

# Construction and Validation of the PAUD Anti-Bias Observation Scales (*PABOS*) for Measuring Anti-Bias Competencies in Children Aged 4-6 Years: A Qualitative Study

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## ABSTRACT

**Background:** Implementation of anti-bias education in early childhood education faces fundamental challenges in assessing children's anti-bias attitudes due to the absence of contextually appropriate and developmentally sensitive observation instruments in Indonesian contexts. This qualitative study aimed to develop and explore the implementation of an authentic observation-based assessment toolkit (*PABOS*) for documenting anti-bias attitudes in children aged 4-6 years through four dimensions: Positive Identity, Comfort with Diversity, Justice Awareness, and Activism Readiness. This qualitative study employed a constructivist grounded theory approach with iterative data collection over 8 months. Participants included 24 early childhood educators and 32 children aged 4-6 years from 6 ECE centers in Central Bengkulu. Data were collected through participatory observations, in-depth interviews, focus group discussions, Learning Stories documentation, and reflective journals. Analysis used constant comparative method and thematic analysis. Five major themes emerged: (1) Seeing What Was Invisible, educators discovered subtle manifestations of anti-bias attitudes previously unnoticed; (2) From Intuition to

Documentation, transformation from gut-feeling assessments to systematic observation; (3) Identity as Rootedness and Openness, children's positive identity involves pride in cultural roots while embracing diversity; (4) Small Moments, Big Meanings, anti-bias attitudes develop through accumulated micro-interactions; and (5) Children as Agents of Justice, young children's capacity for recognizing and responding to unfairness. The study revealed that authentic observation within culturally-embedded activities provides richer, more nuanced understanding of children's anti-bias development compared to decontextualized assessment methods. *PABOS* represents a culturally-responsive assessment approach that transforms educator practice by making children's anti-bias learning visible, supporting reflection, and facilitating evidence-based dialogue with families. This study contributes to understanding how documented pedagogy can be meaningfully adapted for assessing social-emotional competencies in diverse Indonesian early childhood contexts.

**Keywords:** authentic assessment, anti-bias education, documented pedagogy, early childhood observation, psychometric validation

## INTRODUCTION

Anti-bias education has emerged as a critical agenda in Early Childhood Education (ECE) for building inclusive and equitable generations (Derman-Sparks et al., 2020). The early years represent a critical period when children form foundational understandings about themselves and others within contexts of diversity (Doucet & Adair, 2020). Research demonstrates that implicit bias begins forming remarkably early, with 3-month-old infants already showing preferences for same-race faces (Bar-Haim et al., 2006;), and 6-year-old children demonstrating implicit bias comparable to adults (Baron & Banaji, 2006).

In Indonesia, anti-bias education implementation shows promising results with various intervention models developed (Putra et al., 2024). However, program success faces a fundamental challenge: the absence of assessment approaches capable of capturing the complexity and nuances of anti-bias attitude development in young children within Indonesia's diverse socio-cultural contexts.

Preliminary research in Karang Tinggi District, Central Bengkulu revealed a concerning paradox. Although the majority of ECE educators (78%) reported implementing anti-bias activities, only a small fraction (12%) could concretely explain how children's attitudes changed and how they documented these changes. In-depth interviews revealed that assessment was intuitive and unsystematic. One educator disclosed:

*"I know Rani is now more open with friends from other ethnic groups, but if you ask me how I know... I just see it, I feel it. But if asked to prove it or explain to parents... it's difficult." (Mrs. S, 8 years teaching experience)*

Researcher observations at several ECE centers indicated that although educators possessed sensitivity to classroom social dynamics, they lacked language or frameworks to systematically articulate their observations.

Systematic analysis of anti-bias education literature from 2015-2024 revealed four critical gaps: *First, dominance of verbally-based instruments inappropriate for developmental stages.* Most research (87%) employed questionnaires or structured interviews problematic for young children due to cognitive limitations and tendencies toward socially desirable responding (Crandall et al., 2013). Baron and Banaji (2006) demonstrated discrepancies between children's explicitly reported attitudes and implicit attitudes expressed in spontaneous behavior. *Second, absence of standardized observation protocols.* Only 8% of studies utilized systematic observation, and even those studies failed to provide replicable observation guidelines (NAEYC, 2020). *Third, instruments lack contextual relevance to Indonesian realities.* Nearly all assessment instruments were developed in Western contexts with vastly different socio-cultural assumptions. Instruments such as the Preschool Racial Attitude Measure (Williams et al., 1975) employ stimuli unfamiliar to Indonesian children. *Fourth, assessment not integrated with pedagogy.* Assessment is often treated as separate from learning, rather than as an organic component of pedagogical processes (Wiggins, 1998).

