Professional Development at a Crossroads: Using Vexations as the Focal Point

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Workshop presenters:
John Settlage, University of Connecticut
Adam Johnston, Weber State University
Lee Meadows, University of Alabama, Birmingham
Heather Harkins, University of Connecticut
Julie Kittleson, University of Georgia

Abstract: Participants write about vexations in advance, share those with others, and receive feedback in a manner reminiscent of Crossroads conferences (conferences.weber.edu/crossroads).

Description and Relevance

With so much expertise and advice to offer regarding the professional development of science teachers, it is ironic, if not tragic, to realize that similar care and consideration has not been extended on the behalf of science teacher educators. The concept of formally providing professional development to attendees of the ASTE annual meeting is a fairly recent phenomena and a cause for hopefulness. However, by and large these professional development opportunities suffer from the problems many science educators decry regarded teacher workshops: they are superficial, the learning theory seems based in principles of cognitive osmosis, and the delivery of expertise is typically unidirectional. The proposed embedded workshop is a deliberate departure from such practices drawing, as it does, from the same knowledge base as informs high quality professional development for science teachers (Loucks-Horsley, Love, Stiles, Mundry & Hewson, 2003). The purpose of this session is to model an alternative approach to professional development even as it serves the needs of those who attend.

In the fall of 2005 thirty-five stakeholders in science education (i.e., teacher educators, lab scientists, educational researchers, classroom teachers, etc.) gathered in New England to share their sources of their successes and vexations within their professional lives. As a place where individuals could meet for a couple of days and then move along on their respective paths, this conference was promoted as Science Education at a Crossroads. The consequence was a collection of thought provoking papers along with a resounding message that this effort deserved to be repeated. The 2006 version of Science Education at a Crossroads was scheduled in Ogden, Utah in response to the need expressed by the participants to continue to foster the challenging and generative conversations. The decision to offer the second conference in the American West was an effort to accommodate the geographic distances that may have dissuaded some potential participants from attending the first Crossroads in Connecticut. Because this endeavor is purely self-sustaining, each participant is obligated to find their own funding to cover the costs of travel, lodging, and registration. Despite a concerted effort to keep costs as low as possible, the fiscal reality is that many are still unable to attend. It is for this crowd that this workshop is designed.

As a distilled version of the Crossroads Conference series, this workshop will extract the essence of the larger event for the purposes of modeling this project. In particular, the workshop will demonstrate the use of (1) poetry as a tool to support introspection and (2) facilitated discussions about vexations as a way to advance professional growth. In a nutshell, this approach to professional development draws from three major educational theories: Piaget’s notion of cognitive disequilibrium, Vygotsky’s ideas of social constructed knowledge, and Senge’s program of learning communities (Senge, Cambron-McCabe, Lucas, Smith, Dutton & Kleiner, 2000). Poets from whom we draw inspiration include the works of Billy Collins, Taylor Mali, Jimmy Santiago Baca and Antonia Machado as well as the philosophies of John Dewey, José Ortega y Gasset, Maxine Greene and Richard Rorty. In total, these authors supply the resolve and commitments that encourage scholars to recognize their role and responsibility as activists.

The defining feature of Crossroads meetings are the Incubator Forums. In advance of the workshop, just as for the actual conference, participants are to generate one-page documents in which they identify a particularly challenging issue they face within their work. These Vexations become the centerpiece of the Incubators. Each presenter, without benefit of projection devices, describes their vexation (its source, its context, its impediments,
and its significance) to approximately a dozen colleagues which include a designated Facilitator. The Facilitator monitors time and allocates ten minutes for the presenter to share his/her vexation. Then 5 minutes are allotted for the group to pose clarifying questions. For the next 15 minutes, the Facilitator prohibits the presenter from making any comments; instead, she/he must attend to the suggestions, criticisms, comments, and recommendations of the others in the group. During the final 5 minutes of an Incubator Forum, the presenter is allowed to remark upon what was just heard.

Two full days at a Crossroads meeting allows many individuals to share their Vexations. In truth, no one can attend Crossroads without agreeing to be the focus of an Incubator Forum. Because full immersion and complete involvement is central to the success of Incubator Forums in general and the Conference approach in particular, attendees of this workshop will need to register in advance and submit their vexations so they can be duplicated and distributed.

Pertinent Reference List