

Acting Out: Using Theater to Discuss Career Struggles of Women Faculty in Engineering

Naomi C. Chesler, Leslyn Hall, Mark A. Chesler

University of Wisconsin/ORC Marco International/University of Michigan

Abstract

In a workshop for untenured women faculty in engineering, participatory theater exercises were used to build community and facilitate a discussion among participants about their career struggles. Two key differences between participatory theater-based discussions and traditional round table discussions are the physical enactment of personal experiences and the collective brainstorming for (and enactment of) problem-solving strategies. At the workshop, the theater exercises built and strengthened a caring community for the participants, helped the participants recognize shared struggles and concerns, and had obvious immediate and potential longer-term positive impacts on participants. Thus, participatory theater may be a novel and useful strategy for women in engineering to discuss personal and professional concerns, find community support around and develop new ways of working through those concerns.

I. Introduction

In 2001, 17.5% of assistant professors, 11.1% of associate professors and 4.4% of full professors in engineering disciplines were women [1]. Despite much progress toward provisions for equal opportunities for women, subtleties such as cognitive differences that affect professional choices, socialization patterns that affect communication and conflict resolution styles, and small but accumulated disadvantages, result in women advancing less and less rapidly than their male counterparts [2, 3]. This under-representation and increasing loss of women faculty members decreases the number of female role models available to undergraduate students, the diversity of research teams and the return on investment from the considerable resources universities spend on faculty and research [4]. Thus, there exists ample evidence that women who are in or may enter academic engineering careers could benefit from more and better support mechanisms.

Previously we have suggested that such support, especially in the form of a caring community, could improve the quality of life for women faculty members in engineering [5]. Over time, it might even have a positive long-term effect on retention and advancement. Other benefits of community for women faculty members in engineering may include informational gains such as increased understanding of the information necessary for successful professional development within an academic career, psychosocial gains such as heightened self-awareness or increased self-confidence and an awareness of “not being alone,” and instrumental gains such as a commitment to mentor others and share the benefits of the caring community with a broader population [6].

Participatory theater has been created and used as a strategy for addressing personal and social problems by a variety of social activists. As Halperin notes, “Through mutual activity people create community out of a collection of individuals and, through community, can act to change

their personal and collective worlds.... Theater, as an ensemble art form, necessitates cooperation and teamwork” [7]. Perhaps the most unique aspect of participatory theater as a technique to build community is its focus on collective brainstorming for alternatives. Boal, the principal architect of participatory theater as a technique to combat personal and social oppression, has said, “The principal objective is to change the people. The [people] are encouraged to become part of the action by suggesting solutions and exploring alternatives” [8]. And as alternative actions are imagined, they can be scripted, enacted and evaluated.

Given the proven benefits of community for providing informational, psychosocial and instrumental benefits, and the evidence for participatory theater as a strategy for both building community and addressing personal and social problems, our goal was to use participatory theater within a small, weekend workshop environment in order to build a temporary community for untenured women faculty in engineering in which they could openly and usefully discuss their career struggles and possibly find solutions.

II. Methods

The principles of participatory theater as a strategy for building a temporary community and discussing the career struggles of women faculty were explored with a small sample ($n=9$) of untenured women faculty in engineering. This self-selected group of participants traveled to a remote location for three days, away from both work and family, and shared all activities during that period. The theater activities were complemented by comments by and interactions with a senior academic woman engineer (at the level of dean), writing activities facilitated by a professional technical writing consultant, a free-form pottery workshop and informal social time. A theater and arts instructor at the Flynn Center for the Arts in Burlington, Vermont, developed and led the participatory theater activities.

After preliminary ice-breaker or trust-building exercises, participants were led in the formation of “oppression images” where the women were asked to consider those things in their lives with which they struggled, and to create a literal or figurative physical sculpture-image of that situation using the other participants as props. The resulting participant images will be described in the Results section below. Then, participants were led in an activity to collectively develop alternative strategies to overcome the personal and professional challenges demonstrated. These again were either literal or figurative physical sculpture-images using the participants as props. To begin, participants were asked to create a composite image that captured the essence of all of the previous oppression images. After a consensus was reached as to the best composite image, different women took on the role of the central figure. Then, the central figure was instructed to “solve” the problem. To do so, she could interact with the other participants in the image either verbally or non-verbally. In this way, different women developed and tested different problem-solving strategies while the rest of the group watched. Finally, participants were asked to create a physical image of happiness, either real or imagined. Again, the images that were created and situations that were physically enacted will be described below.

