

WISEST INITIATIVES / STEM WOMEN FACULTY DEVELOPMENT

**Tools for handling student challenges to competence of women faculty in STEM disciplines**

by Cynthia J. Jameson, UIC

| Type of challenge   | Behavior   | student at his stage of development   | Range of responses   | Recommended positive options  |
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| confrontational and threatening attitude against the rules for the course | <p>Student says "I don't need learning goals. I'll learn what I need to if you do your job."</p> <p>Upon random assignment to a project student group: "Who do you think you are, telling me who I have to work with in this course?"</p> <p>Above was excerpted from Gallos<sup>i</sup></p> | <p>Student's perspective: Teacher violates strong traditional expectations equating authority with maleness. He expects teacher to play certain role, yet he has been taught to assume that people like her cannot do this.</p> | <p>Primitive instincts: fight or flight</p> <p>(a) Unproductive anger: See this as a personal attack. He's a bully, a regular disrupter. Throw the student out of the course.</p> <p>(b) Distance: Ignore him. Others need my attention and energy.</p> <p>(c) Defeat: He is the product of major societal issues. One course isn't going to change a guy like that.</p> | <p>1. Think of this conversation as a single event of student-teacher exchange (that is, avoid loading it with historical baggage, 'another example of a common and demeaning male power play' which would cast it as an overwhelming societal event).</p> <p>2. Assume a non-defensive interpersonal stance. Manage yourself (i.e., do not lose your temper; this would escalate the intensity of the exchange in non-productive ways). You need to maintain the personal clarity and calm necessary to see your options and use them productively.</p> <p>3. Select comfortably from a repertoire of relevant techniques, i.e., have a list of available options and feel comfortable using each one of them. Having choices gives you a sense of self-control.</p> <p>(a) Remember the don'ts: Don't tell an angry student he is wrong. Don't engage in an angry student-teacher debate about who is right. Don't tell a student he does not understand (instead, 'Summarize in your own words what you heard from what I said.').</p> <p>(b) Reflect back to him what he is saying by asking questions: What leads you to that conclusion? What did you hear me saying? How would you feel if someone said that to you? How do you think others might see your behavior?</p> <p>(c) Clarify/restate the limits and rules for the course, the reasoning behind them, and the consequences for violating them. This offers student an informed choice about what to do.</p> <p>(d) Communicate your commitment to learning.</p> |
| challenges substantive statements by lecturer                             | <p>"That does not make sense!"</p> <p>"I disagree"</p>   |   | same as above  | <p>Assume the student simply did not understand.</p> <p>(a) Say, "Okay, let me explain it better. Perhaps other students are also missing the point." Explain again, this time starting from really, really basic principles and very slowly.</p>   |

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|   | with that!"   |  |   | <p>or (b) Prove the statement by using alternative approaches to show that the same result is arrived at.</p> <p>or (c) Point to the part of the textbook that talks about this topic and show the logic is the same as what you are using.</p> <p>or (d) Ask the class, "Does any one here want to explain it to Mr. XX? If not, everyone should prove this as a homework."</p>   |
| incivility  | continuously rolls his eyes or otherwise shows disdain in class             | Social identity theory suggests that an individual may engage in out-group derogation when his social identity,                |   | Do not look at this student. Instead look at students whom you have previously identified as interested in the course and deliver your lecture as if to them specifically, get feedback from their body language, as you attempt to clarify.   |
| questioning your competence   | "You are not qualified to teach this course!"                               | competence* or value has been undermined.  | [Particularly threatening to an untenured Asst. Prof. and could undermine confidence for survival in the academy.]  | "On the contrary, I am more than qualified to teach this course." Then proceed to itemize your credentials and achievements. [*Students can have unrealistically high opinions of their abilities (70% of college freshmen in 2004 said their academic ability was "above average" or "in the highest 10%")]   |
| continuously interrupting in middle of lecture                          | (asking questions every few minutes)  | If the student does not believe a woman can be competent in this field, he may simply be asking questions to prove his belief. |   | <p>If question is relevant and the answer will provide clarity for the rest of the class, answer it.</p> <p>If question is irrelevant or pertains to previous topic, not this one, say "we have already covered that in last week's lecture, if you wish to know the answer, you will find it on page xx of the textbook. We are now talking about something else." "That concept has nothing to do with the present topic. If you really are curious about it, look in chapter xx of the textbook."</p> <p>If the question has already been answered by you at some previous lecture, say "Don't you remember you asked that same question before? Here is the answer again..."</p> |
| making a big deal out of trivial errors of the type many lecturers make | "You got the sign wrong in that equation. That is not what is in the book!" |  | <p>(a) Spend an enormous amount of time over-preparing for lectures to avoid having this happen.</p> <p>(b) Stop in the middle of lecture and spend the rest of the period trying to find your mistake.</p> <p>(c) Apologize over and over for making the mistake</p> | <p>(a) "Did I? Let me see." Then look over your work to be sure the student is right. Do not assume he is right. Do not accept every "correction". Sometimes the student is simply trying to see if you can be tricked into agreeing with him that you have made a mistake even when you have not.</p> <p>(b) If you are not sure, say, "Let us just leave it like that for now. I will check when I have more time and then show you during our next lecture." Then move on.</p> <p>(c) If you know exactly where it is, open the textbook to check and make the correction right away, and then move on.</p>   |
| hostile & threatening comments during class                             | "I can get you fired!"  |  |   | <p>(a) Do not reply to a threat like this.</p> <p>(b) Do keep a diary of the incidents. Describe in detail what happened, include quotes and record the place, date, time. Record all reports (to head, dean...) made about the incident.</p> <p>(c) Save all documentation. Prepare a written report to Head of department and Dean of Students and campus police. Get a copy of the police report with a case number against future</p>  |
| hostile & threatening   | "You'll be sorry!"  |  |   |  |

