Fragile Foundations: Indonesian Architecture Students' Struggles in Experiential Learning and Community-Based Pedagogy

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Abstract

Experiential learning in architecture education has gained momentum globally, often framed as a transformative bridge between theory and practice. It takes various forms— live projects, design-build programs, service learning, or community-based design— however the existing scholarship overlooks the systemic challenges students face, particularly in non- Western contexts where institutional instability frequently shape the operational reality of such programs.

Drawing on ethnographic research across three university–community collaborations in rural Indonesia, this paper exposes the fragile foundations underpinning community-based pedagogy: blurry institutional support, resource constraints, and unpredictable social dynamics that disrupt students' expectations of meaningful, structured learning. Rather than empowering students, these programs often burden them with logistical uncertainties, unstructured roles, and financial precarity, forcing them to navigate a structurally flawed system with minimal support.

By critiquing the romanticization of experiential learning, this study argues that 'learning by doing' in Indonesia often becomes 'learning by enduring.' It calls for pedagogical models that acknowledge instability as a systemic issue, rather than an individual challenge for students to overcome. The findings advocate for clear institutional guidelines and supports, financial accountability, active engagement collaborations, towards insightfully experiential learning in Indonesian architectural education and potentially other Global South contexts.

Keywords: Fragile Foundations, Experiential Learning, Community-Based Education, Architectural Pedagogy, Student Struggles.

1. Introduction

Globally, architecture education is undergoing a transformative shift toward more practice-based, collaborative, experiential, and service-learning models, moving beyond the traditional master-apprentice and studio-based approaches (Salama 2002; Harriss 2014). These initiatives—variously termed live projects, design-build, or community-based design—are celebrated for bridging theory and practice while addressing real-world societal needs (Pak and De Smet 2022). However, implementing such approaches in Indonesia requires navigating a complex set of socio-economic and institutional contradictions, revealing fragile foundations that shape student experiences in these projects.

Indonesia's long-established higher education framework, the Tri Dharma of Higher Education (UU 1961; Suwignyo 2024), has emphasized community service as a means of decolonizing and reforming the higher education sector since the post-colonial era. However, despite this longstanding history, scholarship on these initiatives in Indonesia remains limited especially in architecture field. Recent reforms, such as the 2020 Kampus Merdeka (Freedom Campus) policy, which encourage students to spend up to two semesters participating in and off campus activities (Purwanti 2021; Kusumo et al. 2022), have further intensified tensions between institutional agenda and on-the-ground realities. While experiential learning initiatives in Indonesia aim to equip students with real-world experience, they also expose students to unpredictable institutional and socio-economic challenges that force them to develop adaptive resilience and renegotiate their roles as architects and designers.

Despite expanding opportunities for experiential learning widely, related research remains limited on how structural barriers reshape student experiences in Indonesia—a gap magnified by the often Western-centric discourse dominating existing community-based pedagogy literature (Smith, Dupre, and Crough 2023), which frequently fails to adequately address the profound impact of resource scarcity, bureaucratic ambiguity, and institutional unpredictability prevalent in contexts like Indonesia.

Given the expanding role of community-based initiatives in Indonesian architectural education, this paper addresses a central question: What challenges do Indonesian architecture students face in these projects, and how do these 'fragile foundations' reshape their learning? Drawing on ethnographic engagement with three university–community collaborations, this paper exposes how blurry institutional support, resource constraints, and unanticipated social dynamics complicate idealized narratives of experiential learning. By centring student struggles, this paper reframes these challenges as systemic conditions rather than individual failures, urging a critical rethinking of architectural pedagogy and curricula in Indonesia and similarly characterized in other Global South contexts.

2. Experiential Learning and Community-Based Education in Indonesia

Experiential learning is grounded in the concept of learning by doing, emphasizing that learning cannot happen without direct experience. Extending on Deweyan 'learning by doing' philosophy (Dewey 1963), Kolb's (Kolb 1983, 2014) later expanded on this concept by introducing a four-stage cycle involving, comprising Concrete Experience (CE), reflective observation (RO), abstract conceptualisation (AC), and active experimentation (AE). Over the year, Kolbs's model has become a cornerstone in educational practice. Nevertheless, critiques of Kolb's framework have emerged, pointing to its potential overemphasis on individual cognition and insufficient attention to structural and contextual factors (Mughal and Zafar 2011; Seaman 2008; Morris 2020). These critiques are particularly relevant in Indonesia, where institutional instability and socio-economic constraints complicate the application of experiential learning. For instance, pervasive resource limitations can directly impede the 'Active Experimentation' phase, while unclear institutional guidance and lack of structured mentorship may undermine meaningful 'Reflective Observation' and 'Abstract Conceptualisation,' disrupting the idealized cycle.

