

EVALUATIONS

New England Workshop on Science and Social Change Spring 2011 Workshop "Open Spaces for Changing Science and Society"

(This evaluation was administered online after the workshop, yielding 6 responses from a possible 12 participants)

Synthetic statement (1 or 2 paragraphs) evaluating this workshop. (You might build on/build in your comments from Qs 1-3.) Please make comments both to help us develop the workshop in the future and to enable some third party appreciate the workshop's strengths and weaknesses.

A. The NewSSC gathering at Woods Hole brought together a small group of interdisciplinary researchers interested in science in social context. The workshop created a reflective and meditative space that allowed participants to connect quickly with one another, while finding opportunities for individual exploration and development. The workshop's topic created a framework for the use of interactive processes that allowed individual voices and ideas to join into collective dialogue and then feedback into individual reflection and learning. The group dynamic was amazing and I felt strongly connected to all of the participants present at the gathering. The structure and preparation of the workshop also allowed individuals to play multiple roles and there were many opportunities to interact with others. Activities like the daily writing, provided opportunities for me to develop my own thinking around the topic and connect it to others. I found the experience to be personally and professionally fulfilling and am interested in continuing the dialogue with those present.

B. As we step into the future of science, new approaches to working are necessary in a way that was not a requirement for science as it has historically been conducted. However, the complex issues that we have bumped up against are those very issues that were not amenable to our current reductionist, competitive, single-PI scientific approaches. The systemic breakdowns in the system are extremely 'big' - yet the core of science can continue as-is without being directly affected. A sure sign of a complex system - the cause and affect are separated in time or space. One of the largest trends of extreme concern is the accelerating loss of our most talented young scientist pool - we dropped from a high-water mark of over 30% of top-quintile high school graduates (grade point and SAT scores) that received STEM degrees and were either in graduate programs or working in STEM 5 yrs post-degree, to under 14% of this group persisting in the last cohort measured. This trend is also seen in the 44% of Stanford NIH-funded post-docs that leave science altogether after their training period. It's the top we're losing, not the bottom. At the glacial rate of assessment and top-down change currently attempted, we will lose a complete generation of top scientists - and very late in the game for them. I feel we MUST use new approaches that utilize spaces that allow trust, vulnerability, and non-hierarchical communication to let a common vision for the future of science emerge. It will not come from the top - and it will not come from the grass-roots. It will come from our ability to bring all sectors together into a space such as that created at this workshop, to allow the wisdom of the crowds to emerge with all parties present.

C. I very much recommend this workshop! The opportunity to engage in a horizontally-organized learning space is extremely valuable in broadening perspectives, both in terms of content and process, and is unfortunately rare. This workshop created a container for participants to connect across their personal and professional experiences, offered space for us to use and share our skills directly by facilitating activities ourselves, and had a general tone of making connections between science and society within and beyond the room. It was unique in that there was no opportunity to 'hide'- participation was not only expected, but built into the structure such that we couldn't help but be 'walking the talk' of participatory learning. I think it's so useful that I intend to follow up by pursuing the creation of a similar workshop next fall! While socially intensive, this workshop did an excellent job of making sure we were nourished and had breaks, which I appreciated. In such a whirl of activity, it could be hard to lose sight of one's objectives. In a future workshop I would set up a daily check in for myself to see where I was in relation to my goals, and perhaps to set a sub goal for the day. This would ideally be something like a 5m freewrite followed by a 5m check in with a 'goal buddy'.

D. I participated in the four day "Open Spaces" workshop run by Peter Taylor (UMASS-Boston). In the New England Workshop on Science and Social Change, I learned several activities that can help bring about open spaces for dialogue, creative exploration of ideas, and collaborative planning, with the potential of inclusion and empowerment of many diverse participants. I believe that we all came away thinking the experience was very positive. While I found the experience to be very emotionally charged, and thus 'risky', I am also coming back from it excited about the tools that we used and how effective they seemed. I am interested in the potential of such tools as: autobiographical introductions, free-writing, theatre therapy, figure/ground diagramming, narrative therapy, etc. to name a few. Through all of the individual activities and exercises, as well as the small group exercises (all of which were collaboratively planned by small teams) we thought inside, outside and around the critical interpretation of S&T research and how to organize social movements. I hope to use such activities and exercises as tools to encourage critical thinking among engineering undergraduate students, especially mechanical engineers.

