



Reflections on Community-Engaged Research: Learning to Practice what we Preach

Samuel J. Bullard

University of Minnesota

During a science class in a Midwestern middle-school, a group of students gathered around a computer monitor. They watched a video recorded by a Somali-speaking woman who identified herself as the mother of one of the students in the class. In order to discuss the video, the teacher asked this student to translate her mother's story into English. Excitedly, the student explained the various processes of making medicinal teas from various herbs and spices. In situations like this, students find themselves in unique but infrequent engagements with science curriculum, which allows the free expression of cultural and personal values. A pedagogy of reciprocity is often composed in these fleeting moments - brief, subtle transfers of knowledge from parents, to students, to teachers, and so on. Such strategies help students rewrite their schema of what 'knowledge' really is. Rather than a static unit of a formal structure gatekept by the academically credentialed, learning about science could be a fluid, dynamic product of people's interactions.

During this exchange, I sat in the back of the classroom with a pen and paper. I wrote some observations while another research assistant operated a video camera to record supplemental footage. We were students from the University of Minnesota who participated in a study of how the teachers at a local middle school integrated cultural knowledge into their science classes. After the class ended, we stayed to speak with the teacher. We shared some thoughts about the class and addressed any issues the teacher may have regarding their participation in our study, my first experience with community-engaged research.

Community-engaged research "centers around fostering collaborations with and among groups of people affiliated by geographic proximity, special interest, or similar situations with the goal of addressing issues that affect the wellbeing of the people within the group."

(Catalyst.harvard.edu, 2019). These definitions may vary depending on the specific needs,

values, and expectations of a community. Some methods taught in introductory courses make research impersonal, with controllable variables for data to be useful. While these values may align with experiments using strictly quantitative measures or non-human subjects, it may prevent us from being able to explore complex systems. Compared to a refined and impartial methodology, the type of research I became involved with was broad, dynamic, and empathetic to the various risks involved when communities are at stake.

Within the educational sciences, community-engaged research dictates that the interdependent relationship between the teacher and student should not exist only within classroom contexts. This part is crucial: that all the stakeholders involved feel that they have a unique role as a collaborator to the base of knowledge on the subject being studied. The theory of positivism understands science to be a neutral, objective aggregation of facts, detached from any personal or cultural values. Conversely, prominent theories in educational psychology view scientific knowledge as a process of interaction between individuals, where cultural values negotiate the meaning of this knowledge (Kuhn, 1962). If educational researchers intend to influence educators' pedagogical techniques to align with this theory, then we must also use a methodology that builds relationships and emphasizes collaboration between stakeholders. In doing so, we begin to practice what we preach.

I became involved in the ESPRIT project ("Equitable Science through PaRental Involvement and Technology") by accident. While looking for one more class to fit in my schedule for next spring, a course title in the university catalog caught my eye: "EPSY 5200 – Special Topics". The description identified the class as an introduction to community-based research designs with an opportunity to participate in a current faculty project. I took a chance and decided to enroll.

The course was taught by the two professors who direct the ESPRIT project and assisted by one of their graduate students. On the first day of class, they explained the overall course and their research goals. They aspired to reduce the science 'achievement gap' between white and racial minority students in Minnesota, which remains one of the largest in the United States. (MDOE, 2015). They outlined two strategies to achieve this goal: first, to increase parental involvement through educational technology, and second, to assist teachers in utilizing culturally relevant pedagogy. I previously saw my home state as a model of progress and opportunity, so I was surprised when I learned about the academic disparities in Minnesota. During my time with the project, I have realized that my understanding of the problem reflected my public school experience coming from a place of privilege, and it is not universal.

Before becoming involved in the ESPRIT project, my perceptions of parental involvement in schools assumed that it consisted of volunteering at the school, assisting on field trips, coaching or assisting sports teams, and attendance at parent-teacher conferences. I grew up with these experiences as a middle-class student living in the suburbs.

However, while engaging with the parents of our study, it appeared that two main barriers were preventing them from participating in their child's education. First, socioeconomic factors often make traditional modes of involvement (e.g., volunteering at the school) unfeasible. Many of the parents in this study are non-English speaking and work long hours, often having more than one job. When lessons and assignments are in a language different than their native tongue, the student cannot utilize the intellectual resources of their family members. A second barrier seemed to be the parents' perceived role in their child's education. Instead of being a source of knowledge, many parents thought of themselves as logistical supports, ensuring that their children get to school or turn in assignments on time.

Inquiries into these perceptions revealed two separate spheres of influence – wherein the parent ensures success in home-based school tasks, and the teacher does so while the child is in the classroom. This finding showed that the factors which influence parental involvement are not always tangible, observable behaviors. Instead, they are mediated by the family's socioeconomic/cultural context and the perception of what roles the various stakeholders have in a child's learning. In researching the unique qualities of working-class, culturally diverse education, it became clear that attempts to increase parental involvement through one's preconceived understanding of the term may ultimately fail.

My professor noted that these barriers to involvement might disappear if we can create new environments where the parent, student, and teacher can engage in social learning together. Using a social learning environment, "Flipgrid" ([flipgrid.com](http://flipgrid.com)), teachers could post video prompts that inquire about both science and cultural content. Students and their families would reply to them by recording responses in their homes. From using this tool, parents may begin to feel that their funds of knowledge and lived experiences have value in the science education of their children.

