# CLASSROOM CLIMATE WORKSHOPS ON GENDER EQUITY: MODEL OF DEVELOPMENT AT PURDUE UNIVERSITY

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# **ABSTRACT**

This paper introduces a model for development of Classroom Climate Workshops on Gender Equity that have been created at Purdue University under a grant from the Alfred P. Sloan Foundation. An introduction includes the program philosophy, then, program objectives, process, presentations, results, dissemination, and expansions are delineated.

#### INTRODUCTION

In college classrooms today, we need to provide climates where all students, regardless of their gender, will have an equal opportunity to learn [Sandler, Silverberg, & Hall, 1996]. Past research indicates that such a situation does not exist, especially in fields like engineering and science where the majority of students, faculty, and teaching assistants are male [Davis & Rosser, 1996; Ginorio, 1995; Sadker & Sadker, 1994; Seymour & Hewitt, 1994]. Thus, challenges for educators become those of investigating awareness of gender equity issues, exploring unexamined assumptions and needs for attitudinal changes related to gender equity, and considering action steps that promote gender equity [Arnold, 1993; Henes, Bland, Darby & McDonald, 1995; Ginorio, 1995; Rosser, 1995].

One means of addressing these challenges is through classroom climate workshops using interactive theatre as the medium [Wadsworth, Mennen, & Clark, 1996; Wadsworth & Mennen, 1997]. This form of theatre, incorporating dramas and discussions, is non-threatening, participatory, and highly effective when dealing with sensitive issues such as gender equity. In this case, professional actors, who are graduate students in theatre, dramatize problematic encounters in the classroom. Then, workshop participants interact with actors by asking questions of them while they remain in character. Facilitators conduct informal discussions of classroom encounters that lead to specific suggestions about changing communications and behaviors. Participants are then asked to commit to taking one specific action step during the upcoming semester in their classrooms. A follow-up study on action steps taken by participants is then conducted at the end of the school semester.

# PROGRAM OBJECTIVES

The three main objectives of the Classroom Climate Workshop Program are to:

- \* examine awareness of gender equity issues;
- \* assess components of gender equity workshops;
- \* encourage educators to take action steps in order to achieve gender equity in classrooms.

These objectives have become the framework for the program and have set the direction for development of this effort.

# PROCESS OF DEVELOPMENT

The process of developing Classroom Climate Workshops for graduate teaching assistants began in September, 1994, and the first workshops were offered in August, 1995. The initial effort was a joint collaboration between the Schools of Engineering, Science, and Liberal Arts. The process involved six main steps: meeting with stakeholders; forming a program team; reviewing the literature; assessing current classroom climates; writing scripts; and constructing measures.

The first step was meeting with stakeholders who had a primary interest in this effort. This was done in order to form an early commitment to and ownership of the program. The group included the Deans of Engineering and Science, along with several school and department heads. The purpose of the meeting was to garner ideas on facets of the workshops including settings, times, content, materials, and procedures to take that would ensure success of the effort. For example, the idea of holding a Preview Party for Administrators, Deans, School and Department Heads was generated by this group.

The second step was forming a program team which consisted of the following: three Coordinators, one each from Engineering, Science, and Liberal Arts; two Facilitators; six graduate teaching assistants equally representing Science and Engineering; one graduate teaching assistant from the Division of Theatre to write scripts and direct cast members; and an administrative assistant. The entire team met once a month throughout the first year.

Members of the program team collectively took the third step which meant **reviewing the literature.** Each week for several months, individuals read different professional articles and books on gender equity and classroom climates then gave a synopsis of readings at team meetings. These same people completed the fourth step which was **assessing classroom climates** at Purdue. This involved distributing surveys to female engineering and science students who were undergraduate or graduate students.

Findings and stories from returned climate surveys were used to complete the fifth step, writing scripts for three scenarios. The dramas incorporated major issues related to gender equity that were revealed in survey results [e.g. gendered language, isolation, self esteem, spotlighting]. Guidelines for scenes were these: settings had to be realistic; characters needed to be believable; classroom situations had to reveal conflict with several possible solutions. The dramas needed to engage the audience in identification with the setting, characters and conflict which would encourage participants to consider behavioral changes that would make classroom climates more effective. After scripts were written, readings were held and cast members selected.

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1998 WEPAN National Conference

A final step was **constructing measures**, a pre-questionnaire on gender awareness, a post-questionnaire on workshop components, and a follow-up survey on action steps. Measures were pilot tested with a representative group of graduate students then changes were made based on feedback.