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| verbal,<br>email, phone<br>communication |  |  |  | problems.  |
| accusations<br>of unfair<br>grading      | <p>"I was there.<br/>You must<br/>have lost my<br/>test paper!"</p> <p>"Some parts<br/>of my exam<br/>were ignored"</p> <p>"my exam<br/>was not<br/>graded fairly"</p> |  |  | <p>(a) Record presence of students during exam by having all students sign an attendance sheet or have the TA record attendance.</p> <p>(b) Scan all exams after grading as a precaution against answers added by students after exams are returned to them. When a student returns an exam for regrading, say "just give me a note stating which problems need to be regraded and sign and date the note. I do not need the exam; I will examine our copy of your exam instead."</p> <p>(c) As a precaution, you may ask a colleague to look over the graded exam of a challenging student and attach the colleague's signed dated statement that the grading was fair and consistent with the grading of other students' exams. Keep for your records but do not show to student. At the end of the semester when he complains about the letter grade received, you are protected.</p> |

**Pro-active preparation by women faculty** to minimize such challenges. Here are some suggestions:

1. Establish authority and expectations on first day of class: syllabus for the course, rules for homework, projects, deadlines, grading scheme for the course (point system?); the schedule for all exams are best set on the first day. It is easier to adjust to be more lax rather than stricter over the course of the semester
2. During the first few minutes of the first day of the semester, signal that you are competent and knowledgeable. For example, you might talk about your qualifications, research expertise areas, technical achievements, as a way of introducing yourself to the class on the first day. Participants in a study who watched as little as six seconds of an instructor's silent classroom behavior "predicted with surprising accuracy" students' end-of-semester evaluations.<sup>ii</sup> This suggests that the first few minutes in the semester will determine the quick impression made by the students and that this impression will be reflected in their end of semester student evaluations.
3. Women faculty should not be on a first name basis with students. Always use your title such as I am Professor Last-name. Welcome to Engineering 101. Research studies have shown that a common example of student bias is that the same student addresses women faculty as Miss or Mrs. while addressing male faculty as Dr. or Professor. Also, women faculty are referred to as teachers (just as elementary and high school teachers), while male faculty are referred to as professors.
4. Convey concern for students and commitment to learning while maintaining sufficient distance to protect your research time. Being endlessly available to students will not be particularly appreciated by students or rewarded with high student evaluations,<sup>iii</sup> and you will not get your other work (writing proposals, doing research, writing research papers, mentoring Ph.D. students) done.
5. Recognize that students expect men to be authoritative and women to be nurturing. Going against their expectations of the teacher is one of the reasons for bad student teacher interactions. Seek a proper balance between authority and nurturing, Achieve

balance through small adjustments rather than radical change, i.e., you don't have to become someone else. Women faculty must appear nurturing and expressive, but not too much so. These must go along with competent behavior or else risk being seen as motherly and be similarly devalued as an authority in the subject.

6. Establish reasonable office hours on the first day of class for yourself and for your TA (if you have one). Limit out-of-class interactions with students to your office hours. If at all possible, have office hours in a location other than your office, for example, in a learning center where other faculty also hold their office hours. This keeps students from informally dropping into your office at other times and also protects you: students are less likely to engage in challenging behavior in a public place.

7. Whenever applicable, insert into your lectures examples from research work that you have done, to remind the students that you have expertise in your field. This helps establish your competence in the discipline from their perspective.

8. Try to find strategies that are consistent with your personality; there is no one formula for teaching evaluation success. For example, if you tend to be quiet and less assertive, strategies that work for a loud and dynamic personality may be difficult for you to adopt. Be self aware of your weaknesses and discover how to work around them or even use them to your advantage. For example, if you tend to be volatile, discover ways of keeping your reactions in check. If you are shy, remind yourself to hold your head up when talking to the class and project your voice to the students at the back of the room. If you have a small voice, arrange for a microphone in a large class room.

