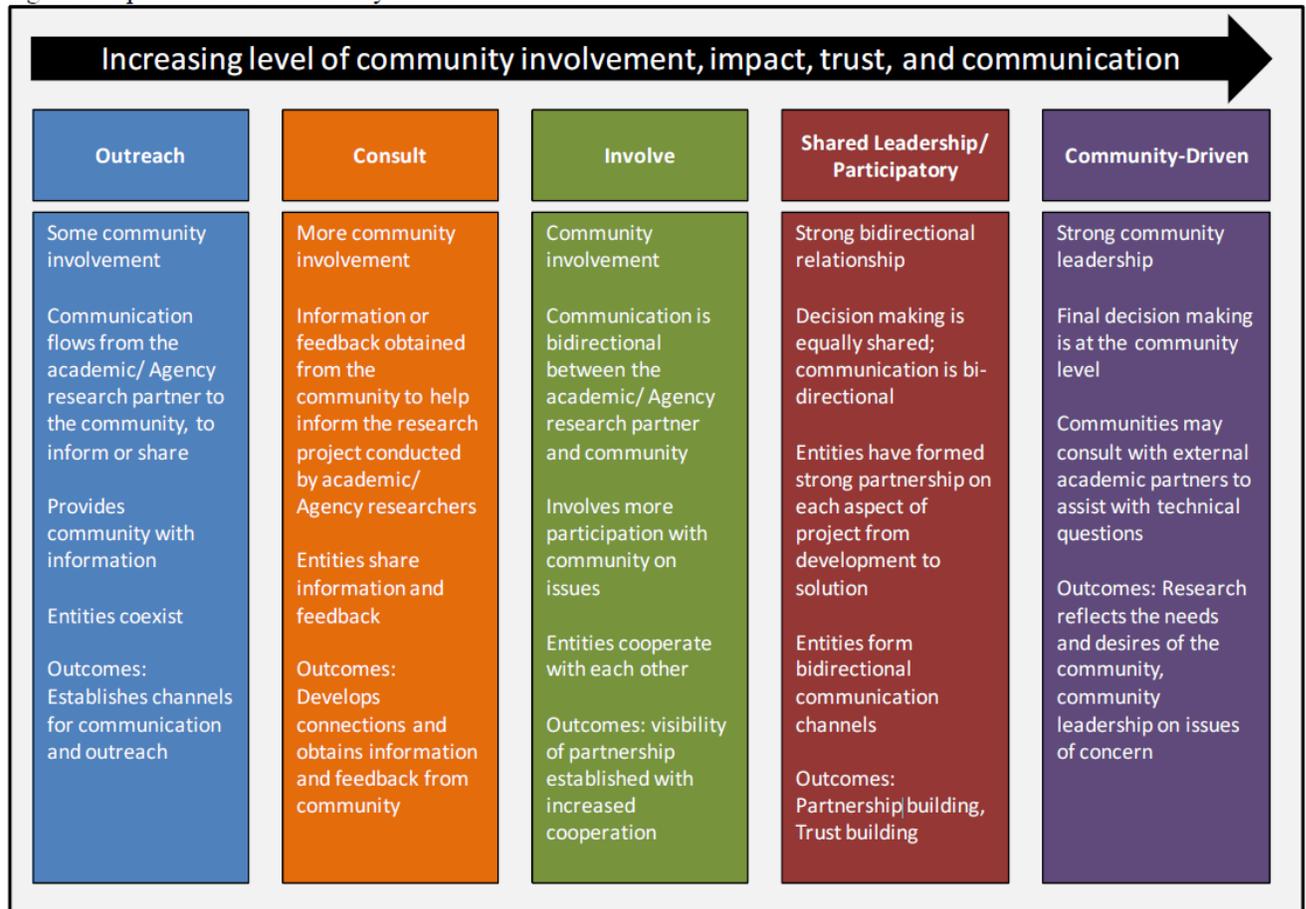


Video Title:	DRIVERS4EJ: Duwamish River Solutions for EJ Academy
Student Names:	Drew Slaney, Isebella Bergsma, Cianna Bergsma-Galarosa, Christopher Castroy, AJ Cooper, Guadalupe Sanchez, Alexis Sorm, Randall Thall, Jenny Meyeter, Rudi Mondragon, Zoe Stutman
Community Organization Name(s):	Duwamish Valley Youth Corps (DVYC)

A. Strategy Proposal

We developed our DRIVERS4EJ Academy following principles Community-Based Participatory Action Research (CBPAR). According to public health scholars, CBPAR is not a research method, but an orientation to research aiming to increase community relevance through power sharing (Green and Mercer 2001). Others described how CBPAR reemerged as an alternative to expert-driven outreach and consultation seen on the left of Figure 1 below (Clinical and Translational Science Awards Consortium and Task Force on the Principles of Community Engagement 2011). Truly community-driven CBPAR falls on the right-hand side and ensures research is co-developed with the community and results address community needs (Park et al. 1993).