Based on these gaps, this study aimed to:

1. Develop an authentic observation protocol (*PABOS*) contextually appropriate for Indonesian settings to document anti-bias attitudes in early childhood
2. Explore how educators experience and utilize *PABOS* in daily practice
3. Understand meanings and manifestations of anti-bias attitudes within Indonesian children's everyday lives
4. Investigate how documented pedagogy can be adapted for attitude assessment within Indonesian diversity contexts

### **Conceptual Framework**

Anti-bias education has emerged as a comprehensive pedagogical approach designed to address issues of diversity, equity, and social justice in early childhood settings (Derman-Sparks et al., 2020).

Distinguished from multicultural education, which primarily celebrates diversity, anti-bias education explicitly confronts prejudice, stereotyping, and discrimination while nurturing children's capacity to recognize and challenge unfairness (Doucet & Adair, 2020). Rooted in critical pedagogy and social justice education, this framework positions even young children as active meaning-makers who can understand and respond to issues of fairness and equity. The framework rests on four interrelated developmental goals. The first, identity development and positive self-concept, emphasizes that children form multifaceted social identities from an early age, with research showing that infants demonstrate racial familiarity preferences as early as three months (Bar-Haim et al., 2006;). This goal highlights that a healthy identity is not colorblind but grounded in what Rogers et al. (2021) describe as "rootedness and openness." The second goal, comfort and joy with diversity, focuses on children's empathy, curiosity, and connection across differences, supported by research demonstrating that children naturally notice differences but require intentional exposure to prevent early in-group bias (Bigler & Liben, 2007; Dunham et al., 2008; Cameron et al., 2011). The third goal, critical thinking about bias, aligns with developmental findings that children can recognize unfairness from as early as three years old, though their understanding remains concrete and context-dependent (Shutts et al., 2013; Olson et al., 2012). The fourth goal, anti-bias activism, reflects research indicating that even preschoolers engage in simple forms of advocacy, such as defending peers or questioning unfair rules (Nguyen, 2022). Neuroscience further underscores early childhood as a critical period for anti-bias development due to heightened neural plasticity and sensitivity to social experiences (Knudsen, 2004; Hensch, 2018; Hebb, 1949). Despite growing scholarly attention, anti-bias research remains limited by its heavy reliance on verbal instruments unsuitable for young children, as explicit

verbal attitudes often diverge from children's spontaneous, behaviorally expressed attitudes (Crandall et al., 2013; Baron & Banaji, 2006).

The Reggio Emilia-inspired tradition of documented pedagogy provides a powerful foundation for addressing these limitations by reframing assessment as a pedagogical act rather than a technical procedure. Grounded in social constructivism, documented pedagogy emphasizes making learning visible, engaging in a "pedagogy of listening," and using documentation as a dialogic medium that connects children, educators, families, and communities (Rinaldi, 2006; Vecchi, 2010; Edwards et al., 2012). This approach requires educators to attend not only to children's verbal expressions but also to their gestures, play choices, and social interactions, an essential practice for identifying the subtle and often non-verbal manifestations of bias or anti-bias behaviors. Learning Stories, developed by Carr (2001), operationalize documented pedagogy through narrative assessments that foreground children's competencies and dispositions in context-rich accounts, making them particularly suitable for capturing social-emotional and dispositional learning such as anti-bias attitudes. Although documented pedagogy is well established in cognitive and creative domains, its integration with social justice and anti-bias assessment remains limited, presenting an opportunity to generate more context-embedded, culturally grounded, and developmentally appropriate approaches.

Authentic assessment provides an additional conceptual anchor for anti-bias documentation. Defined by Wiggins (1998) and Mueller (2006), authentic assessment evaluates children's learning through meaningful, real-world performance rather than decontextualized tests. Key principles include performance-based demonstrations, contextualized assessment environments, multimodal evidence, and formative purposes. These principles align closely with developmentally appropriate practice as articulated by NAEYC (2020), which

recommends minimizing verbal demands, prioritizing naturalistic observation, embedding assessment in culturally familiar contexts, and collecting evidence across extended time periods. Cultural responsiveness is a critical dimension of authentic assessment, particularly in Indonesia, where Western-designed tools often fail to capture local values, social practices, and expressions of identity (Rogoff, 2003; Nsamenang, 2008). A culturally responsive approach requires the development of instruments grounded in Indonesian cultural contexts, co-constructed with local educators, and capable of recognizing diverse family structures, ethnic identities, and social realities.

