

METHODS ARTICLE

Pedagogy of community-engaged research

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Abstract

Community-engaged research (CEnR) has emerged as a transformative approach to knowledge co-creation, challenging academic hierarchies through equitable partnerships between communities and researchers. While much attention has been devoted to CEnR methodologies and ethics, less focus has been placed on how to effectively teach and learn its principles and practices. This paper presents a conceptual framework for CEnR pedagogy, outlining its foundational components rather than a full implementation strategy. The framework includes three interconnected elements that move beyond transmissive teaching toward transformative, learner-centered education. The first, Foundational Principles, addresses the “why” of CEnR education, emphasising epistemic humility, critical consciousness, relational competence, and ethical accountability. The second, Design Strategies, translates these principles into curriculum through capacity bridging, experiential learning, cultural responsiveness, and sustainability planning. The third, Teaching–Learning Practices, operationalises the framework through participatory teaching, community-based engagement, applied projects, reflexive practices, and contextual placement. Preparing researchers for authentic community engagement requires more than technical skills. It calls for critical reflexivity and relational accountability. We also acknowledge practical challenges, including institutional constraints and the risk of “lite pedagogy” that superficially incorporates CEnR principles without promoting genuine transformation. Safeguards include structured mentorship, reflective assessments, and co-teaching arrangements that center community voices. This conceptual pedagogical model supports learners in embodying CEnR’s core values while developing technical competencies, thereby strengthening both the integrity and societal relevance of community-engaged research. While the framework outlines strategies and methods conceptually, empirical testing, co-designed curricula, and evaluative metrics are future work that will require thoughtful investigation.

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Key messages

Pedagogy in community-engaged research requires more than technical skill; it integrates epistemic humility, relational accountability, and collaborative praxis within flexible frameworks. Through strategies like capability bridging, culturally responsive curricula, and participatory teaching in community contexts, educators transcend transmissive models, fostering critical consciousness, adaptability, and shared knowledge that enable ethical, equitable, and reflexive engagement with real-world research challenges.

Pedagogy

Pedagogy refers to the approach to teaching and learning that encompasses the theory and practice of how educators instruct, guide, and facilitate learning to achieve specific educational goals. It encompasses not only the “what” (content) of curriculum but also the “why” (values and purposes), the “how” (methods of delivery and learning), the “with whom” (multi-faceted relationships that shape teaching), the “where” (contexts and institutional settings), and the “to what effect” (assessment and impact) [1]. Essentially, pedagogy describes the entire approach to teaching and learning, covering the aspects from initial planning and curriculum design to the actual delivery of lessons and assessment of learner progress (Table 1). A central concept in contemporary scholarship is learner-centered pedagogy, which places the learner at the heart of the educational process, emphasising active participation, coconstruction of knowledge, and responsiveness to individual needs [2, 3]. It is not simply about transferring knowledge but about shaping the ways educators and learners think, act, and relate to others in the teaching-learning processes [4]. Rather than considering students as a “blank slate”, this approach takes into account the previous knowledge, skills, and experience that everyone involved brings to the learning process.

Conducting research in the community setting

Community-Engaged Research (CEnR) or Community Based Research (CBR) has emerged as a cornerstone of equitable and impactful scholarship, fundamentally challenging traditional academic hierarchies and knowledge production practices when conducted in community settings [5]. Much of the discourse emphasises “how to conduct CEnR”; methodological approaches for co-designing studies, ensuring ethical, equitable, and empowering engagement, co-creation of knowledge products, and sustaining community partnerships [6, 7]. Yet far less attention has been given to “how we teach and learn CEnR”. If CEnR is to fulfill its promise of transforming research into a collaborative and justice-oriented endeavor, then dedicated scholarly attention needs to be devoted to its pedagogy.

