# Authentic Research, Teaching, Events, and Assessments for Economic Prosperity: The STEAM of Responsive Education

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#### **ABSTRACT**

Responsive research serves as an alternative platform to address issues of human rights violations, ACEs, structural violence, and systemic poverty in particular as it relates to educational opportunities. This chapter identifies four step-by-step processes that can be used when conducting community-led research and education. Activist anthropology, studying up, studying through, and financial implications of debt foreground earlier efforts made by anthropologists to use their research as a way to examine how policy decisions shape cultural practices and impact the livelihood of specific communities. These efforts are expanded upon by examining the controversy, pitfalls, and rewards found within the epistemological paradigms and research methodologies. The second half of the chapter identifies four pathways researchers can use when engaging in activist anthropology: teaching to a goal; responsive mapping to uncover mystical barriers; community building as the goal for focus groups, interviews, and surveys; and responsive programs and events.

### INTRODUCTION

Pedagogical innovations in today's education network depend upon interdisciplinary education, eLearning, and cultural responsiveness. Science, technology, engineering, arts, and mathematics (STEAM) is an initiative that highlights problem-solving and initiatives serving science, technology, engineering,

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arts, and mathematics. STEAM, however, lacks a culturally responsive perspective to serve students fully. Additional measures in the research process, before applying STEAM methods, can create deeper insights. These insights include the process of responsive and iterative development, teaching, and assessment for individuals and multi-generational families. Cross-sector modalities that use qualitative and quantitative cultural research methods to shape curriculum and teaching can then target the specific needs of learners and remove barriers to educational opportunities.

This chapter focuses on responsive work (engaging and adaptive practical methods) with the following objectives. By the end of this chapter, teachers and students engaging in intercultural education will be able to:

- 1. Identify how cultural barriers, frameworks, and positionalities connect to responsive education.
- 2. Develop a community-engaged research plan supportive of responsive teaching on all educational levels.
- 3. Transfer knowledge of responsive research, teaching, and assessments to their initiatives.
- Identify, adapt, and replicate these tools in new contexts, as discussed in Chapter Five.

Businesses like Apple use this culturally iterative approach when designing and marketing their products. Customer feedback loops drive the production and execution of iterative versions of both software and devices (Friedman, 2020; Interactive Design Foundation, 2020). Thus, engaged, participant-driven research should be leveraged to develop educational products, like the successful approach of the private industry.

Research can be used as an iterative teaching tool. This chapter helps readers consider why and how to gather baseline research tailored to each situation and analyze the data to identify the proper modalities and content for teaching. It also describes how to focus assessments for specialized populations. Finally, utilizing engaging, participant-driven research methods establishes a baseline to more accurately evaluate an initiative.

#### BACKGROUND

### Activist Anthropology and Studying Up/Through

Activist anthropology connects different people, problems, and places by transforming traditional knowledge based on the integration of political positionality (Hale, 2008). Activist anthropologists must be engaged throughout each step of the research process alongside community organizations and individuals to address critical social issues based on similar political positions in a collaborative effort toward social change (Hale, 2008, pp. 3–4). Activist fieldwork includes seeking closeness with the community through fieldwork and practicing reciprocity, which can be achieved by acquiring additional attributes and leveraging current skills (e.g., database entry, writing grants) or providing tangible or political benefits (Pulido, 2008, pp. 354–356, 357).

The chapter explores participant-driven initiatives, a research design model generated by students and community members participating in a study that gives participants a chance to articulate lived experiences. The move toward participant involvement aims to place participants and researchers/teachers/organizers on more equal footing to produce work to directly benefit the community (Bird et al., 2006).

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