

Beyond Paradigmatic Tensions: Toward Context-Sensitive Educational Research in Indonesia

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Abstract

Indonesia's multicultural education system presents a unique challenge for educational research. This paper examines the persistent paradigmatic tension between positivism and interpretivism in Indonesian educational research and argues for a context-sensitive mixed-methods approach that rise above this traditional dichotomy. While positivism offers valuable tools for identifying broad patterns and informing national policy through quantitative methods, it frequently fails to capture the cultural, linguistic, and socioeconomic complexities at the local level. Conversely, interpretivism provides deep and contextual understanding through qualitative inquiry but often struggles to achieve broader applicability and policy relevance. Through a critical comparative analysis of paradigm foundations and examination of Indonesian case studies this paper demonstrates how a reflexive, ethically grounded mixed-methods praxis can bridge this divide. The paper contributes a framework for Indonesian educational researchers that emphasizes paradigmatic reflexivity, methodological flexibility, ethical consideration of power relations, and active community engagement.

Keywords: positivism, interpretivism, mixed methods, educational research, Indonesia, context-sensitive research, research ethics

Abstrak

Sistem pendidikan multikultural Indonesia menciptakan tantangan unik bagi penelitian pendidikan. Makalah ini mengkaji ketegangan paradigmatik yang terus berlangsung antara positivisme dan interpretivisme dalam penelitian pendidikan Indonesia dan mengajukan argumen untuk pendekatan metode campuran yang peka konteks yang melampaui dikotomi tradisional ini. Sementara positivisme menawarkan sarana yang berguna untuk mengidentifikasi pola umum dan memberi masukan pada kebijakan nasional melalui metode kuantitatif, pendekatan ini sering gagal menangkap kompleksitas budaya, linguistik, dan sosioekonomi di tingkat lokal. Sebaliknya, interpretivisme memberikan pemahaman

kontekstual yang mendalam melalui penyelidikan kualitatif namun sering kesulitan mencapai penerapan yang lebih luas dan kebijakan yang bermanfaat. Melalui analisis komparatif kritis terhadap fondasi paradigma dan pemeriksaan studi kasus di Indonesia makalah ini menunjukkan bagaimana praksis metode campuran yang reflektif dan beretika dapat menjembatani kesenjangan ini. Makalah ini menyumbangkan kerangka kerja bagi peneliti pendidikan Indonesia yang menekankan reflektivitas paradigmatis, fleksibilitas metodologis, pertimbangan etis tentang relasi kekuasaan, dan keterlibatan aktif masyarakat.

Kata kunci: positivisme, interpretivisme, metode campuran, penelitian pendidikan, Indonesia, penelitian peka konteks, etika penelitian

1. Introduction

Indonesia stands as one of the world's most remarkable inquiry in pluralism. With a population exceeding 270 million people dispersed across thousands of islands, the nation embodies what anthropologist Clifford Geertz famously termed "the integrative revolution." This refers to the ongoing project of building unity amidst breathtaking diversity.¹ The Indonesian education system operates within this complex sociocultural matrix. So it must simultaneously pursue standardized learning outcomes mandated by national policy while responding to localized realities shaped by distinct cultural values, religious practices, and economic conditions.² This tension between uniformity and diversity creates a fundamental challenge for educational research. The question then becomes: what forms of inquiry can produce knowledge that is both scientifically valid and genuinely meaningful across Indonesia's varied contexts?

Educational research often uses two main approaches: positivist methods for quantitative studies and interpretivist methods for qualitative studies. The positivist tradition emphasizes objectivity, measurement, hypothesis testing, and the pursuit of generalizable laws as it is rooted in empirical science. In the Indonesian context, this paradigm manifests in large-scale assessments like the National Exams (*Ujian Nasional*), system-wide surveys of educational access and quality, and quantitative evaluations of policy interventions.³ Such research generates data that appear authoritative to policymakers. These numbers seemingly offer clear evidence for decision-making. The interpretivist tradition, in contrast, emphasizes subjectivity, meaning making, contextuality, and deep understanding of lived experience. In Indonesia, this paradigm appears in ethnographic studies of classroom interactions, narrative inquiries into teacher identities, and phenomenological explorations of student learning in specific cultural settings.⁴ Such research illuminates dimensions of educational reality that statistics cannot capture.

The central problem this paper addresses is not merely the existence of these two paradigms, but rather the false and counterproductive dichotomy that has emerged between

¹ Clifford Geertz, *The Interpretation of Cultures: Selected Essays* (Basic Books, 1973), 255-283.

² Suharti, "Trends in Education in Indonesia," in *Education in Indonesia*, ed. Daniel Suryadarma and Gavin W. Jones (ISEAS–Yusuf Ishak Institute Singapore, 2018), <https://doi.org/10.1355/9789814459877-007>, 15-52.

³ Daniel Suryadarma et al., "Improving Student Performance in Public Primary Schools in Developing Countries: Evidence from Indonesia," *Education Economics* 14, no. 4 (2006): 401–429, <https://doi.org/10.1080/09645290600854110>.