Community-based education in Indonesia traces back to the Tri Dharma Higher Education framework initiated in the 1960s to reform and decolonize the country's higher education (Suwignyo 2024). Alongside teaching and research, community service constitutes a core pillar of this framework. In practice, the framework's application varies across institutions—some have developed dedicated service modules or programs, while others integrate community-based assignments within existing courses.

Recently, the development of Kampus Merdeka (Freedom Campus) Policy, under Minister of Education and Culture Regulation No. 3/2020, further redefined the role of Indonesian higher education in community engagement by promoting flexible learning activities (Purwanti 2021). A central component of this policy grants students up to two semesters off-campus activities (Vhalery, Setyastanto, and Leksono 2022), effectively shifting community-based pedagogy from peripheral to integral parts of academic programs (Persov et al. 2020; Smith, Dupre, and Crough 2023) by aligning them with the academic credits.

However, while this policy expands opportunities for experiential learning, it also exposes the fragility of university–community collaborations. Institutions often lack adequate funding, administrative support, and consistent engagement, leading to unpredictable project outcomes. Rather than ensuring deeper student engagement, the structural weaknesses of Kampus Merdeka often place students in precarious learning environments.

While students are expected to engage meaningfully with communities, the lack of preparation, cultural-social training, and long-term institutional partnerships frequently leaves them navigating challenges alone. Given these constraints, Indonesian architecture education must constantly adapt, renegotiate their roles, and navigate this uncertainty.

3. Methodology

This essay reflects on the ethnographic observation conducted in three rural areas in East Java, Indonesia, where architecture students from a university engaged in collaborative programs with local village communities. The selected case studies have at least one semester of collaboration, allowing an examination of long-term dynamics between students, communities, and institutional structures. Ethnography was chosen for its capacity to capture an in-depth exploration of cultural and social dynamics, within specific contexts (Gullion 2015; Fetterman 2009). Over three months, observations of student–community meetings, design workshops, and site visits were recorded to document the learning process and structural challenges encountered.

Additionally, the study involved 20 semi-structured interviews with students from three different institutions, supplemented by additional interviews with lecturers and community representatives. Participants were selected through purposive sampling to capture diverse perspectives across different locations and roles. Throughout fieldwork, care was taken to critically reflect on the researcher's positionality. As an observer associated with the university, there was a risk that participants might moderate their critiques or concerns. Strategies such as informal conversations, repeated visits, and the use of trusted local intermediaries helped in mitigating power asymmetries. The data collected through observation and interviews were analysed using qualitative coding methods. Qualitative coding is the process of systematically categorising and interpreting textual data to identify themes and patterns (Saldana 2009).

4. Findings

4.1. Blurry Institutional Support

All three case studies revealed a critical flaw in institutional support: the absence of clear guidance, leaving students struggling to define their roles. This was particularly evident in Kampus Merdeka (KKN-T), where structural inconsistencies created confusion and inefficiencies, exemplifying the fragile foundations of community-based education in Indonesia. As student GV remarked, "*We were confused because there were no technical guidelines. We wanted to do a direct survey, but for the first two weeks we just ate and slept, waiting for instructions*." Similarly, student UM noted, "*Coordination is lacking; we want to ask about this and that, but if we do it on our own, we're afraid of miscommunication and doing wrong things*." These responses reflect a lack of institutional structure and mentorship, leaving students to navigate uncertainty alone, particularly in rural areas far from the university.

Students were often expected to "figure things out" independently, assuming they would adapt. However, not all students possess the necessary skills to engage effectively with communities.

At a minimum, pre-project orientation should include guidance on community engagement, expected outcomes, and available university support.

A similar issue emerged with faculty disengagement. Lecturers were often absent, creating gaps in supervision and mentorship. One student noted that some of the lecturers failed to grasp the local context as they are rarely engaging on the field work progress. Thus, it is difficult to bridge communication between universities and communities when there is a problem happening.

Furthermore, the university's limited resources and expertise highlight the need for external professionals in community-based design projects. As student MB suggested, "*There should be a dedicated experienced mentor, like in our bamboo project. We discussed ideas with residents, but we were still confused because, in campus, we only learned a brief theoretical overview.*" This suggests that inviting external experts could provide practical guidance on specific and practical topic, ensuring students receive the support necessary for project execution.

4.2. Resource Constrains

Alongside institutional ambiguities, students faced significant constraints related to funding, materials, and time. A recurring challenge across all case studies was the uncertainty over financial responsibility—whether costs were covered by the university, local government, or students themselves. Although these programs were university-led, this did not guarantee sufficient funding. Budgets were typically allocated for transportation and accommodation, leaving implementation costs unclear.