9. Engage in eye contact with students during a lecture. Choose 2 or 3 students who sit in different parts of the classroom and look directly at one at a time while lecturing, as if you are talking to him/her personally, and also invite that individual to ask questions. If you make this a habit, those particular students will feel more engaged in the lecture, will listen more carefully, will probably learn more and give you good teaching evaluations. Your lecture will become more interesting to everyone in the class because your voice and facial expression will transmit to the class that you are engaged in a learning conversation with students rather than a mere recitation of material.

10. Ask peers to observe your classes and evaluate your teaching. This provides feedback for improvement and also for teaching assessment by peers to support your tenure and promotion.

11. Document your teaching effectiveness. Save any positive feedback from students or alumni (e-mails, letters). Apply for teaching awards; ask your department head to nominate you for these.

12. You are not alone. Communicate with your mentors about teacher-student interaction strategies. Communicate with William Rodriguez, Associate Dean, Dean of Student Affairs; phone: 312-996-4857, fax: 312-413-3716, or email: [willie@uic.edu](mailto:willie@uic.edu) for advice or for action when you encounter student problems. Communicate with your department head and/or senior faculty when the problem is more general (not just you, not just one student) and if you think the problem can/should be solved within the department by instituting new policies or implementing existing policies. If you believe your problem is a consequence of endemic gender bias, communicate with WISEST Science & Engineering department Facilitators: e-mail [men@uic.edu](mailto:men@uic.edu) LAS Distinguished Professor of Chemistry, Martin Newcomb, Lead Facilitator of WISEST. He can bring the problem to the attention of all Facilitators at a Facilitators meeting and/or to the attention of the Vice Provost for Faculty Affairs MoYin Tam, WISEST PI and/or to the attention of the Vice President for Academic Affairs Mrinalini (Meena) C. Rao, previous WISEST PI at the WISEST Executive Committee meeting.

**Pro-active preparation by the department** to minimize gender-biased challenges against female teachers by students.

Here are some suggestions:

1. Recognize that students' expectations based on gender schemas may cause problems when female professors deviate from their expectations that men are authoritative and competent and women are nurturing. Training about unconscious bias may need to be included as part of student orientation within the department.
2. Establish early that the department has zero tolerance for improper student behavior such as abusive or threatening stance or threatening language against professors. If an infraction occurs, the head (or a senior faculty member designated by him, if the head is unavailable) should deal with it immediately and decisively. It must be made clear to students when they have crossed the line of unacceptable conduct. When the leadership of the department fails to handle this type of situation properly, it undermines the confidence of the faculty member who is the target of abusive behavior and puts into question the ability of the department to retain its valuable investment, namely a productive faculty member.
3. Make the achievements of your female faculty visible to students in order to counteract their gendered expectations about competence. Publicize events such as when your female faculty receive grants, honors & awards, deliver invited conference lectures, or invited seminars in other institutions, or receive any type of press attention. Use posters, announcements on bulletin boards, UIC News press releases, departmental website postings.
4. The head or his designated senior faculty should establish a clear communication line with the faculty, so that faculty feel confident that (a) they can go to the head when problems involving inappropriate student behavior occur, (b) they know that he will be supportive, (i.e., will not be automatically assume it is the faculty member's fault), and (c) the department will help the faculty ameliorate the problem. The teaching effectiveness of the entire department matters in its relations with its alumni (and future donors), with its students' future employers, with its responsibilities to the citizens of the state of Illinois, and more. Therefore, it is important for the leadership of the department to exert considerable effort to help its faculty members carry out their teaching duties in a facilitative, supportive environment. A department that provides a supportive environment for teaching permits its faculty members to manage their time sensibly and improves their ability to advance their research programs. It is a win-win strategy.
5. Recognize that student evaluations are affected by gender-role expectations by students. Educate others about the limitations of student evaluation questionnaires in assessing teaching ability (see section below: What about student evaluations?). Discover alternative measures of teaching effectiveness to counter the imperfections of standard student evaluation forms. Some examples are: peer review of teaching, correlating student performance in subsequent courses to teaching effectiveness in previous courses, correlating student performance in professional, licensing, or GRE advanced subject exams to teaching effectiveness in the subject. Use the same measures for all faculty, including male faculty.

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<sup>i</sup> Joan V. Gallos, (1995) When authority = she: a male student meets a female instructor. *Journal of Management Development*, **14** No. 2, 65-76.

<sup>ii</sup> Nalini Ambady & Robert Rosenthal, Thin Slices of Expressive Behavior as Predictors of Interpersonal Consequences: A Meta-Analysis, *Psychol. Bull.* **111**, 256–274 (1992).

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<sup>iii</sup> B. L. Bernstein, A. Sumner, S. Blaisdell, M. J. Perez and C. J., St. Peter (Aug 1995) Women faculty's role demands, work effort, and student evaluations. Poster presented at annual meeting American Psychological Association, New York.