⁴ Aria Maulana Satriyo et al., "Languages of Power and Belongings: A Case Study of a Papuan Student's Struggle for Identity in a Multilingual University," *Linguistik Indonesia* 43, no. 1 (2025): 155-170, <https://doi.org/10.26499/li.v43i1.715>.

them in Indonesian educational research practice. This dichotomy manifests in several problematic ways. First, it creates a methodological hierarchy in which positivist research is often privileged as more scientific and policy relevant, while interpretivist work is marginalized as subjective.⁵ Second, it encourages researchers to specialize within one paradigmatic silo which limits their capacity to address research questions that demand both breadth and depth. Third, and most critically for Indonesia, it produces knowledge that is either context-blind or context-bound to the point of impracticality. This split in approaches weakens Indonesia's educational research system and makes it harder to produce insights that support fair policies and effective practices across different contexts.

While the international literature has extensively debated these paradigms and promoted mixed methods as a synthesizing approach,⁶ the specific implications for Indonesia remain underdeveloped. Simply importing the generic mixed-methods solution may fail to address the distinctive challenges of conducting educational research in a nation where diversity is not only a variable to be controlled but also a fundamental epistemological consideration. The uniqueness of the Indonesian context with its linguistic and cultural complexity demands a more finely tuned approach to paradigm integration.⁷

Therefore, this paper poses the following guiding question: How can Indonesian educational researchers develop research practices that transcend the positivist interpretivist dichotomy to produce knowledge that is contextually responsive, ethically grounded, and policy-relevant? Our thesis is that addressing this challenge requires moving beyond mechanical method mixing toward what we term "context-sensitive research praxis." This praxis involves: (1) conscious reflexivity about paradigmatic assumptions; (2) ethical engagement with power relations in research; (3) methodological flexibility that respects local epistemologies; and (4) commitment to research that serves both knowledge production and social transformation.

2. Research Method

This paper employs a qualitative research design based on a critical interpretive review methodology. Unlike systematic reviews that seek comprehensive coverage using predetermined inclusion criteria, interpretive reviews aim to develop new conceptual understandings through critical analysis of selected literature.⁸ Our approach is particularly suited to addressing the paradigmatic and philosophical questions at the heart of this paper.

The review process involved three interconnected phases. First, we conducted a conceptual mapping of key literature on research paradigms in social science and educational research. This included foundational texts in positivism (such as Comte and Popper), interpretivism (such as Weber and Dilthey), and paradigm debates (such as Guba and

⁵ Donna M. Mertens, *Research and Evaluation in Education and Psychology: Integrating Diversity with Quantitative, Qualitative, and Mixed Methods*, Sixth edition. (SAGE, 2024).

⁶ John W. Creswell and J. David Creswell, *Research Design: Qualitative, Quantitative, and Mixed Methods Approaches*, 5th edition (SAGE Publications Inc, 2018).

⁷ Linda Tuhiwai Smith, *Decolonizing Methodologies: Research and Indigenous Peoples*, 2nd ed. (Zed Books, 2012).

⁸ Thomas A. Schwandt, *The Sage Dictionary of Qualitative Inquiry*, Fourth edition. (SAGE, 2015), 166-170.

Lincoln, and Kuhn), as well as contemporary discussions of mixed-methods. This phase aimed to identify core philosophical debates and evolutionary trends in paradigm thinking.⁹

Second, we engaged in contextualized analysis of Indonesian educational research. Using databases such as EBSCO, ERIC, and Indonesian journal portals, we identified studies that exemplified positivist, interpretivist, and mixed-methods approaches in the Indonesian context. Selection criteria included: (1) publication in peer-reviewed journals; (2) clear articulation of research paradigm or methodology; and (3) publication within the last two decades (2005-2025) with a few seminal earlier works.

Third, we practiced reflexive synthesis. This involved continually examining how the theoretical paradigm, literature, and Indonesian empirical studies informed each other.

3. Findings and Results

3.1. Comparative Analysis of Paradigm Foundations

Understanding the possibilities for transcending paradigmatic tensions requires first understanding the foundational differences between positivism and interpretivism. This section provides a comparative analysis of their ontological, epistemological, and methodological commitments, with particular attention to implications for educational research.

3.1.1. Positivism: The Empirical Science Model

Positivism, as a philosophical tradition, traces its origins to Auguste Comte's early nineteenth-century formulation of a "positive philosophy" that would extend scientific methods to the study of society.¹⁰ For Comte, human knowledge progressed through theological, metaphysical, and finally positive (scientific) stages, with the latter characterized by empirical observation and logical analysis of unchanging laws governing phenomena.¹¹ This tradition was further developed by logical positivists of the Vienna Circle in the early twentieth century, who emphasized verification through sensory experience and the unity of scientific method across natural and social sciences.¹²

Ontologically, positivism adopts a realist stance. Positivists believe that reality exists independently of human perception and cognition. There is a single, objective reality out there waiting to be discovered through systematic inquiry.¹³ This reality is orderly and governed by cause-and-effect relationships that can be identified through careful observation. In educational research, this translates to assumptions that phenomena like student achievement, teacher effectiveness, or school quality are objectively real attributes that can be measured with appropriate instruments.

Positivism is objectivist and empiricist epistemologically. Knowledge is gained through sensory experience and logical reasoning, with the ideal researcher maintaining value

⁹ Egon G. Guba and Yvonna S. Lincoln, "Competing Paradigms in Qualitative Research," in *Handbook of Qualitative Research*, ed. Norman K. Denzin and Yvonna S. Lincoln (Sage Publications Inc., 1994), 105-117.

