

USING INTERACTIVE THEATER TO ENHANCE CLASSROOM CLIMATE

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Abstract—

Several universities (e.g., Cornell and Purdue) have successfully improved the educational climate in engineering through the use of interactive theater — theater that combines live performance and audience participation. This paper describes an adaptation of this concept to improve the climate for diversity broadly construed; counteract recent degradations of campus climate due to anti-affirmative action legislation in the State of California; improve the quality of teaching; and build a more tolerant community among a diverse student body, staff and faculty. It identifies ways the program increased awareness and empathy, promoted positive new behaviors, and provided significant data, suggestions and support for change. Finally it identifies key lessons learned and recommendations for others interested in using this form of interactive theater to promote a diverse teaching and learning climate.

1.0 Introduction

Interactive Theater workshops combine live performance and audience participation to help people examine complex human issues (Butterwick, 2000). In the Interactive Theater Program (ITP) workshops implemented in the College of Engineering at UC Berkeley trained actors performed scenes that vividly illustrated problematic encounters between students and between students and faculty with diversity themes. At the end of each scene, the actors remained in character as the faculty audience, with the assistance of the facilitators, had the opportunity to ask them any questions about their behavior, feelings, and motivations.

At the end of this Q & A period, the actors step down and facilitators ask the audience members to imagine stepping into the shoes of each character and to discuss among themselves the causes, consequences and possible solutions to the problematic attitudes

and behaviors represented in the scene. The process allows participants to experience empathy for all of the characters, think through what actually happened, identify problems, and consider solutions and strategies for prevention. Audience members experience a variety of emotions as they interact with the characters, ranging from sympathy or amusement to frustration and anger. “Interactive theater is a great way for people to confront sensitive issues in a non-threatening atmosphere. It touches them where they live. They see themselves and their responsibilities in the characters” (Robert Young, Director of Diversity Initiatives, Eastman Kodak Company).¹ Once the audience makes that connection to the issues presented, they begin a joint problem solving process. The goals of our Interactive Theater Program were to:

- identify and promote new behaviors conducive to eliminating bias and increasing equity.
- increase awareness about issues of gender and racial equity and other dimensions of diversity.
- increase empathy for different points of view.
- provide data on relevant issues and suggestions for creating an equitable learning environment.
- promote on-going dialogue and support for program participants.
- build a model in engineering that can be transferred elsewhere on campus.

Our adaptation includes six components.

- (1) A cross-departmental Steering Committee was formed with faculty and staff from the College of Engineering, the Staff Affirmative Action Office and the Department of Dramatic Arts and Music. Their goal was to guide the development of the interactive theater workshops and assist in their implementation and transfer to other units on campus.

¹ Cornell Interactive Theater brochure

- (2) Research was conducted in the College of Engineering on the experience of diverse graduate and undergraduate students and faculty to provide the foundation for the interactive theater workshop content. Graduate student researchers from Engineering and the Social Sciences conducted interviews and surveys on the quality of the academic experience in the College of Engineering.
- (3) A Dramatic Arts instructor completed the interviews and used the results to write scripts for four scenes (“A Little Extra Time,” “But I’m Here Now”, “Faces of the Future”, and “The Invisible Woman”). She served as the theatrical director and taught Dramatic Art 166, a class initiated in Spring 2000 to complete the project. The students and staff who enrolled in this course received acting instruction and participated in a social change process. The actors performed two scenes per workshop and interacted with the audience during the question and answer periods following each scene.
- (4) In accordance with the “grow-your-own-philosophy,” staff and faculty were recruited as workshop facilitators. Each facilitator team consisted of an engineering faculty member and a campus staff person, all of whom had previous facilitation experience. A facilitator’s guide was developed to assist in keeping the facilitators on task for each of the methods used in the workshop.
- (5) Four workshops were held for faculty in the College of Engineering in Spring 2000. These encounters addressed complex diversity issues present in the Berkeley College of Engineering. At the end of each scene, the actors remained in character as the faculty audience, with the assistance of the facilitators, had the opportunity to ask them any questions about their behavior, feelings, and motivations. The faculty participants experienced a variety of emotions, ranging from sympathy or amusement to frustration and anger, as they interacted with the characters. At the end of this session, the actors left and the facilitators initiated a reflection and problems solving session. The facilitators asked the audience members to imagine themselves stepping into the shoes of each character and to discuss among themselves the causes, consequences and possible solutions to the problematic attitudes and behaviors represented in the scene. The process allowed participants to