Integrating anti-bias education, documented pedagogy, and authentic assessment generates a synergistic framework that addresses persistent challenges in early childhood assessment. This integrated model resolves the verbal-behavioral gap by prioritizing observation over verbal reporting, ensures developmental appropriateness through narrative-based documentation embedded in natural activities, and enhances cultural responsiveness by using locally meaningful contexts and co-developed tools. Moreover, it bridges the long-standing divide between assessment and pedagogy by positioning documentation as both evaluative and instructional. The resulting conceptual model conceptualizes anti-bias attitudes as developmental competencies emerging through social interaction within specific cultural contexts, manifesting in observable behaviors during everyday activities, and best understood through holistic, narrative documentation rather than isolated, checklist-based measures. Through systematic observation and intentional pedagogy informed by ongoing assessment, children's anti-bias development becomes visible, interpretable, and actionable within early childhood education settings.

## **MATERIALS & METHODS**

This study adopted a constructivist paradigm combined with a grounded theory

approach as articulated by Charmaz (2014). The constructivist paradigm views reality as socially constructed through interaction and shared meaning-making, while grounded theory provides a systematic and iterative process for developing substantive theory emerging directly from field data. This approach was selected due to the absence of existing substantive theory on manifestations of anti-bias attitudes within Indonesian early childhood contexts, the need to understand meanings and processes from the perspectives of educators and children, and the alignment between the iterative nature of grounded theory and the cyclical stages of instrument development.

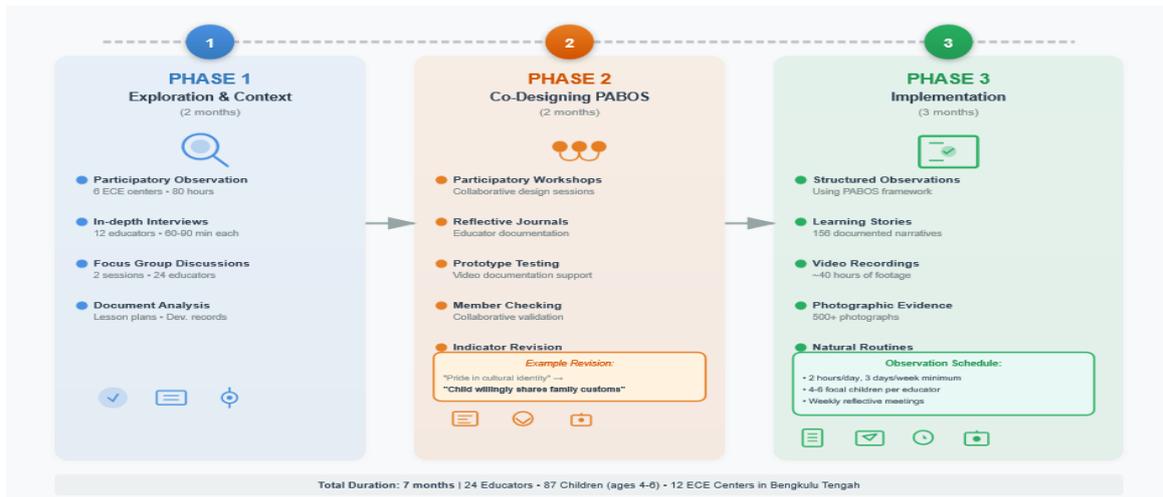
The research was conducted in six early childhood education (ECE) institutions located in Karang Tinggi District, Central Bengkulu, selected purposively to represent contextual diversity. Two sites were situated in Serawai-majority villages, two in Rejang-majority villages, and two in multi-ethnic communities consisting of Serawai, Rejang, Lembak, and Javanese populations. All institutions were located in semi-rural areas characterized by families from lower to middle socioeconomic backgrounds. The primary instructional language was Indonesian, supplemented by local languages depending on classroom needs. Classroom compositions were generally heterogeneous with respect to ethnicity, religion, and socioeconomic status.

The primary participants were 24 ECE educators, all female, aged between 24 and 48 years (median age 34), with 2 to 15 years of teaching experience (median 6 years). Their educational backgrounds varied, comprising eight educators with Diploma or Bachelor's degrees in ECE, ten educators with tertiary degrees in non-ECE fields who had completed ECE training, and six educators with high school education who had also undertaken ECE training. Inclusion criteria required educators to teach children aged 4–6 years, commit to eight months of participation, and communicate effectively in Indonesian.

Children served as contextual subjects for observation, with a total of 32 participants aged 4–6 years selected purposively as focal children for Learning Stories. The group reflected diversity in ethnicity, gender, religion, and socioeconomic status. Supporting informants included seven parents for triangulating developmental

insights, three ECE experts for conceptual validation, and one local cultural figure to provide contextual grounding in local wisdom.

Data were collected iteratively over an eight-month period (May–December 2024) across four phases.



Phase 1: Exploration and Contextual Understanding (2 months) involved participatory observation in six ECE centers (80 hours), in-depth interviews with 12 educators (60–90 minutes each), two focus group discussions with all 24 educators, and document analysis of lesson plans and child development records. Guiding questions explored educators’ understanding of anti-bias attitudes, their recognition of inclusive behaviors, experiences observing bias or anti-bias behaviors in children, and challenges in documenting such observations.

