Performance Reviewed in Management Human Resources (Study on Employees of PT. Bukit Asam Tbk. Tarahan Port Bandar Lampung)" (diploma, UIN RADEN INTAN LAMPUNG, 2025),

³⁶ Khairani Yasmin et al., "Literature Review: Impact The Use of Artificial Intelligence (AI) Against Students' Critical Thinking Skills," *INSPIRE: Innovation and Sustainability in Pedagogical Research and Education* 1, no. 1 (2025): 142–50, <https://proceeding.unilak.ac.id/index.php/inspire/article/view/21>.

For ensure quality analyzed studies , quality appraisal was carried out using adaptation of the CASP (Critical Appraisal Skills Programme) checklist that assesses clarity purpose , suitability method , transparency analysis , validity findings and relevance to question research . Articles that are not meet at least three indicator quality eliminated at the stage eligibility . Assessment process done in a way independent and comparable return For minimize selection bias .

Data extraction is performed use matrix synthesis that contains information author , year publication , country/ context research , type methods (qualitative , quantitative , mixed, or conceptual), type AI technology used , implementation domain (listening , speaking , reading , writing , or literary appreciation), as well as impacts and challenges reported . The data is then analyzed use technique analysis content analysis and analysis thematic For identify pattern effectiveness pedagogical , the role of AI in literary creativity , as well as implications ethical and cultural . Synthesis results directed For mapping the state-of-the-art of AI- based literary literacy in Indonesia at the same time formulate an ethical , contextual , and value - oriented integration model wisdom local .

RESULTS AND DISCUSSION

Transformation of Literary Appreciation (From Textual to Dialogic)

The results of the literature synthesis reveal that AI, especially Large Language Models (LLM) such as ChatGPT and Claude, have changed the way PBI students appreciate literature. a) Intrinsic Element Analysis: While previously structural analysis (theme, characters, plot) was carried out conventionally, now students use AI as a "discussion partner" to dissect hidden layers of meaning. Mariyadi's research ³⁸ shows that AI helps elementary/high school students visualize imaginary elements in poetry into more concrete narratives. b) Characterization Simulation: Students can ask AI to play the role of a character in a novel (for example, the role of 'Hanafi' in *Salah Asuhan*) to understand character and inner conflict more empathetically. This deepens literary literacy through simulation methods that would not be possible without technology ³⁹.

Implementation of AI in Language Skills (Receptive and Productive)

The integration of AI in PBI is not limited to literature, but also to mastery of language skills: a) Writing Skills (Productive): AI is used as a "Pre-writing" instrument. Students use generative algorithms to compose short story outlines or literary criticism essays. Data shows that the efficiency of drafting has increased significantly, allowing the teaching focus to shift to aspects of aesthetic depth and originality of ideas ⁴⁰. b) PUEBI/EYD Aligned Rules: The use of AI assistive devices in detecting syntax and diction errors helps students understand the application of language rules in real-time. This strengthens digital literacy as well as grammar ⁴¹.

Challenges of Locality and (Digital Ethnopedagogy)

One crucial finding in this discussion is the limitations of AI in understanding Nusantara Sociolinguistics. a) Cultural Bias: AI tends to provide answers with Western logic. In PBI, this risks eroding students' understanding of local metaphors or traditional expressions (proverbs). b) Ethnopedagogical Solution: Sukrin & Ihlas emphasize that PBI lecturers must act as cultural

³⁷ Firane Larasyifa David Benny Gleneagles Raihan Fawaiz, "The Role of Technology Intelligence Artificial Intelligence (AI) In Improving Efficiency of the Learning and Teaching Process ," *Madani: Jurnal Scientific Multidisciplinary* 2, no. 5 (May 2024): 107–16, <https://doi.org/10.5281/zenodo.11364580>.

³⁸ Mariyadi et al., " Perception Student To Utilization of ChatGPT in the Learning Process In College ."

³⁹ Amal et al., "The Role of Artificial Intelligence as References in Creating Short Story Literary Works."

⁴⁰ Novita, " The Influence of Workload , Work Balance , and Organizational Justice Employee Performance Reviewed in Management Human Resources (Study on Employees of PT. Bukit Asam Tbk . Tarahan Port Bandar Lampung)."

⁴¹ Apriliani , " The Use of Artificial Intelligence in Indonesian Language Learning ."

gatekeepers⁴². This discussion proposes that AI should only be used as a "creative trigger," while determining cultural meaning must still refer to canonical Indonesian literary texts and local contexts.