E. Open spaces are needed by everyone—activists and academics alike—because spaces get closed off in our activist or academic work and lives. This work and our lives suffer as a result. This workshop continued the development of an open spaces tradition at Woods Hole. The daily writing innovation promises to make it possible for future workshops to generate material for a written product so that people who weren't there can learn from what happens.

F. I felt that the workshop was very productive. Have participated now for the third time, I still learned new things and/or was able to focus on issues where I wanted to learn more or where I felt I did not enough use of when returning home from the former workshop. I liked very much the open and sensitive way in the organisers conducted the workshop, allowing for an atmosphere of great trust among people that mostly has not met before. Also, I like the fact of being surprised by others and by myself and of finding the time to think about methods but also about my own attitude towards my professional and private interactions with people. To me it is a highly valuable experience which I will also recommend to my colleagues and students.

DETAILED QUESTIONS

1. Start with an evaluation of yourself Think about your personal goals in joining this workshop - Did you achieve them? How could you have proceeded differently if you were attending this workshop again? What have been your major personal obstacles to gaining more from this workshop?

1. Self-evaluation (continued) What have you learned about what you have to do to make an "interaction-intensive" workshop stimulating and productive?

2. General Evaluation: How did the workshop meet or not meet your expectations? How did your attitude to participating in the workshop change through the four days? How do you think the workshop could be improved? What was special about this workshop (negative & positive)? How does it compare with other workshops? What would be your overall recommendation to prospective participants?

3. Evaluation in relation to the workshop description--Read the workshop description/goals below. Comment on how well the goals expressed were met. Make general and specific suggestions about how these could be better met.

"Open Spaces for Changing Science and Society" Applications are sought from teachers and researchers (including graduate students) who are interested in moving beyond their current disciplinary and academic boundaries to explore concepts and practices that help us work in the arena bordered on one side by critical interpretation of the directions taken by scientific and technological research and application and on the other side by organizing social movements so as to influence those directions. The metaphor of "open spaces" suggests that the issue is not so much to bridge the two sides as it is to acknowledge the value of discussion, reflection, and clarifying one's identity and affinities with both sides kept in view. Whereas the young Karl Marx proclaimed that the "philosophers have only interpreted the world, in various ways; the point, however, is to change it," what happens when we allow for more dialogue and deliberation before or as a complement to-jumping into campaigns for change? (In this spirit, open spaces has been used to characterize Social Forum meetings at the World, national, or regional levels.) Interpretations from science and technology studies often suggest that things could be (or could have been) otherwise, but when should effecting change be the litmus test of STS critique? What can we learn from examples of explicit and implicit open spaces and what can we share from our own experience? In particular, how can NewSSC articulate and develop its role as a valued open space for participants, some of whom return many times for a recharge and affirmation of aspirations that are not well supported in home institutions and day-to-day interactions? Participants are encouraged, but not required, to submit a manuscript or sketch related to the workshop topic that would be read by others before the workshop and be subject to focused discussion during the workshop. There is also room for participants to develop--either before or during the workshop--activities or interactive presentations to engage the other participants.

Specific objectives of NewSSC

1. Promote Social Contextualization of Science --To promote the social contextualization of science in education and other activities beyond the participants' current disciplinary and academic boundaries.

2. Innovative workshop processes --To facilitate participants connecting theoretical, pedagogical, practical, political, and personal aspects of the issue at hand in constructive ways.
3. Training and capacity-building--To train novice and experienced scholars in process / participation skills valuable in activity-centered teaching, workshops, and collaboration.
4. Repeatable, evolving workshops—To provide a workshop model that can be repeated, evolve in response to evaluations, and adapted by participants.

RESPONSES

A

1. I hoped to gain some insight in open spaces that would inform my thinking on self-organizing systems. I also wanted to learn more about the processes of the workshop and how they might inform my own community-based work. One area that I don't think I fulfilled well was the role of backup to the main facilitator. I would make sure to be more aware of this in the future. In terms of personal obstacles, I am often resistant and skeptical which impeded my willingness to engage fully.

The main thing that is clear is that some sort of structure is necessary in order to really allow others to have freedom to act. This insight is influenced by my participation in the Arouca workshop as well.

2. I'm not sure what my expectations were other than to participate and see what happens. I was amazed at how well the process worked of connecting participants to one another. In conversations with Peter and past participants, they indicated that the autobiographical statements were useful in creating this. Not sure what could have been improved, but the workshop was special in creating a reflective space and connecting participants to one another. This doesn't happen as often as it should in other venues. The experience was unlike other workshops in that the process aspect was very visible and present. For prospective participants looking for a space to reflect, connect and learn new processes I think this is the ideal type of experience.