experience empathy for all of the characters, think through what actually happened, identify problems, and consider solutions and strategies for prevention.

- (6) Provide the faculty with a summary of the results from the student questionnaires and from the faculty feedback on the workshops. Track and facilitate longer term improvements in the teaching and learning climate for diversity.

2.0 Student and Faculty Interviews Used for Scenario Development

Research conducted in the College of Engineering on the experience of diverse graduate and undergraduate students and faculty provided the foundation of workshop content. Graduate student researchers from Engineering and the Social Sciences conducted approximately 100 hours of interviews and targeted surveys on the quality of the academic experience in the College. Lura Dolas, a Dramatic Arts faculty member, completed the interviews and used the accumulated results to write scripts for four scenes based on the Cornell model of Interactive Theater. The scenes focused on: disability issues, re-entry student problems, alienation and sexism in student project groups, and the overall climate for women and minority students.

3.0 Implementation

In Spring 2000, four Interactive Theater workshops were offered to faculty in the UC Berkeley College of Engineering and one demonstration workshop was conducted for the general campus community. Each workshop included a combination of two of the four scenarios.

Working with a multi-departmental advisory committee, Lura Dolas, a Dramatic Arts faculty member, served as the theatrical director and taught Dramatic Art 166, an experimental class initiated in Spring 2000 to implement the workshops. The students and staff who enrolled in this course received acting instruction along with readings associated with social change processes (e.g., Brown, 2000; Rains, 1995 and Subramaniam, et al., 2001). The actors performed two scenes per workshop and interacted with the audience during the question and answer periods following each scene. The Staff Affirmative Action and the College of Engineering’s Diversity Office co-coordinated the administration of

the program, especially guiding the diversity education aspects of the program. In accordance with the Berkeley ITP Model's "grow-your-own-philosophy," staff and faculty were recruited as workshop facilitators. Each facilitator team consisted of an engineering faculty member and a campus staff person, all of whom had previous facilitation experience. A facilitator guide was generated which provided a thorough description of the objectives and methods for each portion of an ITP workshop.

3.1 Increasing Awareness About Issues of Gender and Racial Equity and Other Dimensions of Diversity

The four scenarios that comprised the program address issues of gender, race, age, and disability. In each scene, and in the question and answer period that follows, the audience witnesses the deeper impact of the inappropriate treatment that the student or faculty characters demonstrate. The audience becomes more aware of the impact of differential treatment on individuals, and they receive a glimpse into the life and academic experience of diverse students. The characters show both the emotional impact of prejudice, and the practical impact that an un-supportive academic environment has on students' opportunities to succeed. The audience could not dismiss what they witnessed, since the research-based scenes vividly address issues of current concern in the College of Engineering. Additionally, they had the opportunity to widen their awareness through asking the characters probing, poignant and tough questions after each scene that would be too uncomfortable or difficult to ask in every day situations.

Finally, program evaluations also indicated that the workshops were successful in increasing awareness. When asked to rate whether the workshop "increased my understanding of the experience of students of color (older/re-entry students, students with disabilities, and women students)" faculty rated the workshops on average as "very successful".

3.2 Increasing Empathy for Different Points of View

The Interactive Theater method is designed to be non-threatening to the participants. This approach shifts the focus from blaming and finger-pointing which creates distance and alienation, to empathetic understanding. This fosters deeper awareness and the desire to address underlying causes. When participating faculty were asked to rate how well they

could empathize with the characters, the average response was 4.36 on a five point scale.