Pedagogy of CEnR

Conventional research training focuses heavily on technical skills, such as research design, ethics approval processes, data collection, analysis, and interpretation [8]. While essential, these skills are insufficient for authentic CEnR [8]. CEnR represents a transformative model of knowledge co-creation that emphasises collaboration between academic researchers and community members [9, 10]. While much attention has been given to the methodologies and ethical considerations of CEnR, there is growing recognition of the need for a pedagogy that prepares university students and other learners to engage meaningfully with communities to conduct research in the local settings. This requires moving beyond transmissive models, where educators deliver

information to passive learners, toward transformative pedagogy that cultivates critical consciousness, agency, and reflective practice [11]. Alongside this, inclusive pedagogy emphasises equity, inclusion, and responsiveness to diversity, ensuring that all learners are recognised as capable contributors in the learning process [12]. Building on this, open pedagogy further invites learners to co-create knowledge, engage collaboratively in the learning process, and participate in shaping both content and methods, thereby deepening engagement and ownership of learning outcomes [13].

To achieve this, a CEnR pedagogy needs a structured yet flexible framework that equips learners not only with technical competencies but also with the reflexivity, relational accountability, and critical consciousness necessary for meaningful engagement with communities [14, 15]. Explicit recognition of learner-centered and context-responsive approaches is essential, as both the needs of learners and the cultures of partner communities must inevitably shape teaching and research practices. This manuscript focuses on conceptualising such a pedagogy; specific examples of tested models or measurable learning outcomes are planned for future empirical work. Operationalising CEnR pedagogy calls for attention to three interconnected components: Foundational Principles, Design Strategies, and Teaching–Learning Practices (Figure 1). These components not only structure the teaching–learning experience but also correspond to core pedagogical questions: Foundational Principles address the ‘why’ of teaching, articulating the values and purposes that guide CEnR; Design Strategies outline the ‘what’, translating principles into actionable curricula and learning experiences; and Teaching–Learning Practices encompass the ‘how’, ‘with whom’, ‘where’, and ‘assessment’, detailing interactive methods, collaborative engagement, evaluation approaches, and contextual considerations. Framing the pedagogy in this way helps educators and learners plan and arrange learning that is both theoretically grounded and pragmatic.

Foundational principles (the Why)

Foundational principles provide the philosophical and ethical grounding for CEnR pedagogy, answering the question of why educators and learners engage in CEnR

Epistemic humility and critical consciousness

Emphasising the value of situated knowledge, challenging academic dominance, and fostering reflexivity about power, positionality, privilege, and structural dynamics that shape research relationships [11]. Learners reflect critically on their own social location and biases to engage ethically with communities.

Relational competencies and ethical accountability

Prioritising skills for building and sustaining respectful, reciprocal partnerships. Trust, transparency, and long-term commitment underpin the ethical conduct of CEnR [8].

Table 1 Aspects of pedagogy**Components of pedagogy**

(The foundational building blocks of pedagogy; essential elements that constitute the teaching-learning process)

Learning design and content

- Learning objectives and goals
- Curriculum content and subject matter
- Instructional strategies and teaching methods

Assessment and feedback

- Assessment and evaluation
- Feedback mechanisms

Learning environment and resources

- Learning resources and materials
- Learning environment
- Learning support systems

Interest-holders and context

- Teacher and facilitator expertise, skills, and pedagogical knowledge
- Learner characteristics
- Time management and pacing of instruction
- Policy and institutional context

Dimensions of pedagogy

(The perspectives or approaches through which pedagogy is framed; reflecting variations in context, approach, and learner engagement)

Delivery and interaction

- Mode of delivery
- Teacher-centered and learner-centered approaches
- Individual and collaborative learning
- Active engagement and participation

Cognitive and scholastic focus

- Cognitive and affective focus
- Reflective and metacognitive focus
- Scaffolding and differentiated instruction
- Inquiry-driven and problem-solving approaches