¹⁰ Michel Bourdeau, "Auguste Comte," in *The Stanford Encyclopedia of Philosophy*, Spring 2023, ed. Edward N. Zalta and Uri Nodelman (Metaphysics Research Lab, Stanford University, 2023), <https://plato.stanford.edu/archives/spr2026/entries/comte/>.

¹¹ Bourdeau, "Auguste Comte."

¹² Rudolf Carnap, *The Logical Structure of the World: Pseudoproblems in Philosophy*, trans. R. George (Open Court Classics, 2003).

¹³ Roy Bhaskar, *A Realist Theory of Science* (Verso, 2008), 15-35.

neutrality and emotional detachment from the subject of study.¹⁴ The researcher's role is that of a dispassionate observer who applies rigorous methods to uncover facts about the world. Truth claims must be empirically verifiable (or falsifiable, in Popper's formulation) and replicable by other researchers using the same methods.¹⁵ Methodologically, positivism privileges quantitative approaches, including surveys, experiments, standardized assessments, and statistical analysis of large datasets. These methods are valued for their precision, reliability, and capacity for generalization. Research designs typically follow a linear sequence: hypothesis formulation, operationalization of variables, data collection, analysis, and conclusion. Quality is judged by criteria such as validity (are we measuring what we intend?), reliability (would we get the same results repeatedly?), and generalizability (do the findings apply beyond the specific study context?).¹⁶

The strengths of positivism in educational research are evident. It provides tools for identifying broad patterns, comparing groups, assessing intervention effectiveness, and generating data that can inform policy decisions at scale. In Indonesia, where educational disparities between regions and groups are substantial, positivist approaches can help map these inequalities systematically. However positivism faces limitations when confronting the complexity and diversity of Indonesian educational realities, as we will explore later.

3.1.2. Interpretivism: The Meaning Centered Alternative

Interpretivism emerged as a critical response to positivism's perceived inadequacies for studying human social life. Its philosophical roots extend to Wilhelm Dilthey's distinction between *Naturwissenschaften* (natural sciences) and *Geisteswissenschaften* (human sciences), with the latter requiring *Verstehen* (understanding) rather than mere *Erklären* (explanation).¹⁷ Max Weber further developed this approach, arguing that social science must account for the subjective meanings that individuals attach to their actions.¹⁸ The tradition was enriched by phenomenology (emphasizing lived experience), hermeneutics (emphasizing interpretation of texts and actions), and symbolic interactionism (emphasizing meaning-making through social interaction).¹⁹

Ontologically, interpretivism adopts a relativist or constructionist stance. Rather than a single objective reality, there are multiple and socially constructed realities that emerge through human interaction and meaning-making.²⁰ Reality is not discovered but constituted through language, culture, history, and subjective experience. In educational research, this means that phenomena like learning or educational quality are understood as culturally and historically contingent constructs that vary across contexts.

¹⁴ Karl Popper, *The Logic of Scientific Discovery* (Routledge, 2002), 27-48.

¹⁵ Popper, *The Logic of Scientific Discovery*, 32-39.

¹⁶ Sidney Gavel, *Ensuring Your Quantitative Research Is Replicable and Reproducible* (Sage 2025), <https://methods.sagepub.com/how-to-guide/ensuring-your-quantitative-research-replicable-reproducible>.

¹⁷ Wilhelm Dilthey, "Introduction to the Human Sciences.," trans. Michael Neville, *Wilhelm Dilthey: Selected Works* (Princeton), 1989, 249-294.

¹⁸ Sung Ho Kim, "Max Weber," in *The Stanford Encyclopedia of Philosophy*, Winter 2024, ed. Edward N. Zalta and Uri Nodelman (Metaphysics Research Lab, Stanford University, 2024), <https://plato.stanford.edu/archives/win2024/entries/weber/>.

¹⁹ Edmund Husserl, *Ideas: General Introduction to Pure Phenomenology*, trans. Dermot Gibson (Routledge, 2012), <https://doi.org/10.4324/9781315823577>.

²⁰ Guba and Lincoln, "Competing Paradigms in Qualitative Research," 105-117.

Interpretivism is subjective and interpretive epistemologically. Knowledge is situated, contextual, and co-constructed between researcher. The researcher cannot be a detached observer but is necessarily engaged with the research participants and context.²¹ Understanding requires empathy, dialogue, and reflexivity. This means conscious examination of how the researcher's own background and assumptions shape the research process and findings. Truth claims are judged by criteria such as credibility, transferability, dependability, and confirmability.²²

Methodologically, interpretivism privileges qualitative approaches such as ethnography, phenomenology, case study, narrative inquiry, and participatory action research. These methods emphasize depth over breadth, context over control, and meaning over measurement. Research designs are typically emergent and iterative rather than predetermined, with data collection and analysis often occurring simultaneously. Quality is judged by the richness of understanding produced, the ethical integrity of the research process, and the resonance of findings with those who experience the phenomena studied.²³

The strengths of interpretivism in educational research are particularly valuable in culturally diverse settings like Indonesia. It provides tools for understanding how educational processes are experienced differently across cultural groups, how local knowledge systems interact with formal schooling, and how power relations shape educational opportunities. However, interpretivism also faces challenges, particularly regarding scalability and policy relevance in a nation as large and administratively complex as Indonesia.