The Shifting Role of Teachers in the AI Era

The review confirms that teachers now function as digital curators. Teachers/lecturers no longer simply teach "what figurative language is" but "how to evaluate the accuracy of AI-generated figurative language." Technology-based literary literacy requires teachers/lecturers to teach the ethics of AI use to maintain students' academic integrity⁴³.

Table 3. Comparison of Conventional and AI Methods and Indonesian Language Education

Dimensions Comparison	Conventional PBI Method	AI- Based Methods in PBI
Literary Text Analysis	Depends completely on intuition students and guidance lecturer in class .	Student using AI as <i>co-analyst</i> For dissect element intrinsic in a way fast and multidimensional .
Creative Process (Writing)	Often experience <i>writer's block</i> ; drafting process until editing done manually .	AI in action as partners <i>brainstorming</i> for plot, diction , and coping obstacle creative beginning .
Language Feedback	Wait correct lecturer ; bait come back often delayed (not <i>real-time</i>).	Grammar correction (PUEBI/ EYD) and effectiveness sentence given in a way instant by AI system .
Personalization Study	Material and speed Study equalized For One class .	AI adapts level difficulty text and style explanation in accordance with ability individual student .
Accessibility Reference	search in the library or machine seeker general public who need long time .	AI is capable summarize thousands literature related specific literary themes in count seconds (LLM).
Depth Aesthetics	Focus on the soul moral and emotional values humanity in a way deep .	Risky become mechanical If No filtered ; role lecturer shift become curator values and aesthetics .

Based on the table above, it is clear that the integration of AI in Indonesian Language Education provides extraordinary efficiency in both mechanical (grammar) and technical (structural) aspects. However, conventional methods still have irreplaceable advantages in the affective aspect and the in-depth expression of meaning. Therefore, in this context, AI is not present to eliminate conventional methods, but rather to perform cognitive augmentation. For example, in the Poetry Appreciation course, students still use conventional methods to feel the "spirit" of poetry, but use AI to dissect rhyme patterns or find equivalents for rarely used metaphors, thereby enriching the artistic quality of their work⁴⁴.

Digital Ethnopedagogy in AI- Based Literary Literacy

Digital Ethnopedagogy Model in AI- Based Literary Literacy is positioned as approach pedagogical interdisciplinary that integrates literary literacy , intelligence artificial , and values culture local in context learning based technology interactive . This model leave from view that

⁴² *Integration of Ethnopedagogy and Artificial Intelligence .*

⁴³ Adzan and Azhar, "Ethics of Using Artificial Intelligence in Writing Scientific Papers."

⁴⁴ *Integration of Ethnopedagogy and Artificial Intelligence .*

utilization of AI in education language and literature not can released from dimensions critical , ethical , and cultural , as emphasized in study *critical literacy in an AI world* that places participant educate as subject reflective , not just users technology ⁴⁵. Therefore that , AI in this model No only functioning as tool help technical , but as *cognitive and cultural mediators* who support understanding literary meaning in general contextual , valuable , and rooted in culture .

Figure 1. Digital ethnopedagogy model in education



In a way In principle , this model built on four runway main , namely contextuality cultural , critical-reflective , humanistic-technological , and sustainability pedagogical principles contextuality confirm that literary texts and activities literacy must leave from reality culture participant educate so that learning meaningful and not let go from identity local . Principle critical-reflective put participant educate as capable subjects evaluate meaning text , technology , and algorithmic bias in a way aware . Principle humanistic-technological ensure that AI technology works serve development humanity , not replace role pedagogical human . Meanwhile that , the principle sustainability emphasize importance literacy literature and AI as competence term long in face a digital ecosystem that continues to grow develop .⁴⁶

In a way implementative , this model started with election literary texts that represent wisdom local and issues socio-cultural , then enriched through utilization AI technology and interactive media . The use of AI such as *natural language processing* , system generative , and digital visualization allows analysis structure narrative , exploration meaning , and creation literary content in general creative and adaptive approach This in line with findings Nezhyva et al., who showed that AI can support development literary and artistic literacy in a way sustainable if directed through design structured and reflective ⁴⁷ pedagogical approach . In addition , the use of media based on technology interactive and multimodal proven capable strengthen involvement cognitive and affective participant educate in understand dimensions emotional and narrative literary ⁴⁸texts .

⁴⁵ Mills and Gutierrez, *Critical Literacy in an AI World* (London: Routledge, 2025).

⁴⁶ Rebecca D. Taylor et al., "Promoting Positive Youth Development Through School Based Social and Emotional Learning Interventions: A Meta Analysis of Follow Up Effects," *Child Development* 88, no. 4 (July 2017): 1156–71, <https://doi.org/10.1111/cdev.12864>.

