

Across Research Practice Partnerships: Examining Two Projects to Develop Understandings of Infrastructure and Equity

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Abstract: This poster draws connections between two research practice partnerships in order to examine similarities in infrastructuring (Penuel, 2019), the lifecycle of each project, and subsequent research studies after their funding cycles were complete. Research findings point to the ways that relationships within are entangled within the infrastructures of RPPs. Additionally, we examine tensions and draw connections between infrastructuring and the ways RPP infrastructures supports or confounds relationships between stakeholders.

Major issues

Research practice partnerships (RPPs) have historically supported practitioners and researchers in bridging their differing expertise to design interventions that address problems of practice (e.g., Coburn et al., 2013; Coburn & Penuel, 2016). Other forms of partnership, including participatory design research (e.g., Bang & Vossoughi, 2016) and social design experiments (Gutiérrez & Jurow, 2016), have pointed to the need for historicity and justice to be centered within collaborative work. While a recent body of research has begun to examine the need for bridging these perspectives in order to examine potential for projects to result in lasting change for educational communities (e.g., Penuel, 2019), more research is needed to examine the lifecycle of these projects and the ways partnerships continue even after research funding cycles are complete. In order to begin examining similarities across RPP lifecycles as they worked to promote equity within educational settings, this poster draws connections between two multi-year RPPs situated in very different contexts in order to examine their infrastructuring (Penuel, 2019), the lifecycle of each project, and their positioning of research participants in order to promote social justice and educational equity.

Theoretical approach

While RPPs have broadly been theorized as a means of addressing issues of equity in education, research continues to be needed on the ways that these projects actually do the work of building partnerships that result in equity-oriented interventions. In our analysis, we draw upon perspectives on learning stemming from notions of mediated action (Wertsch, 1998) and communities of practice (Lave & Wenger, 1991). In examining these partnership contexts, we look to the ways that these perspectives intersect with the research on boundary crossing (e.g., Anzaldúa, 1987; Behar, 1993; Penuel et al., 2015) to conceptualize the ways that RPPs, and other forms of partnership work, remediate relationship boundaries between researchers and practitioners. This paper draws on our collaborative experiences as stakeholders in co-design processes to build understandings around the ways that infrastructuring (Penuel, 2019) impacts not only the sustainability of designed interventions, but also the relationships that make these designs possible.

Project descriptions

From RPP to participatory design study: Drawing *throughlines*

The Compose Our World (COW) project was a multi-year research practice partnership to collaboratively design and implement a year-long 9th grade English language arts project-based learning curriculum with nearly fifty practicing teachers and fifteen researchers and graduate research assistants. The curriculum was intended to authentically engage students and teachers in building projects that supported asset-based teaching and justice-oriented perspectives on students social and emotional learning (Polman & Stamatis, 2018). Over four years, the project took place across urban, suburban, and rural contexts and engaged more than 2,000 students.

While the COW RPP resulted in the successful development of a co-designed curriculum, it also raised a number of questions about how to continue supporting teachers' implementation after the initial funding cycle ended. Additionally, it raised a number of problems of practice for teachers, including questions across contexts in how to engage students in critically analyzing the current political context and supporting students towards epistemic agency (Elgin, 2013) within classrooms. In order to address these questions, the author partnered with Elizabeth Murray, a teacher who had been associated with the COW project for all four years, in order to create a participatory design study that would allow them to continue investigating new questions in Ms. Murray's classroom. In this poster, the researcher looks across data from the two studies to examine the

infrastructure of the RPP and the way it inevitably shifted within the subsequent collaboration. Additionally, the researcher traces four years of interviews with Ms. Murray to examine the ways that she felt she was positioned within each project and the outcomes she noticed within her practice.

Infrastructuring for participatory design with students

The second study highlighted in this poster sought to develop locally meaningful technology practices at a university-assisted community school through a participatory design partnership (Bang & Vossoughi, 2016) with high school students. In the course of the four-year partnership, the design activity was modified in response to students' stated goals for participation, which included building skills to engage in meaningful academic work in college, creating a tool that is scalable within the school, and to engage in design work that closely relates to students' out-of-school interests. Consequently, two parallel design efforts emerged in response to the stated goals of the students. One strand of design work focused on the development of a school-wide e-portfolio system that was a continuation of design work that teachers engaged in prior to the partnership with students that eventually was utilized more broadly within the high school, and another design strand that focused on the formation of a school-based e-sports community which did not last beyond the engagement of a group of students who eventually graduated, but had impacted the academic trajectory of participating students.

The poster will highlight the ways in which existing design assets in the school and the community intersected with the students' own interests and goals to build out a locally situated design infrastructure (Penuel, 2019) that served as a hybrid design activity that negotiated existing work by the educators, students' learning goals, and students' personal interests. The poster will also compare the lifecycle of both design strands to reflect on how design infrastructures provide opportunities for student engagement and sustainability.

Findings and significance

We relied upon qualitative and ethnographic data collection and multiple cycles of coding to uncover themes across our projects. Individually, we completed first cycle coding and then completed a second cycle of coding (Miles et al., 2014) to examine each other's codes and determine coherent themes. Our findings point to the ways that RPPs have potential to support boundary crossing between different levels of stakeholders and the ways that infrastructures of these projects impact the relationships that emerge. Across projects, researchers recognized that the most powerful boundary crossing opportunities emerged within the relationships in which they had the most personal investment. While more research is needed, our findings point to the ways that partnership work is dependent upon infrastructures that facilitate equity-oriented practices both within designed curricular objects and within the relationships that emerge between stakeholders.

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