3.1.3. Paradigm Differences in Summary

Table 1: Comparison of Positivist and Interpretivist Paradigms²⁴

Aspect	Positivism	Interpretivism
Ontology	Realist: Single, objective reality	Relativist: Multiple, socially constructed realities
Epistemology	Objectivist: Knowledge through detached observation	Subjectivist: Knowledge through engaged interpretation
Methodology	Quantitative: Experiments, surveys, statistical analysis	Qualitative: Ethnography, interviews, narrative analysis

²¹ Norman K. Denzin and Yvonna S. Lincoln, "Introduction: The Discipline and Practice of Qualitative Research," in *The SAGE Handbook of Qualitative Research*, eds. Norman K. Denzin and Yvonna S. Lincoln (SAGE Publications, Inc, 2018), 6-11.

²² Guba and Lincoln, "Competing Paradigms in Qualitative Research," 110-115.

²³ Uwe Flick, "An Introduction to Qualitative Research," SAGE Publications Inc, 2018, 45-74.

²⁴ Compiled from Deborah Court, *A Brief History of Knowledge for Social Science Researchers: Before Method.*, First edition (Routledge, 2020); Guba and Lincoln, "Competing Paradigms in Qualitative Research"; John W. Creswell, *A Concise Introduction to Mixed Methods Research*, Second Edition edition. (SAGE, 2015).

Researcher Role	Detached observer	Engaged interpreter
Validity Criteria	Internal/external validity, reliability	Trustworthiness, credibility, transferability, dependability
Goal	Explanation, prediction, control	Understanding, meaning, contextual insight
Typical Research Questions	What are the effects of X on Y? What factors predict Z?	How do people experience X? What meanings do people give to Y?

These paradigmatic differences are not just academic distinctions. They have implications for how educational research is conceived, conducted, and utilized in Indonesia. The following sections explore these implications through concrete examples from the Indonesian context.

3.2. Paradigms in Practice: Indonesian Case Studies

This section examines three Indonesian case studies representing positivist, interpretivist, and mixed methods approaches. Each case shows both the strengths and limitations of the paradigm in addressing Indonesia's educational challenges.

3.2.1. Case Study 1: Positivist National Assessment Research

An example of positivist educational research in Indonesia is the series of studies analyzing national assessment data to identify correlates of student achievement. Suryadarma et al. 2006 study, "Improving Student Performance in Public Primary Schools in Developing Countries: Evidence from Indonesia," exemplifies this approach.²⁵ Using data from the school surveys conducted by SMERU Research Institute, the researchers employed multivariate regression analysis to examine how family characteristics, school resources, and teacher qualifications relate to student test scores.

The study found that household consumption expenses (a proxy for economic status) and community poverty levels were strong predictors of student performance, while teacher certification showed mixed effects. These findings provided quantitative evidence supporting policy attention to poverty reduction and equitable resource allocation. The positivist approach enabled broad generalizations about patterns across Indonesia's diverse regions. It offered policymakers an evidence-based guidance.

However, a closer examination reveals limitations characteristic of positivist research in complex contexts. First, the study relied on standardized test scores as the sole measure of student performance. It inevitably simplified the multidimensional nature of learning. Second, the quantitative measures captured what was easily measurable (income, teacher credentials, physical facilities) but missed crucial qualitative dimensions. These include how poverty specifically affects educational participation in different cultural settings, how teacher-student relationships vary across ethnic groups, or how local values shape educational

²⁵ Suryadarma et al., "Improving Student Performance in Public Primary Schools in Developing Countries."

aspirations.²⁶ Moreover, the analysis treated Indonesia's regions as essentially comparable units, potentially masking how the same factor (such as teacher certification) might operate differently in eastern Indonesia highlands versus Javanese urban centers. This case shows the positivist trade-off: broad generalizability at the expense of contextual nuance. The research provides valuable macro-level insights but offers limited guidance for addressing the culturally specific manifestations of educational inequality.

3.2.2. Case Study 2: Interpretivist Ethnographic Research

In contrast to broad-scale positivist studies, interpretivist research in Indonesia often focuses deeply on specific cultural contexts. A compelling example is Satriyo, Sampurna, and Rusmawati's 2025 ethnographic study.²⁷ Through eight participant observation and interviews at a Javanese-dominated university, the researchers explored how a Papuan student negotiated linguistic identity amid complex power dynamics.

The study revealed how unspoken language hierarchies created exclusionary dynamics that formal policies failed to address. The Papuan student developed complex code-switching strategies, adopting Indonesian for academic legitimacy while using Papuan languages selectively to maintain cultural identity in private spaces. The research illuminated intersectional stigma, where linguistic marginalization compounded ethnic and cultural discrimination in everyday university life. The strengths of this interpretivist approach are evident in its capacity to uncover hidden power structures and subjective experiences that large-scale surveys would miss. The research provides insight into how educational inequity is lived and navigated at the individual level. It could inform more culturally responsive campus policies.

However, the approach also faces limitations regarding broader relevance. As a single case study, its findings cannot be statistically generalized to other Papuan students, let alone other minority groups in Indonesia. Policymakers might question whether such intensive, context-bound research justifies the resources required or offers actionable insights beyond its specific setting. Additionally, the very depth of interpretation raises questions about the researcher's subjectivity. Specifically, it raises questions about how the researchers' own positions as Javanese academics might have shaped their understanding of Papuan experience.²⁸ This case illustrates the interpretivist trade-off: rich contextual understanding at the expense of broad applicability. The research illuminates specific realities with remarkable depth but struggles to inform nationwide policy directly.