⁴⁷ Nezhyva et al., "AI Tools for Sustainable Primary Teacher Education" (May 14, 2024).

⁴⁸ Onok Dear Pamungkas et al., *Augmented Reality-Based Psycholiterary Learning* .

this model, the role lecturer experience shift strategic from transmitter material become designer learning, facilitator reflection, and guard mark culture. Lecturers are responsible answer curate literary text, designing scenario interaction AI-based, as well as guide participant educate in interpret results output technology in a way critical and contextual. This role in line with HCI paradigm in education that emphasizes importance design interaction human, technology, content as One unity ecosystem learning⁴⁹. With thus, lecturer still become actor key in ensure that utilization of AI is not reduce literary meaning as well as mark the culture it contains.

As for the position of AI in this model placed as partners pedagogical, not authority epistemic. AI is used For facilitate exploration text, giving bait come back language, visualize structure narrative, as well as stimulate literary creativity, but decision interpretive and assessment mark still be on the participants students and lecturers. Placement This important For avoid dependence overuse of technology at a time grow critical and ethical AI literacy, including awareness to potential algorithmic bias and homogenization culture in generative⁵⁰system.

In the human computer interaction (HCI) framework, this model look at literary learning as active dialogue space between humans, technology, and culture. Participants educate pushed For interact in a way active with digital system through simulation, visualization concepts, as well as AI-based dialogue to build understanding critical to the text and the issues raised. Approach This relevant with design instrument learning web-based that encourages discussion reflective, collaborative, and decision-making decision based value, as shown by Kruit⁵¹. With Thus, literary learning does not Again nature passive and reproductive, but transformative and dialogical.

Implications pedagogical from the Digital Ethnopedagogy model in AI-Based Literary Literacy includes strengthening holistic literary literacy includes dimensions linguistic, narrative, emotional, and cultural, as well as development critical and ethical AI literacy. Participants educate No only capable understand and produce literary texts with support technology, but also capable reflect mark culture, recognizing technological bias, as well maintain identity cultural in digital ecosystem. With Thus, this model give contribution conceptual and practical for development literature-based learning humanistic, sustainable and relevant technology with challenge education in the era of intelligence artificial, as directed in discourse cutting edge HCI and *AI in Education*⁵².

CONCLUSION

Based on results analysis literature, research This conclude that utilization intelligence Artificial Intelligence (AI), especially Large Language Models, plays a role effective in support literary literacy in Indonesian Language Education. AI is capable help student in analyze structure literary works, providing bait come back linguistics in a way fast, and stimulate

⁴⁹ Lecture Notes in Computer Science, "12th International Conference on Learning and Collaboration Technologies, LCT 2025, Held as Part of the 27th HCI International Conference, HCII 2025," *Lecture Notes in Computer Science* 15806 LNCS (2025).

⁵⁰ Kathy A. Mills and Amanda Gutierrez, *Critical Literacy in an AI World* (Taylor and Francis, 2025), <https://doi.org/10.4324/9781003539193>.

⁵¹ P. M. Kruit, B. Bredeweg, and H. Nieuwelink, "Addressing Socio-Scientific Issues with Interactive Concept Cartoons: Design of a Web-Based Educational Instrument," *International Journal of Science Education* 47, no. 7 (2025): 870–90, <https://doi.org/10.1080/09500693.2024.2354076>.

⁵² Lecture Notes in Computer Science, "12th International Conference on Learning and Collaboration Technologies, LCT 2025, Held as Part of the 27th HCI International Conference, HCII 2025."

creativity in the process of writing literature through personalization learning . However Thus , the findings also show that AI is not can replace role reflection humanistic in literary learning , especially related interpretation meaning , sensitivity aesthetics , and understanding context culture . Therefore that , AI is more appropriate positioned as tool help pedagogical and partners cognitive strengthening , not replace , practice reading depth and production responsible literary works answer .

Implications from findings This confirm importance development approach integrated learning AI technology with values culture local through framework digital ethnopedagogy . Educator expected play a role active as facilitator reflection critical , guard ethics academics , and curators mark culture in the use of AI in literature classes . With approach that , the use of AI is not only efficiency - oriented technical , but also contributes to strengthening literacy critical , creativity ethics and identity cultural students . Research furthermore recommended For test in a way empirical effectiveness AI- based integration digital ethnopedagogy in context literary learning in various regions and backgrounds Indonesian culture .

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