3. Participants were definitely cross disciplinary in their thinking and approaches. The workshop was willing to build off of these realities. However, the workshop focused far more on processes rather than specific science or social context topics. The workshop definitely keeps processes at the center and used the "topic" as a means to model these processes. Participants were free to bring their own activities to the table and these were included in the gathering. Others were included in the mechanics of several activities and the elements were well documented and transparent. This documentation, transparency, and modeling all work to provide a basis for participants to take these workshops forward into their own work.

B

1. 1) Personal goal: to see what the organizer was working towards, to evaluate its overlap with our organizational goals and to get a 'reading' on the emergent ideas represented by the group. I achieved this goal. 2) Prior to attending in the future I would proceed differently by creating an exercise to share for the conference. 3) I was not able to submerge myself in the workshop, as I would have wished. I had a good bit of business needing to be conducted during the breaks and in the evening. This was difficult given the submersive nature of the meeting (which I prefer -

however, that doesn't mean I had success in setting this up effectively for myself. With fore-knowledge, I think I could do that better in the future).

I am all the more convinced of the value of experiential workshops. The moments of personal insight are informative and important for the type of work being conducted both by Peter Taylor and in this workshop, and also in the work we are doing at our organization. The reason I believe this transformative learning is of importance is because only gut level understanding affords sufficient passion and understanding for long-term, systemic changes currently called for in science.

2. Met my expectations. My attitude to participating became more relaxed over the four days - I knew what to expect more as the days progressed. What was special? Positive: the group activities (outdoors) with this particular group. The group was appropriately diverse AND I felt the individuals were very gifted - a very high level of abilities were represented. I liked that. Negative: I don't have anything here. What was perhaps uncomfortable for me is not anything I would change. It's not a bad thing to have some discomfort. This workshop compared with others I've been to this year in the following manner: I've been to 5 other conferences or workshops so far in 2011 and they fall into two distinct camps. Most of the conferences I've been to have been in a creative space that agrees well with this one - there is a special energy and edge to it, with people being willing to take on some unknowns and to work toward common goals. The one that falls squarely in the 'other' camp was the AAAS conference. Though the talks were informative, the energy is totally different. Not a creative space in the same way what-so-ever. This space has more personal outcomes. Ideas are created, shared and continue to develop after the event ends. Overall recommendation: however you're selecting currently, it works. People came prepared to explore and share. It would be great to figure out some collective follow up. This is a task I struggle with myself for our events.

3. The implicit take-home for me is that 'open space' as it pertains to creating, listening for, evaluating, exploring or letting be a community (within science or otherwise) is an experiential endeavor to shift internal dialogs. Internal dialogs are the seed-bed for group dialog and vision - in a time of flux (I believe we can make the assertion that this is true in science and society no matter what your convictions on the nature of the outcome) continuing either with what has worked before OR trying to 'correct' what isn't working are both approaches that 1) will create more of the same or 2) create entrenchment of the same. It is the 'being in new spaces' as a group endeavor that allows personal 'aha!' moments that create new openings, that can result in new outcomes.

C

1. In a future workshop I would set up a daily check in for myself to see where I was in relation to my goals, and perhaps to set a sub goal for the day. This could take the form of walking by myself to the site followed by 5 minute freewriting. My personal obstacle was finding non-social space. Sharing a room with a stranger means I'm socially 'on' even when I'm in retreat, and I wasn't able to identify a lobby or other 'anonymous public' space to be in the evenings. I need to prioritize alone time on breaks to regroup from the social interaction. I need to keep my personal goals and interests in mind throughout the day, as I get very interested in others, and lose track of my own. Normally I would also have to prioritize eating well, but this workshop did an excellent job of making sure we were nourished, which I appreciated.

2. I very much recommend this workshop to prospectives. The opportunity to engage in a horizontally-organized learning space is extremely valuable in broadening perspectives, both in

terms of content and process. This workshop is also invaluable for making personal and professional connections across the field. I would suggest that the participants meet to decide what they'll do together on day one, and then have two days to refine it. (e.g. the theater activity, the false statements, the meditation walk).