Individual and group reflection time was provided to discuss the results of all exercises, to discuss the parallels between the emotions raised by these scenes and ones at work, to assess the effectiveness of the strategies developed, to explore novel and creative alternatives to the issues

that were raised, and to consider the application of these alternative strategies to their own personal and professional situations.

III. Results

A. Activity Results

Through the oppression images, participants were able to express feelings of exclusion, competition in the face of inequity, inability to meet the many and varied needs of others, as well as a mixture of fear, insecurity, confusion and anger. In the reflective discussions, the women testified that these were precisely the feelings generated in many of their collegial and institutional interactions within academe. One example of an oppression image is that of several people standing in a close circle enjoying a lively conversation while the image creator stands outside the circle, peering in. In a second image, the creator stood facing forward, arms akimbo as people surrounded her with different expressions and postures of hostility and neediness. One participant described two more of these images as follows:

“... I remember [one woman’s] in particular.... hers was like two basketball players reaching for a hoop—she was one of them, and someone else was the other, and she had three of us hold her back, pulling her back on her legs and arms so she couldn’t compete equally—[this woman] is African American....”

“[One woman] did [an image] where she stood there and had [other people] pull on each arm and leg. She always felt like she was being pulled in so many directions, with her career and her personal life. ...”

During the collective problem-solving activity, the summary oppression image that was chosen was one in which several women “oppressors” knelt and pulled at a supine woman from all directions. Then, within this composite image, the central figure was encouraged to overcome her oppressors. As different women took on the role of the central figure, different problem-solving strategies were tested including leaving the situation, bringing all oppressors into conflict with one another, appeasing each oppressor individually and ignoring the oppressors altogether.

The physical images of happiness, either real or imagined, were almost exclusively of relationships, some professional and others personal. One woman created an image of relaxing in front of the television with her husband; another was walking with a colleague; another stood at the front of an imaginary classroom, enthusiastically lecturing to a group of happy and engaged students. As one woman remembered one year later,

We also [acted out] a situation where [the person] feels warm or comfortable. That was interesting because a lot of people did things that were related to their family, their spouse, their dog, even something that was related to teaching. So that was fun.

B. Analysis

Qualitative formative evaluation principles were used to assess responses to the participatory theater exercises within the workshop framework. These methods are suited for use with small groups of people where the intervention is being used for the first time [9]. With such a small sample, statistical analysis of responses would not be particularly fruitful. Thus, we report here not a rigorous “test” of this intervention, but a documentation and demonstration of its potential utility.

The primary assessment data included participants' reflections on the workshop one year later from recorded interviews by a non-participant (author LH). An interview guide was developed to deductively explore issues immediate and broader impacts, which were predicted a priori. The questions were as follows:

1. One year later, what activities and events do you remember from the [participatory theater] workshop?
2. What details do you remember about the theater activities in particular?
3. When you were told several months before the workshop that we would be doing "participatory theater," what were your expectations?
4. What did you take away from the workshop? Were there any lasting impacts?
5. Have you used anything from the workshop in your classes?

Then, a post-hoc inductive design was used to code and analyze the transcripts of participant interviews [10-12] (author NC). The major themes identified were: (1) recognition of struggles and shared concerns, (2) building and strengthening of community, (3) immediate impacts and (4) potential longer-term or broader impacts. Summaries and excerpts from participant interviews grouped according to these four themes are presented below.

1. Recognition of struggles and shared concerns

The illustrative reflections below suggest that in the relatively safe and trusting atmosphere of this workshop, individuals were able to portray ideas and situations that affected them deeply. Also, recognizing shared concerns provided psychosocial support by normalizing individuals' frustrations and worries. Finally, participants report that the non-verbal and physical aspects of the exercise enhanced the emotional impact of the exercise.

