“Doing” Theory and Practice: Steps Toward a More Productive Relationship Between Science and Technology Studies and Nontraditional Science Education Practices

Thesis

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Abstract:
Explores the relationship between nontraditional science education practices, structured by campaigns such as Public Understanding of Science (PUS) and Scientific Literacy (SL), and the field of Science and Technology Studies (STS), using ethnographic work with the Choices and Challenges Project at Virginia Tech as a ‘point of entry’ (Smith 1987) for a broader discussion. It points to the difficulty of “doing” theory and practice at the same time. While affirming that there is no easy solution to the hard work of situating local, nontraditional science education practices within a critical theoretical tradition such as STS, this project also provides recommendations for a new framework to conceptualize a more productive interaction between the practice of nontraditional science education and the theory of STS.

In a postscript, I conclude by urging all researchers within the field of STS to begin to recognize that maintaining the false split between our academic research, undergraduate teaching, university outreach, and community involvement is a failed project. As STS researchers, I believe it is, in fact, our obligation to our local and global communities to adopt an interventionist strategy and to use our work – without apology – for directly political ends. Challenging the technoscientific-political context in which we live always involves a level of real risk – but it is also our only opportunity to achieve real success. Our participation in this challenge is a responsibility to ourselves and to our communities that we must recognize and accept. This participation should not be shunned, but rather applauded.