Phase 2: Co-Designing the *PABOS* Instrument (2 months) consisted of participatory workshops, reflective educator journals, prototype testing supported by video documentation, and member checking. During this phase, researchers introduced an initial draft of *PABOS* derived from literature and Phase 1 findings. Educators provided feedback regarding relevance, clarity of language, and feasibility of implementation. Indicators and rubrics were collaboratively revised, adapted to local contexts, and supplemented

with concrete behavioral examples. Observation guidelines and documentation templates were also developed. For instance, an initial indicator, “Child demonstrates pride in cultural identity”, was critiqued as overly abstract and revised into more observable behaviors such as “Child willingly shares family customs” or “Child enjoys wearing traditional clothing.”

Phase 3: Implementation and Documentation (3 months) involved structured observations using *PABOS*, resulting in 156 Learning Stories, approximately 40 hours of video recordings, and more than 500 photographs documenting children’s activities. Observations were conducted during natural daily routines, including play, meals, and transitions, for a minimum of two hours per day, three days per week. Each educator observed 4–6 focal children using the *PABOS* framework consisting of four dimensions and 32 indicators. Weekly reflective meetings were held to review the observation process and refine documentation quality.

## RESULT

The PABOS development process unfolded iteratively and participatorily over 8 months. What emerged was not merely an instrument, but a transformation in how educators understood and documented children's attitude development.

Mrs. R (38 years old, 10 years teaching experience) reflected:

*"Initially I thought this was just about checklists. It turns out PABOS is like new glasses that make me see things I previously missed. Now I don't just see children playing, but I can see how they negotiate with different friends, how they respond to injustice, small things that are actually very important."*

### Theme 1: Seeing the Invisible – Transformation of Educator Perception

The central emerging theme was how PABOS transformed educators' ways of "seeing" children. Before using PABOS, educators tended to focus on "problematic" behaviors or very explicit actions. PABOS opened their eyes to subtle manifestations of anti-bias attitudes.

#### Sub-theme 1.1: From "Problematic Behavior" to "Learning Moments"

Educators reported frame shifts from viewing conflicts as "problems to be stopped" to "opportunities to understand children's understanding of justice."

#### Activity from Learning Story:

<b>Title</b>	<i>"Reni Asks: Why Is Her Skin Different?"</i>
<b>Context</b>	<i>Monday morning, May 15, 2024. During circle time, Reni (5 years, Serawai ethnicity) sat beside Aldo (5 years, Javanese ethnicity, darker skin tone).</i>
<b>What I Saw:</b>	<i>Reni gazed at Aldo's arm, then at her own. She touched Aldo's arm and said, "Why are you dark?" in an innocently questioning tone. Aldo remained silent, his face appearing uncomfortable. Several other children began paying attention. I (educator) initially panicked, fearing this would become an "awkward" moment. But I remembered PABOS training about curiosity as part of Comfort with Diversity.</i>
<b>Where Next</b>	<i>This is <b>curiosity about physical differences</b> – a normal indicator within the Comfort with Diversity dimension. Reni showed no negative bias, just inquiry. What matters is how I respond. I said, "Reni, you notice Aldo's skin is different from yours? Yes, Allah created us with different skin colors. Like flowers in a garden, some red, yellow, white. All beautiful and unique. Aldo, want to share why your skin is like this?" Aldo answered, "My father is from Java. Javanese people have brown skin."</i>
<b>What I Thought</b>	<i>Next week I will bring mirrors and invite children to explore their own skin colors. Will also read the story "The Colors of Humanity" from the book provided by researchers. Mrs. L (Reni's educator) reflected: "In the past, I might have immediately said 'Enough, don't talk about that' because I feared causing offense. But with PABOS, I learned this is actually a teachable moment. Children are naturally curious, and our job is to respond in affirming ways."</i>

#### Sub-theme 1.2: Previously Undocumented "Small Moments"

Educators discovered that anti-bias attitudes often emerge in small moments easily missed without intentional observation.

#### Activity from observation

<b>Student</b>	Doni (4.5 years, Rejang ethnicity)
<b>Context:</b>	Snack time, children sitting in circle eating fried bananas
<b>Observation</b>	Doni noticed Siti (4 years, less affluent family) had no snack money. Without prompting, Doni cut his fried banana in half and gave half to Siti. When I asked why, Doni answered simply: <i>"She has nothing, I feel sorry."</i>
<b>Interpretation</b>	This manifests <b>empathy</b> and <b>solidarity</b> – key components of Comfort with Diversity and Justice Awareness. Though simple, this action shows Doni beginning to internalize sharing values with those in need without prompting. Mrs. M (Doni's educator) noted: <i>"This is a very ordinary moment. Without PABOS, I probably wouldn't document it. But now I realize, small moments like these are evidence that anti-bias values are taking root."</i>

**Theme 2: From Intuition to Documentation – Pedagogical Practice Transformation**

The second theme describes educators' journeys from intuitive, undocumented assessment toward systematic, reflective documentation.

