

Analysis of feedback from the Expanding Potential 2014 Workshop and resulting changes

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Background

The first Expanding Potential Workshop was held on November 15th, 2014. The workshop centered on issues facing women in STEM and intended to highlight biases in the workplace, how to deal with those biases, and career development and networking. The day consisted of informational sessions on implicit bias, impostor syndrome, careers in industry, a panel on career transitions, a roundtable on women's issues, and a networking activity.

Attendees were almost all female and included a majority of graduate students followed by undergraduates and postdoctoral fellows. Other attendees included faculty, staff, and industry and non-profit professionals.

Registration Feedback

Attendees answered two questions when registering for the workshop that addressed what they hoped to gain from the workshop and to briefly explain their career goals. Not all those registered attended the workshop and as we allowed walk-ins, some attendees had not registered. Only the data from those that registered and attended was analyzed (a total of 148 individuals).

Registered attendees identified several areas in what they hoped to gain, including (in no particular order):

- ability to share experiences and develop a network with other women in STEM facing similar issues
- gain insight on challenges along different career paths and how to navigate those challenges
- career transitions and skill development
- learn about bias and strategies to overcome and talk about bias
- useful information and resources for themselves and to share with colleagues
- to build confidence
- work-life or family balance
- how to overcome impostor syndrome
- how to support and mentor women in STEM
- how to gain success in the STEM fields
- how to deal with male dominated workforces
- networking for careers
- strategies for empowerment

In general most registered attendees' career goals centered on faculty at a large research institution, research and teaching at a liberal arts and sciences institution, and industry positions. Other career areas listed were leadership position in administration, teaching, medical fields, science communication, science policy, education policy, education and outreach, diversity, national lab or governmental agency positions, consulting, staff scientist, high school teacher, genetic diagnostics, pharmacy, and business development. Some respondents were simply undecided. Other less defined

goals included continuing on the research track, continuing to build and improve skills, and working to improve health, environment, societal, and labor concerns.

Post-event Feedback

After the workshop, a survey was administered for feedback about the workshop. Ninety attendees filled out the survey.

Respondents rated the overall workshop from very poor to excellent (given a score of 1 to 6). The average rating was a 4.67 +/- 1.06 (corresponding to between good (4) and very good (5)). Other ratings included not good (2) and okay (3). The overall breakdown is as follows: skipped = 2, very poor = 0, not good = 3, okay = 8, good = 26, very good = 29, and excellent = 22. From this, we concluded that the workshop generally met the needs of attendees but there was room for improvement.

Attendees were asked to rate four individual speakers, the transitions panel discussion, the roundtable of women's issues, and the networking activity on a scale from 1 to 10 with 10 indicating most useful/informative.

The four speakers included Mary Ann Mason: "Do Babies Matter? Graduate Students and Postdocs", Anne MacLachlan: "Alligators and Implicit Bias: Building your career without getting bitten", Maria Padilla: "Unmasking the Imposter Syndrome: Outdated Gender Norms", and Alan Sachs: "Industrial career perspective: Academia, biotech, and pharma". Alan Sachs was a substitute speaker as the originally scheduled speaker canceled the morning of due to an illness. The average score of each speaker ranged for 6.06 +/- 2.90 to 7.73 +/- 2.08 with an overall average for the speakers as 7.18 +/- 0.78. These results suggest that while speakers were above average for usefulness, a lack of information existed.

The transitions panel included individuals from different career paths including academia, industry, and education, outreach, and diversity. The panelists were meant to highlight their careers and the paths they took to achieve these positions with questions from attendees. The conversation did veer away from careers and more into general issues brought up during the rest of the workshop. Attendees gave this an overall rating of 8.13 +/- 1.89.

A Roundtable of Women's Issues in STEM (moderated by Paul Burnett) followed the transitions panel. Any remaining speakers were welcome to participate with questions from attendees. Given that the tone of the panel veered away from careers, the roundtable ended up being a continuation of the discussion on topics covered during the entire workshop. Attendees rated this as an 8.12 +/- 1.71.