3. Objective 1- came up over and over again in our conversations, and was underscored in our attention throughout. Objective 2- the workshop created a container for participants to connect their personal and professional experiences, offered space for us to use and share our skills directly by facilitating activities ourselves, and had a general tone of encouragement towards making connections within and beyond the room. Objective 3- this workshop was unique in that there was no opportunity to 'hide'. Participation was not only expected, but built into the structure such that we couldn't help but be 'walking the talk' of participatory learning. Objective 4- I intend to follow up by connecting with the organizer about creating a similar workshop next fall- objective met! While I understood the objectives of the workshop at large, I was unclear if there were objectives specific to THIS workshop (e.g. relating to open spaces, science, society). It may have helped us to either be presented with, or to collectively formulate a guiding objective. (e.g. what does 'open space' mean in the context of science?)

D

1. My personal goal was to take baby steps towards learning about teaching as a social process and learning as a social process (in the context of teaching a critique of appropriate technology to engineering undergraduates) and so I believe I met them. I'm not sure about how I would have proceeded differently if I was attending this workshop again. I learned a lot about myself and different ways of performing group collaboration and idea generation and I really value what I learned but I'm not sure how it could have been different if I had proceeded differently.

Wow -- so I learned that in order to make an interaction-intensive workshop stimulating and productive requires a lot of pre-planning in order to create the space to have these intense stimulating moments. Not just the ordinary conference planning (e.g. selecting a venue, calculating costs, soliciting registration fees, etc) but also extraordinary planning (e.g. which tools to use will elicit group closeness and cohesiveness? in what order do we use these tools so that we are prepared to discuss the workshop topic of open spaces in a stimulating way?)

2. The workshop was much more personal and emotionally intense than I expected. This was deliberate on the part of the organizers but for some reason (perhaps the calm and staid workshop description?) I was not prepared for the degree of emotional intensity. I also enjoyed the physicality of some of our exercises which involved play-acting with our bodies in the theatre therapy, and thinking about our bodies in the figure/ground exercise. I have never attended another workshop to I have no comparison. However, it is much more interactive and interesting than the conferences I have attended.

3. Quoting from the original "Open Spaces" CFP "work in the arena bordered on one side by critical interpretation of the directions taken by scientific and technological research and application and on the other side by organizing social movements so as to influence those directions" when I first reflected upon this part I thought to myself 'uh oh we did not do that!' Then I realized we did, but we just did not come to a *consensus* about it. Instead through all of the individual activities and exercises (that were collaboratively planned by small teams) and the sm. group exercises (that were also collaboratively planned by small teams) we thought inside, outside and around the critical interpretation of S&T research and how to organize social movements. We definitely hit objectives 1-4 by doing all of those exercises.

E

1. To articulate and develop the role of NewSSC as a valued open space for participants--achieved soon after the workshop. To introduce daily writing and see if it is picked up by participants--achieved during the workshop. Proceed differently: Use daily writing as a touchstone with respect to the workshop topic--bring it into the start of day check ins and collate daily writing by the end of the workshop. Obstacles: Outstanding student work to pay attention to in spare time. Not enough time to hang out.

Spend time beforehand establishing roles with workshop assistant.

2. Participants were again enthusiastic, even though some admitted being unsure of their footing at the outset. Initiatives taken by others, e.g., preparing food, proposing a ferry ride, continuing daily writing, made me feel positive about the experience. I would recommend that participants start daily writing about the workshop topic beforehand so they can both get into the workshop processes AND shine the light on the topic when it gets eclipsed by process.

3. NewSSC objectives 1& 2 were achieved; on 3 trainee facilitation didn't happen much; on 4. we should have done this evaluation at the workshop. We didn't get any manuscripts except Lee's. Surely others have written work -- needed to be brought to light before the workshop so we could see how to bring it into the mix. The Open Spaces theme was enacted more than theorized.

F

1. I did achieve my personal goals in this workshop. If I would attend the workshop again, I would have prepared/suggested an activity by myself, which I could not do because of a lack of time.

I have learned that time and timekeeping are very important issue: I liked the autobiographical introductions, giving time to get to know everybody, also the more silent persons; also o have a strict timing and rules to allow equal participation of all and further creativity by these means.

2. The workshop met my expectations, the more, because I participated for the third time. The special thing in this workshop was that the content was more open. A more focussed content (e.g. on a specific politically and socially scientific subject) is more appealing to me. However, the less specific topic allows for a broader range of interesting persons with unexpected perspectives. Prospective participants should be open and not bring too detailed expectations, be willing to be surprised.

3. I think that the second, third and fourth objectives were met very well. I felt, however, that with this special workshop the first objective was more in the background and not dealt with so much. I would recommend to have in some workshops again a more focussed scientific field/problem area along which the goals are pursued. These specific fields should not be the centre, but the example to make the different processes more concrete.