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Diversifying Understanding of Participatory Action Research for Critical Learning Curricula in Indian Classrooms

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Abstract: This paper discuss the recent developments of a Critical Action Learning Exchange with a K-12 school in India. Briefly examining a Participatory Action Research (PAR) project curricula where a pair of local teachers designed a community-engaged learning project about fibre and fabrics. This PAR curriculum was cross-analyzed in relation to the CALE framework, teacher and student reflections, and cultural aspects. Future directions and implications of the project are also discussed.

Introduction

The Critical Action Learning Exchange (CALE) is a professional learning community of teachers designing and enacting curricula that engage students in critical action toward real-world problems that affect themselves and their communities (Carvalho et al., 2021). Since 2020, CALE has established teacher communities in Canada, China, Egypt and India. Teachers who join CALE communities are presented with theoretical and technological support for collaborative development and implementation of critical action lessons (Carvalho et al., 2023). Recent developments of CALE in Bengaluru, India involve a whole school research-practice partnership with a K-12 school. Over the last three years, several projects involving community engagement approaches have been undertaken with over 40 participating local teachers (Raman et al., 2022; 2024). In November 2024, 5 curricular designs were co-designed by local teachers and researchers. This paper focuses on one of these designs, which provides a compelling example of the enactment of a participatory action research (PAR) curriculum. Throughout two weeks, a pair of local grade 6 science teachers enacted this curriculum as a community-engaged learning project titled "Fibre to Fabric." The local curricular standards mandate this topic, while the local textbook dictates standard teaching practices of lectures. However, this lesson was redesigned to critically understand and actively address the environmental issue of plastic waste.

Theoretical framework

PAR has become generic and often interchanged with terms such as community engagement and collaborative research (Chevalier, 2019; Kim, 2016). However, key aspects like participant empowerment, research-participant equality, and knowledge creation are deeply intertwined within PAR. PAR has been used in the literature as a method of innovation within curriculum development for many decades (Feierabend & Eilks, 2011). While PAR can be applied in different foci within education, PAR merges well with critical learning to evaluate and implement changes for the betterment of individuals and the community (Chevalier, 2019; Kemmis, 2014). The CALE extends the theoretical understanding of Knowledge Building and Critical Pedagogy to understand Critical Action Learning through the lens of learning communities described by Carvalho et al. (2021). As described in previous papers, the framework extends a vertical and horizontal axis of depth and breadth, from individuality to community to globe and knowledge to community to action. PAR and CALE share ideologies of liberation and socio-economic change as described by Freire (1970; Kim, 2016; Voight & Velez, 2018).

Methods

Our recent whole school project with this South Indian school resulted in the creation and enactment of 5 different classroom curricula. Over 2 weeks, teachers and students enacted their locally aligned curricular classroom designs around a theme of sustainability and future cities. Classroom sizes ranged from approximately 30 to 35 students in alignment with their subject curriculum with support from the CALE team. Following one week of final curricular design meetings and in-person introductions, all curricula were enacted within approximately 5 class periods of 40 minutes each. These are supplemented by pictures and videos of the physical learning environments, final student projects, and classroom enactments.

The CALE research team supported teachers in their designs by providing access to more resources like additional audio/visual materials, alternate activity suggestions and student engagement ideas. Teachers were encouraged to think of their students and their teaching practices, i.e., how would this project benefit them and

their students in the next 10 years? Design meetings with teachers focused on empowering teachers to generate their critical action ideas while considering practical implementations in the classroom. These meetings would vary from approximately 20 to 45 minutes per session, with six overall sessions. With the practical considerations of curriculum retention and physical mobility restrictions, almost all classes began with traditional teaching and learning through lecture, eventually progressing towards more inclusive PAR strategies.

The Fibre to Fabric project data comprised final student and teacher interviews and six teacher design meetings. A pair of teachers with teaching experiences of 7 and 20 years designed their initial curriculum together, progressing towards more PAR pedagogies through several design meetings with the facilitation of CALE researchers. The curriculum's final outline comprises learning outcomes, keywords, and various exercises and activities, incorporating class duration and the physical materials required. Planned activities included brainstorming sessions, demonstrations, community trips, and final projects using recycled materials and fabrics.

Findings

During the initial design meetings, teachers expressed difficulty aligning critical action with the curriculum due to the limited classroom time. However, developing their designs throughout several meetings, along with encouragement and support from the research team, eased some tensions. Ultimately, undergoing classroom enactments assured teachers of the viability and educational value of implementing critical action within their school. Moreover, the experienced pairing of the Fibre to Fabric teachers allowed for the flexibility of the Fibre to Fabric curricular enactment. Their final implementation allowed spontaneous inclusions of PAR activities, including a community walk around the school and a plastic waste fashion show. The community walk around the school began as an idea to engage in practicable community action in the local context. Though initially hesitant, the teachers successfully incorporated the walk despite safety and security concerns for the students. With posters about stopping plastic pollution and a school banner, the leadership, teachers and students engaged in this impromptu community action around the school because of the engagement with the CALE curricular design thinking and researchers. The project included a final school-wide presentation on plastic waste as a fashion show. Teachers worked with students to create, and display upcycled costumes with waste collected around the community. Presenting their innovations to the whole school, teachers and students visibly and verbally expressed enthusiasm of their curricular and community work.

In analysis with the CALE framework, the Fibre to Fabric project ranks highly in the individual and community aspects. In personal interviews, the teachers and students expressed high enthusiasm, highlighting individuality regarding interest and knowledge of this topic. They also indicated their personal connections and willingness to act in the future based on the topic, suggesting increased levels of action. A change in leadership and teacher mentality was also noted throughout the study. The leadership expressed a willingness to shift from the current practice of strictly adhering to school textbooks as curricula. Teachers also highlighted how students' heightened motivation and interest and the use of criticality were necessary skills for their futures.

Conclusion

Due to the didactic nature of the school curriculum, enacting a typical PAR curriculum without providing teachers design and enactment support appeared impractical. Thus, researchers and the CALE community contributed to easing the burden and supporting local teachers and leadership as much as possible.

We hope this work will sustain interest and pedagogical creativity in local teachers' curricula. With support from leadership, the above teachers may be allowed to explore more innovative and potentially challenging pedagogies and curricula. Moreover, with more experience creating and enacting such curricula and less novelty around participatory action and critical learning topics, future avenues may further our research-practice collaboration through engagement in alternate modes of participatory action research, such as youth participatory action research. This will enable the students to drive curriculum innovation and directly design topics of interest and criticality. Utilizing YPAR may also become a means for incorporating student voice while considering relevant teacher curricular designs and ideas. Engaging in such designs may enable teachers and students to truly work toward the liberation and empowerment of education, as Friere described over 50 years ago (1970).

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