Finally, we conducted a networking activity set-up as a speed networking session. While intended to be very structured, given the length of the day, we made this more informal. Individuals were assigned a number of 1, 2, 3, or 4 on their badges and instructed to pair up (e.g. a 1 to pair up with a 2 and a 3 to pair up with a 4) and switch approximately every 5 minutes. Those that wanted to participate could while others were welcome to enjoy the reception and mingle as they saw fit. The attendees gave the networking activity a rating of 6.99 +/- 2.15. This was met with mixed feelings including:

These cumulative results are reflected in responses to the open-ended question "What parts of the event did you particularly like or dislike, or think were executed well or

poorly?” following the ratings. Attendees appreciated the event, found it informative, and enjoyed the chance to network and interact with other attendees. However, many suggested that the talks, panels, and networking activities could have been restructured to be more effective. Several responses sought more in-depth active approaches for the topics covered rather than anecdotes, while others appreciated the anecdotes. This might reflect the amount of exposure each attendee has to these issues already as many were hearing it for the first time while others felt like it was the same message they have heard at similar events. Finally, some were offended by the speaker presentations due to their lack of awareness of the issues discussed.

In addition we asked about the length of the event. The scale was from much too short (1) to much too long (7). The intervening values were somewhat too short (2), slightly too short (3), about right (4), slightly too long (5), and somewhat too long (6). Not surprisingly, no one thought the event was much too short, somewhat too short, or somewhat too short. The responses included 3 individuals that skipped the question, 45 for about right, 26 for slightly too long, 12 for somewhat too long, and 4 for much too long. In organizing the event, we aimed to cover many topics and realized the workshop was quite long. Some attendees did suggest breaking the workshop into two days in the open-ended question stated in the above paragraph.

We concluded the feedback survey with two open-ended questions that asked attendees for comments or constructive feedback and topics or activities for the future. This was in addition to talking to attendees at the reception about their perceptions of the day and what they liked and disliked. In conversations, the general sentiment was positive and that the event was greatly appreciated but that changes could be made to improve for the next workshop.

The answers to the comments and constructive feedback were very similar to feedback about the parts of the event. Namely, people wanted more action-oriented items, less negativity around anecdotal evidence, strategies on how to overcome discrimination and empower oneself, to have a safe space to share all experiences, and more structured networking.

Most of the feedback about activities for the future centered on small group discussions about how to actionably deal with bias and other issues that women face and better networking and career development advice. Other suggestions were redundant with previous responses. The responses suggested that the day was quite long on speaker talks and that there was not enough one-on-one interactions.

All identifiers were removed when analyzing the data.

Changes based on the analysis

We considered as much of the feedback as possible when considering how to change the workshop for the next year. While we did want to address everyone’s positive and negative sentiments, some were contradictory and we opted not to change too much in order to better understand what works and what does not.

After careful consideration and much consultation, we decided that the next workshop would concentrate not just on women, but on all underrepresented groups, as there is a common thread of bias and micro-aggressions towards those not well represented in

STEM. This is also to acknowledge that people are not solely defined by their gender, and issues arise by this intersectional definition of one's self.

In addition, we decided to split the workshop into two days: Day 1 would concentrate on recognizing the issues and Day 2 on developing the solutions. This would allow participants with different backgrounds to choose what fit their interests best. To expose everyone to the solutions and give an earlier end to the day, a poster session with an accompanying reception ends both days.

To support the new direction of the program, the first implementation we put into place is the Expanding Potential Seed Projects. This awards anyone affiliated with a university \$1,000-\$5,000 to support an innovative approach to increase inclusivity in STEM. We wanted to provide support to those who were interested in action. We also try to provide in-kind advice and connections to awardees.

In order to highlight the awardees and share their work, we decided to integrate this into the next Expanding Potential workshop. One selection criteria for the programs were based on their ability to scale up to other departments and institutions. Therefore, we wanted to give the awardees a chance to speak in a lightning talk and then have breakout workshops for attendees to discuss the efforts and give feedback.

To give others that are generating programs for a more inclusive STEM environment a similar opportunity to showcase their efforts, we added a lightning talk session for selected presentations and a poster session. Registrants are given the opportunity to submit an abstract for this session.

To include more voices in shaping the workshop topics, structure and activities, we generated an advisory board and steering committee for the 2016 workshop. The advisory board consists of individuals with many years of experience participating and working on inclusion efforts who could advise on current relevant topics for speakers. The steering committee consists of graduate students, postdocs, and staff who coordinate similar events and could lend strong suggestions to shape the event.

Our hope is to improve upon the 2014 workshop based on the feedback we received, attract a more diverse audience, educate more individuals on important diversity and inclusion issues, give a platform to those working hard to combat discrimination in the STEM workplace, and create a safe space for attendees to connect and network. We will determine if we have met these goals with a follow-up survey for feedback for the 2016 workshop.