Designing a Global Community of Critical Action Educators

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Abstract: This paper presents the Critical Action Learning Exchange (CALE), an international professional learning community of educators for development and exchange of Critical Action curriculum, resource sharing, and empowerment of students in responding to issues including climate change, social and environmental justice, pandemics, or economic inequality. Our research focuses on teacher knowledge and learning, and examines the role of a pedagogical framework grounded on Knowledge Building (Scardamalia, 2002) and Critical Pedagogy (Freire, 1970) in supporting collaborative design of curriculum. This paper maps our analysis of our first design cycle to Reeves' (2007) four phases of design-based research.

Introduction

This paper presents the Critical Action Learning Exchange (CALE), an international professional learning community of educators for development and exchange of Critical Action curriculum, resource sharing, and empowerment of students in responding to issues including climate change, social and environmental justice, pandemics, or economic inequality. Our research focuses on teacher knowledge and learning through collaborative design, enactment and reflection about Critical Action curriculum with a theoretical perspective grounded in Knowledge Building (Scardamalia, 2002) and Critical Pedagogy (Freire, 1970). This paper adopts a design-based methodology, explicitly mapping our analysis of the CALE design and first year's activities to Reeves' (2007) four phases of design-based research. We focused on three research questions: (1) How can a professional learning community support teachers in designing curriculum that empowers students in relation to pressing social challenges like climate change, pandemics, racism, poverty and inequality? (2) What forms of materials, activities and technology environments are needed to scaffold such a community? And (3) What is an accessible framework to guide teachers' designs of Critical Action curriculum?

The first design cycle culminated in a 5-week online workshop that established CALE's inaugural cohort, with 60 participants from Brazil, Canada, Colombia, and the United States. During the workshop, teachers engaged in collaborative design of curriculum, reflected about classroom practice and student learning, and discussed pedagogical approaches to Critical Action, defined as the engagement in individual and collective action to produce socio-political change in aspects of society that generate unjust, oppressive, harmful, or unhealthy conditions (Jemal & Bussey, 2018). This paper describes our first design cycle of community activities, scaffolds, and technology environment. It reports on the ideas brought in by initial participants and their progress over the workshop, focusing on teachers' developing ideas, as manifested in their curriculum designs, and discussions related to those designs. We close with a discussion of how these analyses contribute to refinements of our theoretical framework, technology environment, and teacher scaffolds.

The need for critical action

This project grows from an understanding of the current global landscape as a point of confluence of several crises, as reflected by the UN Secretary-General António Guterres in his opening speech of the 75th UN General Assembly:

> "We face simultaneously an epochal health crisis, the biggest economic calamity and job losses since the Great Depression, and dangerous new threats to human rights. COVID-19 has laid bare the world's fragilities. Rising inequalities. Climate catastrophe. Widening societal divisions. [...] Our world is struggling, stressed and seeking real leadership and action." (Guterres, 2020)

Each of these multiple crises—environmental, sanitary, geopolitical, economic, civilizational—have a direct effect on students. In recent years, new terms such as *eco-anxiety* (Ojala, 2018) and *climate anxiety* (Wamsler & Brink, 2018) have emerged to describe a range of psycho-emotional responses to the perceived threat of climate change, including worry, anger, and hopelessness. Similarly, these kinds of psycho-emotional responses have been reported in groups and communities worldwide that are particularly affected by other situations perceived as oppressive and overpowering, such as systemic racism and other forms of discrimination, war, poverty, etc. (Ridley et al. 2020; Thabet, Thabet, & Vostanis, 2016; Williams, 2018).

Typical school curriculum addresses such complex socio-environmental problems by helping students understand the mechanics of those issues. But such approaches may have the unintended consequence of reinforcing a passive perspective in which students feel alienated from consequential decision-making and action. Research suggests that anxiety might be alleviated by engagement in some form of committed action (Hoggett & Randall, 2018), indicating that approaches that emphasize students' collective agency and connection with others may help educators counter the potentially damaging narrative of overpowering, insurmountable calamities. Moreover, problems such as climate change and threats to democracies around the world decisively affect the future of the current generation of students. Thus, if a goal of Education is to equip children with the means to thrive in the future, we must emphasize pedagogical approaches that reinforce students' agency and empower students through critical action. CALE aims to respond to this challenge by providing both a pedagogical framework for Critical Action education and a structure for teachers' peer support, in the form of a community of educators engaged in collaborative design, enactment, exchange, and advancement of curriculum that empowers students as agents for positive change.

Methods

Design-Based Research (DBR) is an approach used to improve design practice as well as to enhance scientific understanding of how design affects learning (Barab & Squire, 2004). DBR is well suited as a methodology for this study because it will help produce new understandings, theories, artifacts, and strategies that account for and potentially impact knowledge building in a teacher professional community. Figure 1 shows the first iteration (year) of our research design, structured according to Reeves' (2007) 4-phase framework for DBR. Through this cyclical process, a specific design is informed (phase 1), produced (phase 2), implemented and tested (phase 3), and evaluated and refined (phase 4). In this sense, the designed artifact or intervention becomes, in itself, an important outcome of the research, and an object for further inquiry.
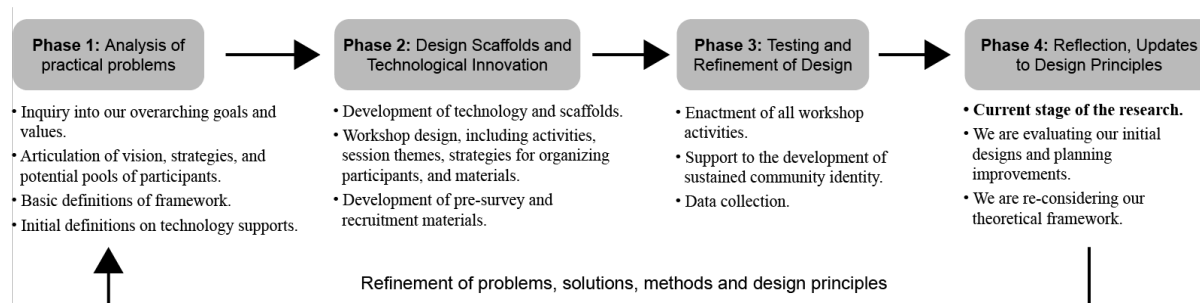

Figure 1: Four phases of our research design. Adapted from Reeves (2007).

Findings

As described in Methods, we present our findings here in terms of Reeves' (2007) four phases of DBR. We focus on the first three phases, as research outcomes, and address the fourth phase in our Discussion.

Phase 1 – Analysis of practical problems

Articulating a theoretical perspective. In Knowledge Building (KB; Scardamalia, 2002) and Critical Pedagogy (CP; Freire, 1970) we identified a set of mutually reinforcing similarities and some important complementary features that offer a solid theoretical foundation for Critical Action education. KB contributes to our approach by proposing a series of practices and principles that foster epistemic agency and collective responsibility to promote continuous improvement of ideas through dialogue and joint investigation (Scardamalia, 2002). CP complements our framework with a philosophy of praxis that stresses the importance of an educative process that interweaves theory, action, and reflection as a means to advance the broader society towards social change and justice (Freire, 1970). CP's commitment to transformative action (Jemal & Bussey, 2018) is articulated around the "problem-