3.2.3. Case Study 3: Mixed Methods Policy Evaluation Research

A growing number of Indonesian educational studies attempt to bridge these paradigmatic approaches through mixed-methods designs. Wijaya and Rizal's 2023 study provides an example of how mixed methods can illuminate complex sociolinguistic phenomena with direct implications for multicultural education.²⁹ The research employed a

²⁶ James A. Banks and Cherry A. Banks, *Multicultural Education: Issues and Perspectives*, Tenth ed. (Wiley, 2020), 15–19.

²⁷ Satriyo et al., "Languages of Power and Belongings."

²⁸ Sandra G. Harding, *Whose Science? Whose Knowledge?: Thinking from Women's Lives*, 1st ed. (Cornell University Press, 1991).

²⁹ Ayudhia Ratna Wijaya and Cesar Abdul Rizal, "Social Discrimination: A Case Study of Social Subordination to Eastern Vernacular Indonesian Speakers," *Prasasti: Journal of Linguistics* 8, no. 1 (2023): 1–16, <https://doi.org/10.20961/prasasti.v8i1.59278>.

qualitative-quantitative method to investigate the correlation between Bahasa Indonesia's vernacular variation and social discrimination experienced by Eastern Indonesians. The article claimed a mixed-methods design based on a single questionnaire that appears to contain both closed and narrative items. The study revealed the psychological impact of this linguistic discrimination: respondents felt ashamed of their vernacular language identity and reported actively attempting to imitate dominant accents, particularly Javanese or Jakartan.

This mixed-methods approach achieved what neither paradigm could accomplish alone. The positivist side offered the broad evidence base that policymakers usually want, while the interpretivist side clarified the processes and meanings behind the numbers. The research offered both generalizable patterns and contextual understanding.

However, even this mixed-methods study illustrates remaining challenges. The integration remained somewhat sequential rather than fully iterative. Qualitative findings enriched the interpretation of quantitative results but did not fundamentally reshape the research questions or design. Additionally, the study focuses primarily on documenting discrimination rather than exploring intervention strategies or educational solution. This highlights how mixed-methods research, while promising, does not automatically overcome all paradigmatic limitations. Conscious attention to design, integration, and inclusivity remains essential.

3.3. Critical Analysis: Paradigm Limitations in the Indonesian Context

This section provides critiques of these limitations to identify specific challenges that arise from uncritical application of either paradigm.

3.3.1. Critiques of Positivism in Indonesian Educational Research

Positivism's emphasis on objectivity, measurement, and generalization creates several problematic tendencies in the Indonesian context. Firstly, positivism tends toward methodological reductionism. In seeking quantifiable measures of complex educational phenomena, positivist research often reduces multidimensional realities to simplified indicators. Student learning becomes test scores, educational quality becomes facility counts, and teacher effectiveness becomes certification status. This reductionism is particularly problematic in Indonesia, where cultural conceptions of knowledge, intelligence, and education vary significantly across ethnic groups.³⁰ What counts as 'learning' in a Javanese *pesantren* may differ substantially from what counts as 'learning' in a Balinese dance academy or a Papuan community-based literacy program. Positivist research that imposes standardized measures across these diverse contexts risks misrepresenting local realities and devaluing indigenous knowledge systems.

Secondly, positivism often ignores contextual connection. For example, a positivist study might examine the relationship between parental education and student achievement across Indonesia, statistically controlling for region. However, this approach misses how the meaning and mechanism of this relationship differ profoundly. In some communities, educated parents may provide direct academic support. In others, they may leverage social networks for better teachers. In still others, they might signal broader community values toward schooling that operate through different pathways.³¹ By controlling for region statistically, the analysis treats local differences as a problem to remove instead of something

³⁰ Smith, *Decolonizing Methodologies*.

³¹ Banks and Banks, *Multicultural Education: Issues and Perspectives*, 249-251.

worth studying. A positivist design may fail to account for how educational processes are embedded in specific cultural, historical, and social systems. Moreover, positivist research focuses on fixed variables and controlled settings, which makes it less able to capture new, evolving, and complex dynamics..³²

3.3.2. Critiques of Interpretivism in Indonesian Educational Research

Interpretivism, while addressing some positivist limitations, faces its own challenges in the Indonesian context. First, interpretivism's particularism limits broader relevance. The deep focus on specific contexts that gives interpretivist research its strength also creates challenges for application across Indonesia's vast and varied landscape. Policymakers responsible for national systems understandably seek evidence that travels beyond single cases. When interpretivist studies present rich descriptions of, for example, multicultural education in a school in Sulawesi, policymakers may struggle to discern what insights apply to other regions with different ethnic configurations, historical relations, and institutional arrangements..³³

Moreover, interpretivism faces challenges of researcher positionality and representation. In a nation marked by significant regional, ethnic, and class differences, the interpretivist commitment to deep engagement raises difficult questions about who can legitimately represent whose experiences. When Javanese researchers study Papuan communities, or urban academics study rural groups, challenges around cultural understanding, power imbalances, and genuine representation become especially sharp..³⁴ While reflexivity helps address these issues, it cannot fully resolve the epistemological challenges of power dynamics in a nation with Indonesia's historical inequalities.