Drama really helped. And [it helped me realize] the kind of situations that other people are in. I think the reason why it was so emotional was because a lot of us could really identify with what everybody else was going through. There are probably things that would have been very difficult for us to put into words and have anybody else understand.

One of the things I took away, listening to the trials and tribulations people had throughout the year, [is that] they are quite similar to my own. This makes me not feel so bad.

[The exercises] really helped me to understand more the struggles that other people were going through in their jobs. It made us realize... [that struggle] is almost a normal part of being an untenured faculty member; it's not that you are not capable or that you don't have what it takes to do it, it's just that it is difficult—it's not an easy task to do.

2. Building and strengthening of community

The quotes coded in this major theme demonstrate that the theater exercises helped strengthen both group and individual connections in a way distinct from the other activities at the workshop such as sharing meals and gathering informally. Furthermore, these and related comments suggest that as participants shared their concerns with one another, they often recognized the common nature of their concerns, which deepened the sense of trust and community within the group.

The theater exercises brought people together.

We did some group exercises... [which] really helped [us] to reconnect together.
Each time we did [an exercise] we got to know each other a little bit better.
I think it did help us get more connected.

3. Immediate impact

These comments reflect some of the ways in which the immediate impact of the exercises and images portrayed was deeply emotional and moving. The use of participatory theater in a workshop setting of this sort encouraged levels of personal sharing and communication not normally reached by casual verbal exchange alone. Moreover, it permitted some participants to go beyond communication and to “try out” solutions to problems they experienced in their home institutions and settings.

The part that I thought that was most meaningful [was] where we role-played out how we felt about where we were in our workplace or at this stage in our career. This was really powerful because there are a lot of things you can't really express in words.

Some of the images that were created are just seared in my memory.

The [exercise] that really sticks in my mind was one where each of us did a pose, and we could use the other people in our group to do a human sculpture to represent a problem, issue, or something in our lives. This exercise was really interesting. ...And it just almost brought tears to my eyes... somehow for her to just display it so graphically... [it] just really spoke to me.

The image [one woman] did sort of slapped me upside the head. It kind of inspired me.

Not only did you role-play/create an image of how you felt as a faculty member, but also you role-played how you would like this scenario to work out. I thought that this was sort of useful.

4. Broader impacts

Participants were queried for longer-term impacts of the theater exercises. While most had not brought these activities into their departments and classrooms, these comments demonstrate that some participants found ways to translate either/both the substantive learnings of the event and/or the techniques demonstrated herein, to their back-home situations and institutions.

I did some of the posing things with some ... 5th graders. ... They liked it; they were really into it. I haven't ventured into it with any of my college kids yet.

I had the faculty role-play an image of what they thought an ideal grad student should be. And then I had the grad students role-play an image of what an ideal faculty advisor should be. It broke the ice. It was kind of fun. I felt I got some insights from students about what they are looking for in an advisor. It has changed a little bit how I see my students.

Actually, one thing that I did was to use the icebreaker exercises with my class... the one where we enacted being a machine. I did that with my students as a way to build rapport, and it worked really well.

IV. Discussion

Within the first theme, the major finding is that the recognition of struggles and shared concerns was beneficial to participants. The exercises in general were emotional and moving. Besides the benefit to community in realizing “the kinds of situations that other people are in,” one

participant makes the important observation that “it made us realize... [that struggle] is almost a normal part of being an untenured faculty member.” In other words, individual fears and concerns become normalized when they are seen to be shared and indeed quite common concerns. As one participant put it, it made her feel “not so bad” to know that others’ struggles were her own. Interestingly, the non-verbal, physical nature of the participatory theater exercises did not impede the expression and recognition of these shared issues. Two different participants noted that people could act out things “that they couldn’t verbalize” or that “you can’t even put into words.” Indeed, it is likely that both the non-verbal and the physical aspects of the exercises – either independently or in a synergistic manner - enhanced the ability of participants to (1) express their struggles, (2) recognize others’ struggles, and (3) recognize aspects of their own concerns in others’ struggles.