**Sub-theme 2.1: Now I Have Language**

Many educators expressed that they actually already "sensed" changes in children but didn't know how to articulate them. PABOS provided vocabulary and framework.

Mrs. T (41 years, 12 years teaching):  
*"Previously when parents asked, 'Teacher, how is my child?', I could only say 'Good, getting along better with friends.' Now I can be more specific: 'Rani can now initiate conversations with friends from other ethnicities. Last week she invited Budi (Lembak ethnicity) to play dolls together, whereas before she tended to play only with Serawai children. This shows she's developing comfort with diversity.' Parents understand and appreciate more."*

**Sub-theme 2.2: Documentation as Reflection**

The process of creating Learning Stories proved not merely documentation, but became a powerful pedagogical reflection medium.

Mrs. N (29 years, 4 years teaching):  
*"When I write Learning Stories, I must really think: What actually happened? Why did this child react this way? What should I do next? This makes me more intentional in teaching. I'm no longer on autopilot."*

In FGD, educators agreed that writing Learning Stories "forced" them to slow down and truly observe:

*"Usually we're too busy. Children play, we manage here and there. Now we must stop and really pay attention. Turns out there's a lot we've been missing."* (Mrs. K, 35 years)

**Theme 3: Identity as 'Rootedness and Openness – Meaning of Positive Identity in Multicultural Contexts**

Analysis of 156 Learning Stories revealed that positive identity for children in Indonesian multicultural contexts is not about *not seeing differences* (colorblindness), but about being proudly rooted in one's culture while remaining open to others.

**Sub-theme 3.1: Culturally Proud yet Inclusive**

Children demonstrating positive identity could express pride in their culture without denigrating other cultures.

**Learning Story:**

<b>Title</b>	<i>Adit Teaches Traditional Dance</i>
<b>Context</b>	Thursday afternoon, June 12, 2024, free play time
<b>What I Saw</b>	Adit (6 years, Serawai ethnicity) invited several friends (including Lina-Javanese ethnicity, and Dedi-Rejang ethnicity) to learn Traditional Dance movements (traditional Serawai dance). Adit enthusiastically explained, <i>"This is a dance from my grandparents' region. The movements are like this..."</i> He patiently taught his friends, while sharing that he learned from his grandfather. Interestingly, afterward, Dedi said, <i>"I also want to teach Rejang dance!"</i> Adit responded, <i>"Sure! Tomorrow you be the teacher!"</i>
<b>What I Thought</b>	This is a beautiful example of <b>Positive Identity + Comfort with Diversity</b> . Adit is proud of his Serawai heritage, but he's not exclusive. He wants to share and is also excited to learn from other cultures. This isn't passive <i>"tolerance,"</i> but active engagement and exchange.
<b>Where Next</b>	I will create routine <i>"Cultural Show and Tell"</i> where each child can share something from their family culture.

**Sub-theme 3.2: Navigating Multiple Identities**

Some children from multi-ethnic families demonstrated sophisticated abilities to navigate multiple cultural identities.

### Observation Example:

<b>Student</b>	Nisa (5.5 years)
<b>Observation</b>	During traditional cooking activity, Nisa brought two recipes: Pendap fish (Serawai specialty) from her mother and Gudeg (Javanese specialty) from her grandmother. She enthusiastically shared about both dishes, explaining differences in spices and cooking methods. She proudly stated, "I can do both!"
<b>Interpretation</b>	Nisa doesn't feel conflicted about her dual heritage. She embraces both cultures and views them as richness. This is positive hybrid identity.

#### Theme 4: "Small Moments, Big Meanings" – Accumulation of Micro-Interactions

This theme revealed that anti-bias attitude development results not from one or two "big lessons," but from accumulation of hundreds of daily micro-interactions.

#### Sub-theme 4.1: Daily Routines as Sites of Learning

Learning Stories demonstrated that routine moments (eating, queuing, choosing friends, etc.) are contexts where anti-bias attitudes are practiced and reinforced.