Furthermore, interpretivism can underemphasize structural analysis. An interpretivist study might beautifully capture how individual students experience discrimination in a multicultural classroom but pay less attention to how those experiences connect to national policies on language, curriculum, or teacher distribution that systematically advantage certain groups..³⁵ Without connecting micro-level experiences to macro-level structures, interpretivist research risks offering insights that are emotionally compelling but limited in their capacity to inform systemic change.

3.3.3. The False Dichotomy and Its Consequences

Beyond the limitations of each paradigm individually, the dichotomous framing of positivism versus interpretivism creates additional problems for Indonesian educational research. Researchers identifying strongly with one paradigm and viewing the other with suspicion or disdain. This could cause researchers to split into competing methodological groups. It limits intellectual exchange and methodological innovation, as researchers within each camp reinforce shared assumptions rather than engaging constructively with alternative perspectives. A fragmented knowledge base might also emerge, where positivist studies

³² Mertens, *Research and Evaluation in Education and Psychology*.

³³ Otniel Aurelius Nole and Mariska Lauterboom, "Potensi Pendidikan Interreligius Meminimalkan Hate Speech Di Media Sosial," *Panangkaran: Jurnal Penelitian Agama Dan Masyarakat* 8, no. 1 (2024): 125–46, <https://doi.org/https://doi.org/10.14421/panangkaran.v8i1.3786>.

³⁴ Bell Hooks, *Teaching to Transgress: Education as the Practice of Freedom*, 1st ed. (Routledge, 1994), <https://doi.org/10.4324/9780203700280>.

³⁵ Flick, *An Introduction to Qualitative Research*, 291-373.

provide broad patterns but little depth and interpretivist studies provide depth but little breadth.

Research capacity development also might become imbalanced. If academic training and funding opportunities favor one paradigm over the other, new generations of researchers develop expertise in limited methodological repertoires. In Indonesia, where positivist approaches have historically dominated educational research funded by government and international agencies, many researchers lack training in rigorous qualitative methods. Meanwhile, those specializing in interpretivist approaches may struggle with basic quantitative literacy.³⁶

Most critically, the dichotomy limits research's capacity to address Indonesia's most pressing educational challenges. Issues like fair quality improvement, culturally responsive teaching, and effective decentralization require understanding both big patterns and local meanings, both system-level structures and everyday experiences. When research stays locked inside one paradigm, it can only offer a partial view of these complex problems.

3.4. Toward Context-Sensitive Mixed Methods Praxis in Indonesia

This section develops a framework for what we term "context-sensitive mixed-methods praxis." This approach goes over technical mixing of quantitative and qualitative methods to encompass philosophical reflexivity, ethical engagement, methodological flexibility, and commitment to research that serves Indonesian educational transformation.

3.4.1. Philosophical Foundations: Critical Realism as a Bridging Paradigm

While various philosophical positions can inform mixed-methods research, we suggest that critical realism offers particularly productive foundations for Indonesian educational inquiry. Developed by Roy Bhaskar and others, critical realism distinguishes between the real (structures and mechanisms that exist whether perceived or not), the actual (events that occur), and the empirical (events as experienced and observed).³⁷

For educational research in Indonesia, critical realism offers clear advantages. It accepts that a real world exists independently of us, while also recognizing that our understanding of it is always partial. It encourages researchers to study both visible patterns and the deeper mechanisms that produce them. This helps link statistical gaps in educational outcomes to the cultural, economic, and political forces behind them. It also supports using multiple methods while keeping a coherent view of reality, allowing researchers to combine insights from data, lived experiences, and structural analysis.³⁸ Critical realism's focus on explaining underlying mechanisms rather than only predicting or describing events fits Indonesian educational research, which needs to show not just what is happening but why, so meaningful action can follow.

3.4.2. Principles of Context-Sensitive Mixed-Methods Praxis

Building on critical realist foundations, we propose four principles for context-sensitive mixed-methods praxis in Indonesian educational research.

³⁶ Creswell and Creswell, *Research Design*.

³⁷ Bhaskar, *A Realist Theory of Science*, ix-xxiv.

³⁸ Bhaskar, *A Realist Theory of Science*, 14-26.

Principle 1: Paradigmatic Reflexivity. Researchers should consciously examine and articulate their paradigmatic assumptions throughout the research process. This involves asking: What assumptions about reality and knowledge inform my research questions? How do my methods reflect these assumptions? How might alternative assumptions lead to different approaches? Rather than claiming paradigm neutrality, researchers should practice transparent positioning, acknowledging how their philosophical commitments shape their work.³⁹ In the Indonesian context, this reflexivity should include examining how researchers' own cultural backgrounds, institutional or political positions, and relationships with participants shape their choice of research paradigm.

Principle 2: Ethical Engagement with Power Relations. Research design should proactively address power imbalances. These include power dynamics between researcher and researched, between dominant and minority groups, and between central and peripheral regions.⁴⁰ In Indonesia's diverse and historically stratified society, such ethical engagement is not an optional addition but a fundamental requirement for credible and just research.

Principle 3: Methodological Flexibility and Cultural Validity. Rather than applying standardized methods rigidly, researchers should adapt approaches to fit local contexts while maintaining rigor.⁴¹ The goal is not to reject international methodological standards but to ensure those standards serve rather than distort Indonesian realities.