Context and inclusivity

- Formal and informal learning contexts
- Discipline-specific and interdisciplinary approaches
- Culturally responsive and inclusive pedagogy
- Experiential and hands-on learning
- Gamified and playful learning approaches
- Social-emotional learning integration
- Ethical and values-based education

Attributes of pedagogy

(The qualities or characteristics that influence the effectiveness, style, and perception that shape pedagogy)

Adaptability and creativity

- Flexibility and adaptability
- Creativity and innovation
- Responsiveness to feedback
- Adaptation to technology and innovation in teaching

Relational and ethical

- Empathy and relational sensitivity
- Ethical and culturally sensitive practice
- Collaboration and teamwork facilitation
- Emotional intelligence and social awareness

Effectiveness and impact

- Clarity and transparency
- Motivation and engagement fostering
- Critical thinking promotion
- Communication effectiveness
- Consistency and reliability
- Sustainability and long-term impact focus
- Curiosity and inquiry stimulation
- Empowerment of learners
- Resilience and perseverance in teaching practice
- Accountability and responsibility in learning outcomes

Praxis-oriented collaboration

Supporting learners to engage in genuine co-learning and co-creation, ensuring community partners participate as equitable agents throughout question formulation, methodology, data collection, interpretation, and mobilisation.

Design strategies (the What)

Design strategies translate foundational principles into actionable curriculum content, focusing on what learners are taught in order to operationalise CEnR values:

Capacity bridging and mutual exchange

Equipping both educators and community partners as co-learners and co-educators in skills exchange, recognising and leveraging community expertise.

Experiential and applied learning

Embedding scaffolded, real-world partnerships that foster reflective engagement with relational processes and community impact.

Cultural responsiveness

Adapting curricula to local languages, knowledge systems, and cultural practices to ensure research relevance and respect.

Sustainability and relationship maintenance

Structuring support for long-term engagement that extends beyond the classroom or project timeline.

Teaching–Learning Practices (the How/ With Who/ Where/ assessment)

Teaching–Learning Practices encompass the practical methods through which learners experience CEnR, covering how, with whom, where, and to what effect learning occurs:

Participatory and interactive teaching

Interactive workshops, case-based discussions, and hands-on sessions foster bidirectional knowledge exchange, modeling reflexivity, relational accountability, and equitable collaboration. This includes content or modules co-designed and co-taught with community partners.

Scaffolded community-based engagement

Structured experiential placements allow learners to progressively engage with communities, building skills and responsibility in real-world contexts.

Applied project activities

Hands-on assignments and exercises, such as joint dissemination efforts or participatory action research projects, operationalise principles and design strategies. Facilitating opportunities for community members to identify research priorities and to name research questions can be excellent learning opportunities for university students, especially those who are not used to listening and learning from community partners.

Reflexive and evaluative practices

Critical incident analyses, positionality reflections, and structured feedback loops encourage ongoing assessment of both process and outcomes.