As evidenced by the second theme, participatory theater led to building and strengthening a sense of community. Few of these women had spoken directly to one another on any regular basis prior to this event. Thus, the theater exercises “brought people together,” helped individuals get to know one another better through the expression of both their oppression images and their happiness images. Thus, both individual and group ties were created and strengthened in this temporary community.

The immediate impacts of the participatory theater exercises, even as they were recollected one year later, were dramatic. Participants use strong, positive language to describe how they were affected by the exercises including “meaningful,” “very moving,” and inspiring. Also, the effectiveness of the enacted brainstorming exercises to devise alternative strategies for difficult situations was mentioned. Again, this is a fairly unique feature of participatory theater as originally described by Boal [8]. The non-verbal and physical communication of these struggles clearly crystallized the emotional content of the struggle in a way that had a much deeper and more lasting impact on participants than verbal communication. That is, while one participant may not remember who is feeling frustrated by journal or grant reviewers or an ineffective chair one year later, most participants remembered details of the oppression images, and who created which image. This type of deep and lasting connection and empathy is likely to enhance the persistence of the caring community.

Finally, some participants used these participatory theater exercises in their own communities, academic department and instructional environments after the workshop. This benefit of the workshop is critical because it holds the promise of broadening the impact of the workshop to students and colleagues in participants’ home institutions. Thus, participants who themselves feel empowered by the caring community developed and strengthened by the workshop (in general) and participatory theater (in particular) may now be more likely to work to develop a caring community within their own departments and classrooms. In the longer-term, these efforts may yield more connected and communicative environments that function better for both teaching and learning.

V. Conclusions

The goals of this deliberately constructed interventional program were to build community and facilitate a productive discussion among participants about their career struggles in order to have

a positive impact on women's professional development in the engineering academy. The tools and techniques of participatory theater, as facilitated by a theater professional, were used to achieve these goals within a small workshop format. In this environment, participants were able to express feelings of exclusion, competition in the face of inequity, inability to meet the many and varied needs of others, as well as a mixture of fear, insecurity, confusion and anger. The women testified that these were precisely the feelings generated in many of their collegial and institutional interactions within the academy. Furthermore, sharing these images was emotionally powerful. Collective brainstorming provided participants with options they could employ in their job situations to improve their comfort and performance. Based on a qualitative evaluation of participant interviews one year out, participants experienced benefits in the following areas: recognition of shared struggles and concerns; building and strengthening of community; immediate impact; and broader impacts. In the longer term, we hope that members of a caring community developed by techniques such as participatory theater will apply these or related strategies in their own communities and institutions, and that they themselves help develop patterns of communal support in these communities and institutions.

The benefits of this program should motivate the development of similar programs nationwide. But beyond workshops that create temporary communities, the need is to develop intervention programs such as this that can help build and strengthen caring communities in the home institutions of women faculty in engineering. The program described here is limited in several ways: (1) it represents a temporary community, one developed as a one-time activity undertaken off-campus, not integrated into a ongoing institutional framework; (2) it is evaluated via a formative, qualitative and short-term set of procedures, and future efforts need to be funded, conducted, maintained and evaluated more systematically. Only then might we see well-institutionalized caring communities that can create the longer-term benefits that extend to patterns of retention and advancement of women faculty in engineering, eventually leading to greater diversity and gender equity in the engineering academy.

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Author Biographies

NAOMI C. CHESLER

Naomi Chesler is an Assistant Professor of Biomedical Engineering at the University of Wisconsin. Her engineering research focuses on the effects of mechanical forces on vascular biology during remodeling in the systemic and pulmonary circulations; her educational action-research focuses on the design of gender-informed mentoring programs and interventions to increase advancement and retention of students and faculty in engineering.

LESLYN HALL

Leslyn Hall is senior research manager at ORC Macro International, a research, management consulting and information technology firm supporting government and commercial clients worldwide. Her expertise is in program evaluation and assessment through qualitative and quantitative research in areas related to education, housing and social policy.

MARK A. CHESLER

Mark Chesler is a Professor of Sociology at the University of Michigan, former Director of Graduate Studies and former Director of Undergraduate Studies in that department. He has published widely in the area of race and gender discrimination in higher education, self-help and social support systems, and social and organizational change processes.