Principle 4: Transformative Purpose and Usefulness. Research should be judged not only by traditional academic criteria but by its contribution to educational improvement in Indonesia. This may involve connecting research questions to pressing educational challenges and designing studies to produce actionable insights for multiple stakeholders (policymakers, practitioners, communities). This may also involve disseminating findings in accessible formats beyond academic journals.⁴² In a nation with substantial educational needs and limited research resources, usefulness cannot be an afterthought.

3.4.3. Examples of Context-Sensitive Praxis

While fully realized examples remain relatively rare in Indonesian educational research, two emerging studies demonstrate the power of context-sensitive mixed-methods praxis. Fathurrochman et al. (2025) examined local wisdom integration in elementary schools across three cultural contexts: Hindu-Balinese in Bali, Javanese in Yogyakarta, and Torajan in South Sulawesi.⁴³ Using an explanatory sequential design, the researchers first conducted qualitative inquiry with 78 participants, identifying three integration models: direct, parallel, and complementary integration. Building on these findings, they assessed 360 students using pre-post tests, engagement scales, and cultural identity surveys. Quantitative results demonstrated significant improvements in cultural understanding, engagement, and identity.

³⁹ Julio Lopez-Alvarado, "Educational Research: Educational Purposes, The Nature of Knowledge and Ethical Issues," sec. 3, *International Journal of Research and Education* 2, no. 1 (2017): 3, <https://doi.org/10.19239/ijrev2n1p1>.

⁴⁰ Paulo Freire, *Pedagogy of the Oppressed*, Thirtieth anniversary edition., trans. Myra Bergman Ramos (Continuum, 2005), 87-124.

⁴¹ John W. Creswell, *A Concise Introduction to Mixed Methods Research*, Second Edition edition. (SAGE, 2022), 56-86.

⁴² Mertens, *Research and Evaluation in Education and Psychology*, 25-38.

⁴³ Irwan Fathurrochman et al., "Integration of Local Wisdom in Elementary School Local Content Curriculum: A Study in Rural Areas of Indonesia," *The Curriculum Journal*, 00, (2025), 1-29, <https://doi.org/10.1002/curj.70029>.

Crucially, qualitative data explained how these improvements occurred: Balinese students responded through ritual and performance, Javanese through reflective narrative and etiquette practices, and Torajan through oral storytelling. The study's adaptation of instruments to each context and collaborative approach with local educators exemplify context-sensitive praxis.

Another study by Laras et al. (2025) evaluated Indonesia's national school feeding program (ProGAS) across four provinces using a concurrent mixed-methods design.⁴⁴ Quantitative data from 454 students across 24 schools showed significant improvements in dietary diversity, meal frequency, and nutrition knowledge. Simultaneous qualitative interviews with principals, teachers, parents, and district officials revealed critical implementation gaps: inconsistencies in nutrition education delivery, varying teacher commitment, and monitoring challenges. Particularly important is the study's ethical transparency: researchers disclosed their involvement in program design and explained how they maintained rigor through external audit. This reflexivity, combined with multi-stakeholder engagement across diverse provincial contexts, demonstrates the ethical dimensions of context-sensitive praxis.

Both studies share defining characteristics: paradigmatic reflexivity in adapting designs to Indonesian realities, ethical engagement with power relations through multi-stakeholder participation, methodological flexibility in developing culturally appropriate instruments, and transformative utility in producing findings that directly inform educational improvement. These examples illustrate how moving beyond mechanical method mixing toward context-sensitive praxis can generate research that is simultaneously methodical, responsive, and transformative.

3.5. Critical Reflections: Power, Ethics, and Researcher Positionality

Implementing context-sensitive mixed-methods praxis requires confronting difficult questions about power, ethics, and researcher positionality in the Indonesian context. This section explores these issues, drawing on critical, postcolonial, and decolonial perspectives relevant to Indonesia's historical and contemporary circumstances.

3.5.1. Research as a Site of Power Relations

Educational research in Indonesia, like all knowledge production, occurs within fields of power. Epistemic power concerns whose knowledge counts as valid. Historically, Indonesian educational research has been shaped by colonial knowledge systems that positioned Western science as superior to indigenous knowledge. It has also been shaped by post-independence modernization paradigms that valorized technical expertise over local wisdom.⁴⁵ These legacies continue to influence which research questions are asked, which methods are valued, and whose perspectives are centered. Context-sensitive praxis requires conscious effort to decenter these inherited hierarchies and create space for multiple knowledge traditions.

Closely related to epistemic power is institutional power, which structures research opportunities through funding agencies, academic institutions, and publication venues. In Indonesia, ministries and major development partners have increasingly prioritized research that produces standardized, quantitative indicators for monitoring and evaluation, particularly

⁴⁴ Pramesti Indriya Laras et al., "Evaluating the Impact of Indonesia's National School Feeding Program (ProGAS) on Children's Nutrition and Learning Environment: A Mixed-Methods Approach," *Nutrients* (Basel, Switzerland) 17, no. 22 (2025): 3575, <https://doi.org/10.3390/nu17223575>.

⁴⁵ Said, *Orientalism*, 201-328.

in education and social policy sectors.⁴⁶ Researchers seeking to practice context-sensitive mixed methods must navigate these constraints while advocating for more inclusive evaluation criteria.