The Interactive Theater model has several inherent advantages for developing empathy for diverse experiences and perspectives. The three key points in building empathy are the scenes, the actors, and the facilitators. Each scene was written to portray realistic, complex situations. The scenes represent multiple points of view, and show the audience behind the scenes thoughts and motivations of the characters. Each character is a realistic human being with understandable reasons for being the way s/he is. Each character does some things well and could do some things better. Describing this balance of feelings and perspectives gives characters depth and helps the audience identify with her/him. Knowing the life experience, emotion and logic that shape a character can help the audience identify with a person that could on the surface seem disagreeable or irresponsible. Then, even if the observer disagrees with an action, s/he can still empathize with how the character got there.

The actors also play a key role in developing audience empathy. The student and staff actors had the unique opportunity of receiving training in acting, as well as in the techniques of creating social change. In their preparation for the Question and Answer period in particular, the actors learned to remain connected to the audience by presenting their characters in a balanced way.

At times, during the workshops, the faculty audience empathized so strongly with the characters, that they would try to influence the characters to act with more sensitivity towards each other. For example, after the scene "A Little Extra Time" in which the faculty character, Professor Jamison, was dismissive and skeptical of a student that came to ask her to comply with his learning disability accommodations, the audience asked Professor Jamison: "If your child was in a similar situation, how would you want them to be treated?" and "What would you say is the best way to deal with your skepticism?" The audience asked the student character, David: "Is there anything that could have been done to make it easier for you?" and "After this experience, how will you feel approaching other professors?"

3.3 Information and Knowledge Exchange

The ITP provided participating faculty with a variety of information and resources. There were four main

data points regarding relevant issues and suggestions for inclusive and effective teaching:

- a packet of information given to each participant,
- the information exchange that occurred between faculty members,
- actors, facilitators, and
- subject experts.

The first source was a packet of information that each person who attended a workshop received. This packet included information on all of the dimensions of diversity that the scenarios addressed, including gender, disability, race, and re-entry students.

The second valuable source of information was suggestions from the faculty themselves. During the problem solving/discussion periods that followed each scene, faculty told stories that illuminated the problems at hand and shared ways in which they had successfully dealt with similar situations. For example: following Scene 4, which depicts a problematic group project interaction, one faculty member described how he had observed similar situations in his teaching experience and described one method he had used successfully to deal with gender discrimination among students: He ensures that every project team that includes female students has at least two women on the team. He noticed that the presence of more than one female student significantly decreased mistreatment by male students. Other audience generated suggestions included: developing incentives for successful teamwork, considering group dynamics as a more important focus of teaching, and instituting new ways of getting feedback from students to faculty. *Listening to their colleagues was perhaps the most valuable source of new ideas for the faculty present, since their peers are often times the most credible experts.* Faculty commented in the evaluations that “I found hearing other faculty experiences, approaches and options very useful.” They also found the discussion portions of the program too short and wanted to spend more time developing deeper solutions.

Third, both actors and facilitators suggested possible solutions. While the primary role of the actors was to present a realistic situation and elicit empathy from the audience, when asked, their characters also presented ways to address the problems depicted in the scenes. Since facilitators were Berkeley Engineering faculty and staff who work on diversity issues on campus, they too were a source of information and suggestions.

Finally, there were knowledgeable subject experts present to provide information during the discussions. Each of the scenes addressed persistent myths about women, people of color, people with disabilities, and re-entry students. For example, in the scene focusing on disability issues, many in the audience shared the same misperceptions as the faculty person in the scene, namely, that learning disabilities are not legitimate, students are cheating the system, and learning disabilities are a growing fad among students. Dr. Connie Chiba, a representative from the Disabled Students Program, presented factual information about the rigorous diagnostic testing required to receive accommodations and the number of students on campus with learning disabilities. Faculty showed great interest in this concrete information and suggestions given by Dr. Chiba on accommodating students with disabilities. Faculty also expressed interest in follow-up programs dealing specifically with disability issues.