#### Daily notes:

<b>Week 1</b>	<i>During handwashing queue, Rika (5 years) always queued with same-ethnicity friends. When Mira (different ethnicity) tried queuing behind her, Rika changed positions</i>
<b>Week 4</b>	<i>Rika began not minding Mira queuing behind her. Sometimes even spoke briefly.</i>
<b>Week 8</b>	<i>Rika invited Mira to role-play (cooking) after handwashing. They shared cooking utensils.</i>
<b>Week 12</b>	<i>Rika and Mira now often play together. Rika even defended Mira when other children didn't want to play with Mira.</i>
Mrs. S (Rika's educator) reflected:	<i>Rika's change didn't happen overnight. It took months with daily exposure, gentle interventions from me, and time for children to know each other. But because I documented consistently with PABOS, I could see the progress clearly</i>

#### Sub-theme 4.2: Educator Response Matters

Learning Stories revealed that how educators respond to small moments critically determines children's attitude development direction.

#### Contrasting:

<b>Dismissive Response:</b>	Child: "Teacher, why is Tina's hair curly?" Educator: "Don't ask questions. Just play." <b>Impact:</b> Child learns that difference is a taboo topic and shouldn't be discussed.
<b>Affirming and Educational Response</b>	Child: "Teacher, why is Tina's hair curly?" Educator: "Oh, you're observant. Yes, Tina's hair is curly. People's hair is indeed different. Some straight, curly, wavy. Do you know why it's different? (pause) Allah created us unique. Tina, do you like your curly hair?" Tina: "Yes!" Educator: "Good. All hair types are beautiful."
<b>Impact:</b>	Child learns that difference is natural, discussable, and all forms are valid and beautiful

#### Theme 5: Children as Agents of Justice – Agency and Activism in Early Childhood

The most surprising theme was findings that children aged 4-6 years can demonstrate forms of activism when they develop a sense of justice.

#### Sub-theme 5.1: Recognizing Unfairness

Many Learning Stories documented moments when children recognized unfairness, though their understanding remained concrete.

#### Learning Story:

<b>Title</b>	"Budi Protests: 'That's Not Fair!'"
<b>Context</b>	Wednesday morning, July 25, 2024, classroom duty assignment
<b>What I Saw</b>	I (educator) unconsciously always assigned girls to sweep and boys to move tables. Budi (5 years) raised his hand and said in a firm tone, "Teacher, that's not fair! Why do girls always sweep, boys move tables? I also want to sweep!" I was surprised. I didn't realize I'd been reinforcing gender stereotypes. Several girls also began saying, "Yes Teacher, I also want to move tables!"
<b>What I Thought</b>	Budi demonstrates remarkable <b>Justice Awareness</b> for his age. He recognized gender-based division of labor and saw it as unfair. More impressive, he dared to <b>speak up</b> (activism). This is a teachable moment for me myself! I immediately said, "Budi, thank you for telling Teacher. You're right. That's not fair. From now on, we'll take turns. Today boys sweep, girls move tables. Tomorrow we reverse. Agree?"
<b>Where Next</b>	I must be more aware of my own biases. This is also an opportunity for class discussion about fairness and that everyone can do all jobs.

### Sub-theme 5.2: Peer Advocacy

Some children demonstrated ability to advocate for marginalized peers.

#### Observation:

<b>Context</b>	<b>Free play, several children playing "house"</b>
<b>Observation</b>	Sari, Dina, and Ani played together. When Lela (child from less affluent family, less neat clothing) approached and wanted to join, Sari said, "You can't play. You're dirty." Dina (who had developed strong justice awareness from consistent anti-bias education exposure) immediately intervened: "Sari, that's not nice! Lela isn't dirty. She's our friend. Come on Lela, you be the mother."
<b>Interpretation</b>	Dina acting as peer advocate – defending Lela and challenging Sari's bias. This is remarkably sophisticated activism for a 5-year-old. Mrs. W (classroom educator): "I'm very proud of Dina. A few months ago, she might not have reacted like that. But because we consistently teach about fairness and inclusion, she internalized those values and acts on them."

### Theme 6: Family and Culture as Bridges – School-Home-Community Integration

The final theme revealed the importance of involving families and local culture in anti-bias education.

#### Sub-theme 6.1: Learning Stories as Dialogue Tools

Educators reported that Learning Stories became powerful bridges for parent communication.

Mrs. H (33 years, 7 years teaching): *"Every 2 weeks I share Learning Stories with parents via WhatsApp. The response is extraordinary. Parents understand what their children are learning at school. They also start sharing back about children's behavior at home. So there's continuity."*

#### Parent Response:

*"Teacher, thank you for sharing about Rendi willing to share toys with friends from different ethnicities. At home now he's also more willing to share with his sibling. I'm paying more attention to moments like these." (Rendi's mother, via WhatsApp)*

#### Sub-theme 6.2: Local Wisdom as Vehicle

Using folklore, traditional games, and traditional clothing in PABOS observations proved highly effective as relatable entry points for diversity discussions with children.