# WORKSHOP PRESENTATIONS

The Program Team decided that it would be helpful for them and cast members to proceed through several **pre-presentations** before the first workshop. Therefore, program coordinators and consultants from the Division of Theatre attended some rehearsals and the entire team was at the **pilot dress rehearsal**. Feedback from viewers helped shape the final dramas, and, questions from the audience assisted the cast when they responded to the interactive element of the workshop. As previously stated, a **Preview Party** was then held for major stakeholders followed by workshops one week before Fall Semester.

#### LONGITUDINAL RESULTS

From 1995-1997, 23 two hour Classroom Climate Workshops on Gender Equity have been offered for 800 engineering and science graduate teaching assistants. Considering gender, the entire sample was 29% females and 71% males. Mean age of participants was 25.38 years and mean years of teaching experience was 3.35 semesters. Over three years of time there have been consistent results for three workshop measures.

The pre-questionnaire contained 9 statements, each of which examined awareness of gender equity issues that had been identified in the review of literature. Since each statement was true according to research results, higher agreement with statements indicated a more "accurate" awareness of gender equity issues. Each of three years, a higher proportion of females versus males were in the high agreement group.

A post-workshop questionnaire assessed perceptions of workshop components (dramas, discussions, facilitators, advice, statistics, and workshop structure). A two-dimensional measure was used to separate value from quality of workshop component. From 1995-1997, use of dramas was of greatest value and quality to the participants. This component was followed by discussion of dramas, facilitators, advice and suggestions, and introductory statistics. Teaching assistants always rated workshop structure very highly.

Follow-up surveys were sent to workshop participants in November of the year they attended workshops. The survey examined three categories, importance, implementation, and impact of action steps that teaching assistants had taken in their classrooms. Findings indicated that the higher TA's valued the workshop, the more strongly they agreed that their action steps were important, implemented, and had a positive impact on classroom climates.

### PROGRAM DISSEMINATION

Dissemination of Classroom Climate Workshops has taken several forms; participating in a special institute; offering workshops at other engineering institutions; giving presentations at professional conferences; and designing products and materials.

In May of 1997, Purdue's Classroom Climate Workshop on Gender Equity was a feature of the Interactive Theatre Institute held at Cornell University. The event was sponsored by WEPAN and the Alfred P. Sloan Foundation. Two of the workshop Coordinators, the Director, and the Facilitator were presenters at this institute.

Workshops that were created at Purdue were transported via **traveling troupes** and offered at other engineering institutions in 1997, the University of Illinois, Cornell University, and Rose Hullman Institute of Technology. Plans are being made to visit Georgia Tech the Fall of 1998. Thus, we are in the process of training other academicians to provide similar workshops.

Presentations on the Classroom Climate Workshops have been made at five **professional conferences** from 1995-1997: National Association for Women in Education; International Conference on the First-Year Experience; National Academic Counselors Advising Association; WEPAN/NAMEPA Joint National Conference; and the Committee on Institutional Cooperation Best Practices Workshop.

**Program products and materials** (e.g. program budgets, videotape albums, participant letters and reply cards, workshop hand-outs, evaluation measures, and annual reports) have been sent to more than 150 institutions, centers, and/or organizations these past three years. Such items are useful in preparing and presenting orientation and/or training sessions for new or current teaching assistants.

# PROGRAM EXPANSIONS

The original Classroom Climate Workshop on Gender Equity has now been expanded into: four climate workshops; four traveling troupes; four video albums [Wadsworth, E., Mennen, D. & Clark, B., 1996; Wadsworth, E., Jamieson, L., Mennen, D., & Sullivan Lee, R., 1998; Wadsworth, E., et.al., 1998; Wadsworth, E., et.al., 1998; and two workshop booklets [Wadsworth, E., 1998; Wadsworth, E. & Anderson, L., 1998]. Workshops, traveling troupes, and albums are focused on Gender Equity for Teaching Assistants, Cultural Awareness for Teaching Assistants, Gender Equity for Faculty Members, and Improving the Boardroom Climate. Booklets are titled "Creating Cultural Awareness in College Classrooms" and "Improving the Boardroom Climate."

Finally, we are currently institutionalizing Classroom Climate Workshops for Graduate Teaching Assistants across all ten schools at Purdue University [Agriculture, Consumer & Family Sciences, Education, Engineering, Liberal Arts, Management, Pharmacy & Nursing & Health Sciences, Science, Technology, and Veterinary Medicine]. Come August, 1998, interactive theatre workshops on Gender Equity and Cultural Awareness will involve 1,000 students.

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# CONCLUSION

The program set forth in this paper is presently serving as a model for other institutions of higher learning. Workshops based on elements of our program have been integrated into or are being seriously considered at Carnegie Mellon, the University of Idaho, the University of Michigan, and Penn State University. It is our hope that more universities will follow suit and thus college classroom climates will become more effective learning environments for many students in future years.

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