3.4 Promoting On-going Dialogue and Support for Program Participants

When asked to rate whether the program “gave me the opportunity to have some valuable dialogue with other colleagues about diversity issues in the College of Engineering” the average response from faculty participants was that the program had been “very successful.” Faculty had a rare opportunity to discuss issues of concern around effectively teaching and interacting with diverse students during the ITP workshops. The specific topics the faculty wanted to see addressed in follow-up programming included: supporting the self-esteem of underrepresented groups, dealing with stereotypes among students, more support for effective teaching, disability issues, and bringing the workshops to junior faculty and the retreat for department chairs.

During the discussions, faculty expressed frustration with the lack of guidance and support for developing teaching skills and in dealing with the interpersonal aspects of effective teaching. The workshops provided relief from this experience of isolation by allowing faculty to exchange ideas and to hear their colleagues discuss that they too shared similar experiences. Some women and minority faculty who attended had felt like the lone crusaders for equity in their fields, and may have felt alienated from the “norm” among their colleagues. These faculty experienced having allies in the facilitators and the actors who shouldered the burden of raising difficult

questions. Also, they could experience their colleagues as allies, who were wrestling with important issues that may have been sidelined at other times. There were moments when participants were visibly affected by finally being able to discuss issues that they had struggled with in their departments for years.

The program also provided support to faculty in providing them with information about resources on campus that they may draw upon and utilize in their teaching and mentoring of a diverse student body. While these campus resources have existed previously, the workshops created a direct link and relationship between faculty and offices such as the Title IX Office and the Center for Underrepresented Engineering Students.

3.5 Building a Model in Engineering That Can Be Transferred Elsewhere on Campus

As part of the original goals of the program, the interactive theater model that was developed in the College of Engineering will be revised, replicated and expanded. To make replication possible, each phase of the program is being documented and evaluated for future development. A demonstration workshop was held for leaders in the wider campus community, which introduced the program, demonstrated the effectiveness of its methods and initiated collaboration with other campus units to begin the expansion of the Interactive Theater Program.

4.0 Conclusions

The Interactive Theater program met all of its proposed goals. Observations of the program and written evaluations from faculty demonstrate that the program increased awareness and empathy, promoted positive new behaviors, and provided significant data, suggestions and support. Next steps include providing on-going programs in the College of Engineering as well as replication of the program in other divisions of the university. As part of the overall evaluation process, faculty and department chairs are being asked to describe specific changes they made as a result of the workshops. Although the interviews are still underway, one dramatic example of change has been to remove photographs of male faculty from a seminar room that had been dominated by over fifty such photographs. Female faculty and students had been trying to renovate the room for over a decade, with limited success and the engineering climate scenario was built around these

complaints. The department is now moving the photographs to a website and a flat screen display that will provide a history of the department and highlight the achievements of the Emeritus faculty. The walls in the seminar room will have displays of student teams and their class projects, undergraduate research and cutting edge research. All will be designed to communicate the “faces of the future in engineering”.

5.0 Acknowledgment

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Alice M. Agogino is a Professor of Mechanical Engineering and Associate Dean for the College of Engineering at UC Berkeley. Dr. Agogino is a registered Professional Mechanical Engineer in California and is actively involved in joint research with industry. Dr. Agogino received a B.S. degree in Mechanical Engineering from the University of New Mexico, an M.S. degree in Mechanical Engineering from the University of California at Berkeley in 1978 and a Ph.D. from the Department of Engineering-Economic Systems at Stanford University in 1984. She received an NSF Presidential Young Investigator Award in 1985; Pi Tau Sigma Award for Excellence in Teaching, 1986; Ralph R. Teeter Educator Award, 1987; SME Young Manufacturing Engineer of the Year Award, elected an AAAS Fellow in 1994 and elected to the National Academy of Engineering in 1997.

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Edith Ng is Director of Staff Affirmative Action and Diversity Programs at UC Berkeley. She has had over 25 years of experience working in higher education,

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