#### Learning Activity:

<b>Traditional Clothing Festival</b>	Each child asked to bring traditional clothing from their respective ethnicities. Some brought Serawai baju kurung, some Javanese kebaya, some ulos, etc. Children shared about and tried on friends' traditional clothing.
<b>Observation</b>	This moment became very rich for observing all 4 anti-bias dimensions: <ol style="list-style-type: none"> <li>1. <b>Positive Identity:</b> Children proud showing their cultural clothing</li> <li>2. <b>Comfort with Diversity:</b> Children curious about and appreciating clothing differences</li> <li>3. <b>Justice Awareness:</b> Discussion emerged about fairness when a child didn't have traditional clothing (poor family)</li> <li>4. <b>Activism:</b> Several children offered to lend or share clothing</li> </ol> Mrs. L (educator): "Culture-based activities like this are very powerful. Children are more engaged because it's relatable. And we can observe all anti-bias dimensions in one activity."

### Final Product: *PABOS* Toolkit

From the 8-month process, the *PABOS* Toolkit was formed, consisting of:

<b>1. <i>PABOS</i> Observation Guide</b>	<ol style="list-style-type: none"> <li>a) 4 Dimensions: Positive Identity, Comfort with Diversity, Justice Awareness, Activism Readiness</li> <li>b) 32 observable and contextual behavioral indicators</li> <li>c) Descriptive rubric (not numerical scale) with 5 levels: Emerging, Developing, Practicing, Consistent, Advanced</li> <li>d) Concrete examples based on local contexts for each indicator</li> </ol>
<b>2. Observation Protocol</b>	<ol style="list-style-type: none"> <li>a) Guidelines for when and how to observe</li> <li>b) Tips for selecting "focus children"</li> <li>c) Observation ethics</li> </ol>
<b>3. Learning Story Template</b>	<ol style="list-style-type: none"> <li>a) Structured yet flexible format</li> <li>b) Anti-bias framework-based interpretation guidelines</li> <li>c) Examples of strong Learning Stories</li> </ol>
<b>4. Visual Documentation Guide</b>	<ol style="list-style-type: none"> <li>a) Guidelines for ethical and meaningful photos and videos</li> <li>b) Tips for organizing documentation</li> <li>c) Portfolio examples</li> </ol>
<b>5. Training Manual (80 pages)</b>	<ol style="list-style-type: none"> <li>a) Modules for self-learning or workshops</li> <li>b) Reflective activities for educators</li> <li>c) Case studies</li> </ol>

## DISCUSSIONS

This research provides important theoretical contributions by demonstrating that attitude assessment in early childhood can and should differ fundamentally from academic assessment. *PABOS* demonstrates a shift from assessment *OF* learning (summative, judgmental, for ranking) to assessment *FOR* learning (formative, developmental, for understanding and supporting).

### 1. Assessment as Pedagogy, Not Add-On

The finding that observation and documentation processes themselves become acts of pedagogy (not merely measurement) aligns with Reggio Emilia philosophy about documentation as "making learning visible" (Rinaldi, 2006). In this

research, when educators observe and document, they simultaneously:

- a) Understand children more deeply
- b) Reflect on their own practices
- c) Plan more intentional pedagogical interventions
- d) Communicate with families

Mrs. N powerfully articulated:

*"PABOS isn't just a measurement tool. It transforms how I teach. Now I teach with documentation in mind, and document with teaching in mind. The two can't be separated."*

This exemplifies actual assessment-pedagogy integration previously discussed more theoretically.

## 2. Situated Assessment: Attitudes as Practice, Not Trait

Findings that anti-bias attitudes are best understood within natural activity contexts (not isolated tests) support situated cognition theory (Rogoff, 2003). Attitudes aren't abstract "traits" children possess or lack, but something *practiced* in specific contexts. For instance, a child might demonstrate high comfort with diversity in play contexts but not in shared meal contexts (because food is a strong identity marker). *PABOS* allows these nuances to emerge because observations occur across contexts.

## 3. Developmentally Gradual Justice Awareness

Findings about how 4-6-year-old children understand justice enrich developmental psychology literature. Children at this age are already capable of recognizing concrete unfairness ("Why does he get more?") and even capable of rudimentary activism ("That's not fair!"), but their understanding remains:

- a) Concrete: Tied to specific situations, not yet generalized
- b) Egocentric to Sociocentric: From "unfair to me" → "unfair to my friend"
- c) Observable to Systemic: From directly visible unfairness → beginning to recognize patterns (e.g., gender stereotypes)

This aligns with Piagetian theory about moral development, yet shows that with appropriate guidance, children are capable of more sophisticated moral reasoning than Piaget predicted.

### ***Culturally-Responsive Assessment: Beyond Translation***

An important contribution of this research is concrete demonstration of what culturally-responsive assessment means. *PABOS* is not merely a "translated" Western instrument, but an instrument *constructed* from local contexts.