Architecture students generally approach community-based projects by analysing the site, proposing ideas, and seeking implementation opportunities. However, funding inconsistencies determined whether projects moved beyond the design phase. If adequate funding—either from the university or external grants—was available, some proposals could be realized. But often, students encountered situations like that of MR, who recalled: "*We wanted to build a café and a greenhouse, but the funding was unclear. In the end, we could only design it, with no certainty on when it would be executed.*" She added, "*We made a budget plan, but when the residents asked, 'Where is the funding coming from?' we didn't know, and neither did the lecturers.*"

Given these constraints, some students managed expectations by shifting focus away from physical construction. However, this often-left 'unfinished businesses' for community partners, who expected tangible outcomes. The tension between idealized classroom design principles and limited on-site resources further exacerbated this issue. Students, inspired by theoretical learning, were sometimes drawn into 'unrealistic imaginations,' proposing ideas that were unachievable within tight budgets and time constraints.

Time limitations compounded financial uncertainty. Determining how much time to allocate to community-based work was difficult, particularly when projects overlapped with other

academic requirements. In one case study, students participated in a service-learning module that only allowed three site visits within a semester—one at the start to assess conditions, one mid-semester to present ideas, and one for a closing event. This rigid structure restricted deeper engagement, hands-on experimentation, or the completion of designs.

However, longer on-site presence did not always guarantee better conditions. In two case studies, students were able to stay longer with the community due to government-funded accommodation. Yet, this funding was insufficient to cover all participants, forcing some students to finance their own participation. This underscores a deeper issue: involving students in community-based projects is not equivalent to having free labour. Universities must recognize that community-based learning requires careful planning, clear funding provisions, and sustainable engagement strategies. Without these, students bear the financial and logistical burden, reinforcing the fragile foundations of institutional support in community-based architectural education.

4.3. Unanticipated Social Dynamics

Although most students entered these programs eager to learn directly from the community—given that their universities are in urban centres—the reality of community engagement proved far more complex. In practice, only a handful of recognized local gatekeepers—such as the village head or a few prominent locals—regularly attended planning sessions and workshops. As student MP explained, "*The dialogue with the residents only involved a few people, and during the public hearing, it was the same people who attended. As a result, the feedback was sometimes lacking*." Similarly, in one recurring program, student UN noted, "*We conducted a socialization session, but their response was: 'Do whatever you want, we believe in you.' It seems like they were already exhausted*." These observations underscore the complexity of the village's social dynamics, where, as Indonesia's smallest governmental unit, a variety of actors, personalities, and agendas converge in one setting.

Given these challenges, it is essential for the university to ensure that its local village partner is not only willing to collaborate but is also committed to actively contributing—especially during discussions with the students. The local gatekeeper should serve as the primary champion who helps align community expectations with the initiative's objectives. Beyond this, the university must create an inclusive environment that invites broader community involvement so that additional local champions can emerge to support the project. In this context, the role of the faculty in structuring community-based learning and fully grasping the local situation becomes especially important. It is also important to have pre-training on cultural-social humility for the students that could make them aware on the situation on the ground, and how they could adapt, mingled, and interact with community effectively so then they could have better co-production knowledge outputs on field.

Taken together, the overlapping issues of institutional opacity, insufficient resources, and inconsistent participation have created a fragile foundation for experiential architectural learning in Indonesia. Students struggled to align their conceptual designs and curiosity spirit with the realities of budget shortfalls and potential local scepticism. It is a big challenge if we are expecting insightful experiential learning experience that can be beneficial for both students and community.

5. Conclusion: Learning by Doing or Learning by Enduring

Experiential learning is lauded as a vital bridge between architectural theory and practice. Yet, this study reveals that within the context of Indonesian community-based architectural education, the reality for students is often less about empowered learning and more a test of endurance against systemic fragilities. Institutional opacity, resource uncertainty, and unpredictable social dynamics converge, often with minimal institutional buffering.

Instead of being equipped as adaptive designers, students are frequently burdened with logistical and financial challenges stemming from unclear guidelines, faculty limitations, inadequate funding, and misaligned expectations. Universities may frame these struggles as 'learning opportunities,' but these narrative risks masking systemic failures for which students must compensate, sometimes personally and financially. In a context where institutional instability frequently shapes program delivery, the line between 'learning by doing' and 'learning by enduring' becomes blurred.

This study contributes by empirically documenting these student struggles within the specific Indonesian higher education landscape, thereby challenging universalist assumptions often embedded in experiential learning discourse and highlighting systemic barriers frequently under-acknowledged in Global South contexts.

If community-based pedagogy is to genuinely benefit students and communities, it must move beyond idealized portrayals. Universities gain reputational benefits from 'engaged learning,' yet the practical burdens disproportionately fall on students and communities. Fundamental reforms are needed: clear institutional guidelines, transparent and adequate funding mechanisms, robust faculty support and training, and strategies for fostering genuinely active and equitable community collaboration. Without addressing these fragile foundations, such programs risk perpetuating inequity, benefiting institutions more than those they ostensibly serve. If Indonesian students must navigate these systemic challenges largely alone, they are not just learning by doing—they are learning by enduring.

Acknowledgement

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