These institutional dynamics intersect with representational power, which involves questions of who speaks for whom in research. In a nation with significant ethnic, religious, and class diversity, researchers from dominant groups (Javanese, Muslim, urban, middle class) studying marginalized communities face ethical challenges regarding voice, interpretation, and benefit.⁴⁷ Even with the best intentions, research can inadvertently reinforce stereotypes, extract knowledge without reciprocity, or misinterpret cultural practices through dominant cultural lenses. Representational power also involves language. Using only Indonesian can miss local nuances, while publishing in English can limit access for Indonesian educators and policymakers.⁴⁸

Together, these four forms of power shape the landscape that Indonesian educational research must navigate. Recognizing them is not abstract theory but a practical step toward producing knowledge that is both strong and fair.

3.5.2. Ethical Imperatives for Indonesian Educational Research

Given these power dynamics, context-sensitive mixed-methods work needs strong ethical grounding. Relational ethics reminds us that ethics is not only about procedures like consent and confidentiality but also about the quality of relationships between researchers and communities.⁴⁹ In Indonesia's communal cultures, researchers should emphasize reciprocity, respect, and long-term commitment rather than extractive data collection. This can include supporting community priorities, sharing findings in accessible ways, and maintaining relationships after the study ends.

Apart from that, Participatory ethics challenges traditional hierarchies by involving communities as partners in designing, carrying out, and interpreting research, which fits well with Indonesian traditions like *musyawarah* and *gotong royong*.⁵⁰ Practical steps include community advisory groups, participatory analysis, and co-authorship when appropriate. Justice-oriented ethics adds that research should address inequities, not just describe them, by centering marginalized voices, identifying pathways toward greater equity, and using findings to push for policy and practice change.⁵¹ In Indonesia's unequal education system, this means valuing the knowledge of indigenous communities, teachers, students, and families, and using methods that can capture and elevate these diverse ways of knowing.⁵²

3.5.3. Researcher Positionality and Reflexivity

Navigating these ethical imperatives requires ongoing critical reflexivity about researcher's positionality. In the Indonesian context, researchers should examine geographical and cultural positioning: Where am I from in Indonesia's diverse landscape? How does my

⁴⁶ Suharti, "Trends in Education in Indonesia," 15-52.

⁴⁷ Hooks, *Teaching to Transgress*, 89-102.

⁴⁸ Smith, *Decolonizing Methodologies*, 143-156.

⁴⁹ Denzin and Lincoln, *The SAGE Handbook of Qualitative Research*, 73-84.

⁵⁰ Freire, *Pedagogy of the Oppressed*, 75-91.

⁵¹ Mills, *The Racial Contract*, 95-107.

⁵² Sandra G. Harding, *Whose Science? Whose Knowledge?: Thining from Women's Lives*, 1st ed., (Cornell University Press, 1991).

regional or ethnic background shape what I notice and value in educational settings? How might my cultural assumptions differ from those I study?⁵³ For institutional positioning, researchers may ask what institution do I represent, and what power does that institution hold in relation to research participants? How does my disciplinary training predispose me toward certain methodological approaches? What resources and constraints does my institutional affiliation create?⁵⁴

Personal positioning also important to be addressed. In this area, researchers should reflect what my own educational experiences and biases? How do my religious, gender, class, and generational identities influence my research? What personal motivations drive my work, and how might these affect my interpretations?⁵⁵ How do my political commitments shape my research questions and interpretations? How do I navigate the tension between academic objectivity and social engagement?⁵⁶

Rather than seeking to eliminate these positionalities, which is an impossible task, researchers should practice transparency about them and consider how they might be leveraged productively. For example, a researcher from a dominant group studying marginalized communities might need to work particularly hard to decenter their perspective and build authentic partnerships.⁵⁷

4. Conclusion

This paper has argued that Indonesian educational research faces a fundamental challenge: how to produce knowledge that is both scientifically rigorous and genuinely responsive to the nation's remarkable diversity. The traditional paradigmatic dichotomy between positivism and interpretivism has proven inadequate for this task. It may cause to research that is either context blind or context-bound. Through analysis of paradigm foundations, Indonesian case studies, and critical reflection on power and ethics, we have suggested a framework for context-sensitive mixed-methods praxis that seeks to transcend this false dichotomy.

This framework has practical implications for researchers, institutions, international partners, and local communities. Indonesia's educational challenges are as complex as its cultural diversity, and these stakeholder implications show that research must move between general patterns and local experiences, between standardized measures and contextual meanings, and between scientific rigor and ethical responsibility. The context-sensitive mixed-methods approach proposed here offers one way forward. It does not offer easy shortcuts; it requires more reflexivity, more complex designs, and deeper ethical engagement. Yet the potential benefits are significant: research that better reflects Indonesian educational realities, more effectively informs policy and practice, and more fairly serves Indonesia's diverse communities.

As Indonesian educational research continues to develop, embracing this complexity rather than retreating to paradigmatic simplicity may be its greatest contribution. This contribution extends not only to Indonesia's educational improvement but also to global

⁵³ Schwandt, *The Sage Dictionary of Qualitative Inquiry*.

⁵⁴ Lopez-Alvarado, "Educational Research," 3-4.

⁵⁵ Hooks, *Teaching to Transgress*, 177-189.

⁵⁶ Hooks, *Teaching to Transgress*, 35-58.

⁵⁷ Hooks, *Teaching to Transgress*.

conversations about how research can serve diverse societies in the twenty-first century. By moving past false divides and using context-sensitive approaches, Indonesian educational researchers can build a distinctive tradition of inquiry that meets scientific standards while honoring the richness of Indonesian uniqueness.

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