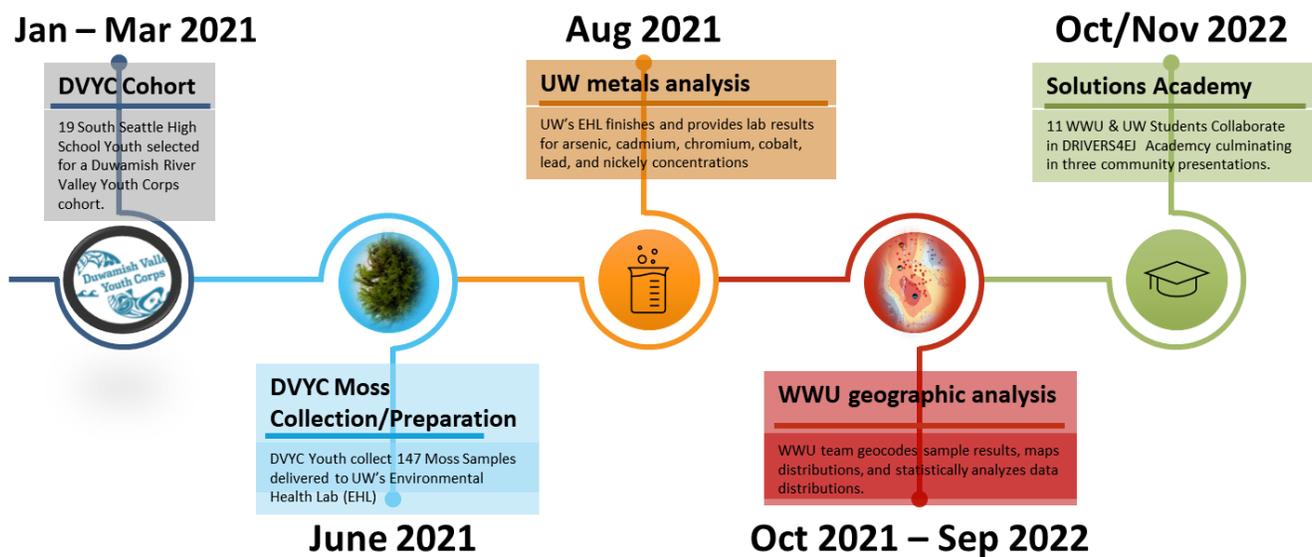
Figure 1: Spectrum of Community Involvement in Research



Modified from Principles of Community Engagement, 2nd Edition and Scammel, 2007

Environmental Justice (EJ) is defined as the fair treatment and meaningful involvement of all people regardless of race, color, national origin, or income with respect to the development, implementation and enforcement of environmental laws, regulations and policies according to the Environmental Protection Agency (EPA). This form of social justice emerged as a movement, scholarly field, and public policy aspiration in the late eighties. EJ also began to reshape environmental institutions and their practitioners. Yet, an EJ blind spot persists in the field of environmental education.

For example, several studies documented how mainstream K-12 environmental curriculums rarely included EJ topics like hazardous waste location and air pollution exposure disparities (Haluza-DeLay 2013; Kushmerick, Young, and Stein 2007; Nussbaum 2014). Even EPA’s definition of EJ leaves out meaningful involvement in EJ science. Education in EJ science swims against strong currents. First, structural racism pervades the sciences and professions of environmentalism and sustainability (Dutt 2020; Gatheru 2020; Goldberg 2019; Purifoy 2018; Ruf 2020). Environmental education pedagogy tends to reinforce the field’s uniformity and exclusiveness. Second, environmental education’s epistemology reflect the values, belief systems, and worldviews of predominately White scientists (Medin and Bang 2014; Miller 2018). These epistemologies marginalize nonwhite views of nature and subsequently Black, Indigenous, and People of Color (BIPOC) students. Third, the spaces of environmental curriculum often distance students from the lived EJ challenges their communities confront and subsequently, the pursuit of desperately needed solutions and policy change.



B. Description of Community Partner Collaboration

Western Washington University’s Dr. Troy D. Abel collaborated with Carmen Martinez from the Duwamish Valley Youth Corps (DVYC) in the development of our DRIVERS4EJ Academy. Designed to continue engaging alumni from the DVYC in a CBPAR academy, Carmen and Professor Troy helped prepare us to share our research results with two neighborhoods where we collected moss to characterize toxic metal air pollution disparities in the Duwamish River Valley.

C. Description of the Use of Publicly Available Data/Tools

DRIVERS4EJ Academy uses EJSCREEN to examine potential sources for the toxic metal disparities revealed by moss analysis.

D. Resource Needs for Strategy Implementation

Our DRIVERS4EJ Academy was supported over the last year by our academic advisor Dr. Troy D. Abel, and DVYC staff Carmen Martinez and Crystal Perez. Both devoted over 20 hours of time to the academy. We estimate that we need nearly \$60,000 to implement our policy change strategy. We projected additional instructional support from Dr. Abel for an environmental law and policy academy to cost approximately \$17,000 (for a course buyout and time devoted to student mentoring). We also projected continuing graduate student support will cost approximately \$13,000 for one term; student tuition for the academy is approximately \$2,600 for nine undergraduates (\$288/credit); and student stipends will be approximately \$4,500 (\$500 per student).

E. Barriers to Strategy Implementation

Community education efforts may not lead to policy changes like more monitoring, tighter emission standards, or reduced transportation and industrial impacts.

F. Measures of Successful Strategy Implementation

The DRIVERS4EJ community education efforts engaged 72 South Seattle residents and youth, 18 adult residents from the South Park neighborhood, and 16 Georgetown neighborhood adult residents. A successful future for the DRIVERS4EJ academy include the number of presentations academy alumni make to state and regional air quality authorities, participation in rule-making for tighter state air pollution standards, and policy changes that regulate ambient toxics emissions in Washington beyond current but minimally compliant air quality rules.

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