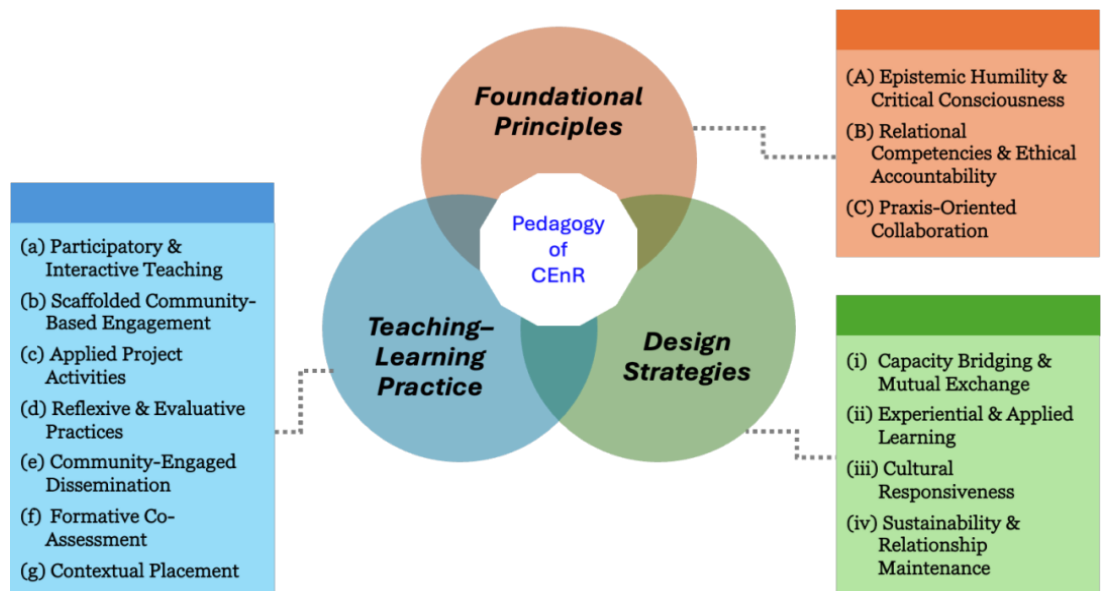


Figure 1 The pedagogy of community engaged research

Community-engaged dissemination

Joint authorship, community forums, and co-facilitated presentations ensure findings are shared ethically and inclusively.

Formative co-assessment

Continuous, participatory evaluation—reflexive journals, peer and community feed-back, and codesigned rubrics—captures both technical competencies and relational skills. Engaging community partners in co-designing contents and co-evaluating student learning also makes it clear to students that community members bring valuable knowledge and expertise to these endeavors.

Contextual placement

Learning occurs in authentic community settings, bridging classroom knowledge with real-world research practice and enabling meaningful engagement.

Circumstantial realities and challenges

Implementing a multilevel CEnR pedagogy is not without challenges. Foundational research skills remain essential; learners must master study design, data collection, and analysis. Institutional constraints, including accreditation requirements and curricular restrictions, also shape research curriculum and program design [16]. A progressive developmental approach, starting with methodological fundamentals and gradually integrating transformative community-engaged practices, may be the most feasible solution. However, care must be taken to avoid “lite pedagogy,” where engagement with CEnR principles is superficial, failing to disrupt entrenched hierarchies or support true transformation. Indeed, teaching students that CEnR is simply a collection of items on a checklist, is not only a lost opportunity, but a way of co-opting research practices that are meant to be grounded in transformative justice. Deliberately designed and critically evaluated pedagogy that centers critical consciousness, reflexivity, relational accountability, and ethical engagement is essential to avoid such reductionism [11].

Conclusion

A structured, multilevel approach to CEnR pedagogy is critical for developing learners who embody core values, not just technical methods. By integrating foundational principles, design strategies, and teaching-learning practices, this pedagogy equips learners to engage ethically, equitably, and effectively with communities.

This paper serves as a conceptual and methodological foundation. Future work needs to focus on piloting the framework, empirically evaluating learning outcomes, and refining implementation across disciplines, institutions, and cultural contexts. Documenting these applications will contribute to evidence-based refinement of the framework and enhance its adaptability.

Institutions and educators have a responsibility to design, implement, and iteratively refine pedagogical models that balance technical competencies with transformative, community-engaged learning. Such models improve research outcomes and support broader social justice by preparing learners to navigate complex social, cultural, and structural dynamics.

As CEnR continues to evolve, ongoing reflection and adaptation of pedagogy is vital to ensure research remains equitable, impactful, and responsive to diverse community needs. By embracing a structured, multilevel pedagogy, educators and learners together can strengthen both the integrity and societal relevance of CEnR.

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Conflict of interest

Tanvir C Turin serves as Editorial Board Member for the BSMMU Journal. Dr. Turin was not involved in the editorial decision-making process related to the acceptance of this article for publication.

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