



Cities on Volcanoes 9
November 20-25, 2016
Puerto Varas, Chile

'Understanding volcanoes and society: the key for risk mitigation'



Promoting Community Resilience to Natural Hazards using Active-based Learning

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What are the best ways to promote protective action behavior amongst communities at risk to natural hazards? This project started because I realized the capacity of engaged learners to make a difference in their community. Simply learning about natural hazards was not enough. What ultimately engaged students in my class was actively mapping local hazards, vulnerabilities, and risk, and discovering the inaccurate risk perception and low levels of preparedness for natural hazards through a community questionnaire. Their new knowledge and unique perspective inspired students to promote preparedness through discussions with their friends and family, and to develop Facebook pages with information about preparing for local hazards. We propose to build on the principle that engaging individuals in active-based learning of natural hazards will allow them to personalize risk and develop positive attitudes toward the efficacy of taking protective actions. We base our research on the Protective Action Decision Model, which integrates approaches in social influence, persuasion, behavioral decision making, and attitude-behavior relationships to demonstrate the phases through which an individual must typically pass before taking protective action. The objectives of our work are to test the efficacy of a training intervention on protective action intention and adjustments, to identify cultural influences on risk perception and preparedness behavior, and to assess the accessibility and usefulness of hazard maps as a communication tool. In this presentation I will introduce an education module, 'Map your Hazards!', which forms the basis of our work. I will also introduce our research study, planned for Portland, Oregon (USA), with the goal of (1) providing the theoretical framework for our approach and implementation, and (2) receiving feedback to make our efforts applicable to communities around the world that are at risk to volcanic hazards.



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