Cultural Responsiveness Manifestations:

1. Familiar and Meaningful Stimuli
  - a) Using local folklore (Legend of Queen Serawi, Tiger Rides Little)
  - b) Traditional games (congklak, gobak sodor)
  - c) Local foods as contexts for diversity conversations
2. Culturally-Grounded Concepts
  - a) "Gotong royong" concept as entry point for solidarity discussions
  - b) "Rukun" as local conception of harmony in diversity
  - c) "Adat dan agama" (customs and religion) as dual values sources in Bengkulu culture
3. Accessible Language
  - a) Using language educators use daily, not academic jargon
  - b) Example: not "demonstrate empathy," but "showing compassion/care"

Culturally-responsive assessment requires deep immersion in local contexts and collaborative processes with local practitioners. Cannot be done from "ivory towers."

### ***Documented Pedagogy as Transformation Medium***

This research demonstrates that documented pedagogy can be adapted beyond its original purpose (documenting cognitive learning) for social-emotional domains. Interestingly, documentation not only captures children's development but simultaneously transforms educators themselves.

Three Transformation Mechanisms:

#### **1. Slowing Down and Noticing**

Documentation processes force educators to slow down, truly observe, and notice things they usually miss in daily busyness. *"I used to be on autopilot. Children play, I manage here and there, clean up. Now with PABOS, I must stop and really look. Turns out there's a lot I've been missing all this time."* (Mrs. K)

#### **2. Developing Professional Vision**

Educators develop what Goodwin (1994) calls "professional vision" – ability to see

and interpret behavior through professional lenses. *PABOS* provides those lenses.

### 3. Reflective Practice as Identity Work

Writing Learning Stories is an act of identity construction – educators define themselves as reflective practitioners, not merely "babysitters" or "caregivers." "Previously when people said 'ECE teacher,' it felt underappreciated. Now with the Learning Stories I create, I feel I'm doing real professional work. I'm proud." (Mrs. T)

## Practical Implications: From Toolkit to Practice Change

### 1. Pre-Service Teacher Education

*PABOS* can be integrated into courses:

- a) ECE Assessment as authentic assessment example
- b) Field Experience Practicum: Students create Learning Stories as assignments
- c) Inclusive Education: Framework for observing social-emotional competencies

### 2. In-Service Professional Development

Training model proven effective in this research:

- a) Duration, minimum 6 hours intensive + monthly follow-up for 3 months
- b) Workshop + peer learning + mentoring
- c) Key components:
  - (1) Understanding anti-bias framework
  - (2) Practice observing with rubrics
  - (3) Writing and sharing Learning Stories
  - (4) Reflecting on own biases

### 3. School Leadership Support

School heads/ECE managers need to:

- a) Provide time for educators to observe and document
- b) Cameras/phones, printers, documentation materials
- c) Facilitate regular sharing sessions
- d) Acknowledge and celebrate good Learning Stories

### 4. Family Engagement

Learning Stories as bridges between school and home:

- a) Regular sharing via WhatsApp groups, parent-teacher conferences

- b) Two-way communication encourage parents to share home observations
- c) Parents can reinforce anti-bias values at home
- d) Parents as resources for teaching about their cultures

## CONCLUSION

This qualitative study developed the PAUD Anti-Bias Observation Scales (*PABOS*) as a culturally responsive authentic assessment toolkit for documenting anti-bias attitudes in Indonesian children aged 4–6 years through an iterative, participatory 8-month process involving 24 educators and 32 children, revealing five key insights: educators began “seeing the invisible” as *PABOS* enabled them to notice subtle anti-bias behaviors previously overlooked; they shifted “from intuition to documentation,” moving from instinctive judgments to systematic, reflective, evidence-based assessment; they reconceptualized identity as both rootedness and openness rather than colorblindness; they understood that anti-bias development emerges from “small moments with big meanings” embedded in daily routines; and they recognized children as “agents of justice” capable of identifying unfairness and engaging in age-appropriate acts of advocacy. The study contributes theoretically by demonstrating that attitude assessment must be integrated with pedagogy, methodologically by modeling a rigorous qualitative co-design process for contextually grounded assessment tools, practically through the creation of an accessible *PABOS* toolkit complete with manuals and examples, and politically by providing evidence for strengthening national ECE standards, accreditation, documentation systems, and inclusion of anti-bias competencies. Ultimately, the study affirms that anti-bias education is a fundamental necessity in Indonesia’s diverse society and shows that authentic observation-based assessment can make children’s learning visible, strengthen educator reflection, and support meaningful communication with families, while

reminding us that young children are active meaning-makers with the capacity to understand fairness, diversity, and justice.

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