The adage, “it takes a village to raise a child” has been extensively elaborated upon in Bronfenbrenner's ecological model of development (Bronfenbrenner, 1979). The model contends that children's lives are surrounded by multiple areas of influence, the first being a microsystem, composed of both the school and the home. Developing strong ties between these two may be an especially worthwhile endeavor, as parental involvement is widely regarded as a mediator of student outcomes within the literature of education sciences (McWayne et al., 2004; Hayakawa et al., 2013).

One of the major criticisms in education research and policy development is a lack of understanding about what kind of interventions are feasible or not for teachers. I find that this neglect, while often unintentional, arises from a lack of experience. Researchers have been and often are students, many of them may also be parents, but frequently, those developing new educational programming have spent little to no time working as a K-12 teacher - the precise occupation for which curriculum and instruction interventions depend. For a research team to ensure that their teachers are both enthusiastic and engaged, their perspectives must be appreciated, and their feedback must be integrated in the projects iterative process.

ESPRIT utilizes a design-based implementation research paradigm, which attempts to bridge the gap between a program's design and its ultimate implementation through a continuous partnership with the schools. With community-based participatory research as its antecedent, the crucial need for our institutions is to invite the lived experiences of all those who are impacted by school programming. Rather than total reliance on 'what works' we focus on what works for who, in what context, and how those benefits can be sustained.

In addition to annual teacher interviews, the ESPRIT team holds a week-long professional development conference during the summer. During this conference, teachers are updated on the current analysis of the data collected in the school year, as well as general developments that have occurred regarding our methodology. Another portion of the conference is hearing teacher experiences from the project - their thoughts, motivations, and concerns for their future involvement. Finally, parents were invited to an afternoon meal where the essential elements of our research are explained and discussed, followed by breakout groups where teachers, researchers, parents, and some students collaborate and share ideas of how we can strengthen these relationships. This particular week is perhaps one of the most salient examples

of community-engaged research in action; the various stakeholders have not only knowledge about how and why we collect this data, but they are integral actors in the process as a whole.

These types of experiences have had a profound impact on my perception of education research. Within the ivory tower, without concern for developing community ties, it becomes easy to study the issues and ignore the discursive implications of our rhetoric. This is especially relevant in discussions surrounding the underserved populations in our society. How do we name the varying levels of test scores among different racial or ethnic groups? Is it useful or strategic to call it an “achievement gap”? What does “high parental involvement” really consist of? Asking these questions forces us to confront a truth we cannot avoid that the ways in which we talk about our population of study implicate us in our attitudes toward them. Ultimately, a bond forms between these collective perceptions and our research questions, methodology, and interpretation of findings, resulting in a series of confirmation biases and feedback loops.

In my time with this project, I have realized that all this rhetoric underlies a premise that if the kids only tried harder, or if their parents volunteered at the school more often, then the problems associated with educational outcomes would be resolved. It seems that in academia, there are at least two forms of ignorance: first, not understanding an issue, and secondly, acting with a sense of detachment. Detachment creates a dichotomy thus establishing an ideological bridge between the experimenters and the subjects. This separation of actors and stakeholders mitigates the potential for experimenter bias, yet the very act of doing so is ideological.

Broadfoot and Munshi (2007) contend that the traditional orientation of “reason, rationality and rigid structures that colonizes the world of lived experience” can also overestimate our ability to establish nuance and frame the narrative around education goals in a beneficial way. As attitudes shift from this deficit model towards something greater, research

bodies have struggled to develop a consistent methodological response. If the purpose of psychological or educational research is to find normative behavior among populations, then community-engaged research is a direct confrontation of that idea because it acknowledges that there is more diversity of experience and opinion within a given social group than there would be between it and another.

For our findings to be truly transformative, we must approach their projects in the same way that an effective teacher would approach a classroom - through a dialogical process of reflection and action with a strong community foundation. Researchers can only meaningfully promote social cohesion when they actively explore and value these differences rather than conceptualizing them as a deficit to be filled. Instead of imposing the reason for poor grades onto parents or students, we have a duty to ask what they struggle with. Instead of telling teachers what they are doing wrong, we must listen to what they believe needs to improve. If it takes a village to raise a child, then it takes a community to raise a research question.

### References

- Broadfoot, K. J., and Munshi, D. (2007). Diverse Voices And Alternative Rationalities: Imagining Forms Of Postcolonial Organizational Communication. *Management Communication Quarterly* 21 (2), 249-267. doi:10.1177/0893318907306037.
- Bronfenbrenner, U. (1979). *The Ecology Of Human Development*. 1st ed. Cambridge, Mass.: Harvard University Press.
- Community-Engaged Research (Cenr) | Regulatory Foundations, Ethics, And Law Program | Harvard Catalyst. (2019). *Catalyst.Harvard.Edu*. Accessed April 14. <https://catalyst.harvard.edu/programs/regulatory/cenr.html>.
- Hayakawa, M., Englund, M. M., Warner-Richter, M. N., and Reynolds, A. J. (2013). The Longitudinal Process Of Early Parent Involvement On Student Achievement: A Path Analysis. *NHSA Dialog* 16 (1), 103-126.
- Kuhn, T. (1962) *Structure of Scientific Revolutions*. Chicago University Press.
- McWayne, C., Hampton, V., Fantuzzo, J., Cohen, H.L., and Sekino, Y. (2004). A Multivariate Examination Of Parent Involvement And The Social And Academic Competencies Of Urban Kindergarten Children. *Psychology In The Schools* 41 (3), 363-377. doi:10.1002/pits.10163.
- "Minnesota Report Card". (2019). *Minnesota Report Card*. <https://rc.education.state.mn.us/#mySchool/p--3>.