GENDERED INNOVATIONS IN SCIENCE AND ENGINEERING

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comfortable environment for women, and in turn it attracts more women. Right now there is an explosion of women at the entry end—nearly half the astronomy majors nationally are women, and 60 percent of the youngest cohort of membership in the American Astronomical Society (ages 18–25 years) are women (Marvel forthcoming). Women speakers at professional meetings are common, the national society has many women officers, and respect for women colleagues comes more readily than in physics. The problems are not solved in astronomy, but the culture is perceptibly more comfortable than in physics, so it feels as if it is only a matter of time. In physics, one feels fundamental transformation is still needed.

The bulk of the work of transforming culture is educating one’s colleagues. Change in most universities happens at the departmental level, so getting colleagues on board—or at least a few powerful colleagues—is an essential step. Toward that end, we organized two conferences on Women in Astronomy, the first in 1992 in Baltimore. We were poorly educated ourselves at that point, and the meeting taught us a lot. Afterward, we wrote the Baltimore Charter (Urry et al. 1993), a sort of manifesto for change, which was disseminated widely among astronomy departments and in other branches of physics. In the ensuing decade we made a lot of progress. In 2003, in Pasadena, we held the second conference on Women in Astronomy, and developed a much bolder, detailed, and comprehensive set of recommendations, which have been endorsed by the American Astronomical Society (http://www.aas.org/cswa). At Yale we have two women faculty in astronomy, one recently tenured, and have hired three women as junior faculty in physics. The president, the provost, and the deans of the college and of the graduate school are all eager to make further hires of women. The Women Faculty Forum at Yale (an association of women faculty across the university) is becoming a powerful tool for change. We simply have to work harder to make change happen.

10 “A Very Scholarly Intervention”
 Recruiting Women Faculty in Science and Engineering
 Danielle LaVaque-Manty and Abigail J. Stewart

In an insightful analysis of the National Science Foundation’s ADVANCE program, Susan Sturm (2006) argues that

A key aspect of ADVANCE’s strategy involves the development of a new role that has proven to be pivotal in enabling systemic change. . . . Because of their core function of mobilizing change at the intersection of different systems, we have called these individuals “organizational catalysts.” Organizational catalysts are individuals who operate at the convergence of different domains and levels of activity. Their role involves connecting and leveraging knowledge, ongoing strategic relationships and collaborations, and forms of accountability across systems.

Sturm’s analysis helped us understand that when the University of Michigan ADVANCE program created a faculty committee called Strategies and Tactics for Recruiting to Improve Diversity and Excellence (STRIDE), we in fact created both a collective “organizational catalyst” and a set of individual catalysts, or change agents (see also Sturm forthcoming a and b). In this chapter we hope to illustrate both the process of internal change that committee members experienced, and the connection between that process and their role on campus as faculty change agents.

Of course the larger context of UM’s STRIDE committee is crucial in ways we cannot measure, but must recognize. In 2001, the National Science Foundation (NSF) created a new program called ADVANCE, designed to cultivate a
series of experiments in institutional transformation, nationwide, that might help to change a system littered with barriers to the success of women faculty in science and engineering. ADVANCE offered universities several million dollars and five-year time horizons to develop creative approaches to improving their institutional climates and their recruitment and retention of women. When the University of Michigan received funding, along with eight other institutions in the first round, it initiated many concurrent ADVANCE interventions, including grants to departments wishing to try their own experiments in improving climate, recruitment, or retention; grants to individual women scientists and engineers to foster their projects and careers; a university-wide network that provides women science and engineering faculty with opportunities to socialize, attend workshops on leadership and negotiation, and mentor one another; and a theater troupe that promotes facilitated discussion of difficult climate issues in faculty groups. This list is not exhaustive but should give a sense of the range of activities that may be supporting and catalyzing the university community's ability to absorb STRIDE's message.

Nevertheless, since its inception in 2002, STRIDE has certainly been a major factor in the increased hiring of women faculty in science and engineering at Michigan, the transformation of committee members' understanding of gender, and the addition of new elements in the campus discourse about gender. In 2005, recognizing STRIDE's accomplishments, the university administration chose to institutionalize it, committing funds until at least 2011, not only to maintain the group but also to expand its purview to departments outside of science and engineering. Although it is important to point to STRIDE's positive impact, it is not without critics and detractors. STRIDE has sought and taken seriously feedback about all of its efforts, often altering its presentations in response to that feedback. For example, in response to one presentation, one critic wrote, "Our faculty felt accused of being sexist. The presenters urged us to adopt a goal of having the same proportion of women among professors as there are among PhDs granted in our field nationwide. No additional argument for the feasibility of this goal was presented. None of us thought the issue was that simple." STRIDE normally does not advocate any particular target goal, but when asked, they do often suggest this sort of approach to goal setting. However, they have increasingly recognized that for some fields that goal seems quite remote and unattainable, so they have developed alternative strategies for discussing the issue of goals. At the same time, some critics and detractors oppose STRIDE's very focus and purpose, and STRIDE members recognize that in these cases they must respectfully disagree and continue to represent their perspective as well as they can.

Because STRIDE has always been an experiment, the Michigan ADVANCE project's principal investigator (PI) and steering committee had no way of guessing at the outset how effective it would eventually become. In fact, they began with no specific criteria for selecting its members, much less any definite sense of what the committee would actually do once it had been formed. Thus, while we write with the purpose of encouraging others to consider interventions similar to STRIDE, we want to be clear about the fact that STRIDE is the result of an evolutionary process, that its particular structure, practices, and priorities are contingent, and that the insights and recommendations in this chapter have been developed through trial and error and are meant to serve more as a well of ideas than as a blueprint. In what follows, we draw on STRIDE's organizational history, hiring data collected by the University of Michigan, survey data collected by the ADVANCE project's evaluation staff, and interviews conducted with STRIDE members in September 2002, December 2003, and January 2006 to construct a narrative of the committee's development and evolution.

Development of STRIDE

The original group of STRIDE members included eight distinguished full professors in science and engineering, recruited by the project's principal investigator, Abigail Stewart, early in 2002. They were nominated by the deans of their colleges, who regarded them as having high credibility with their fellow faculty members and who believed they cared about issues of diversity in science. The idea behind the creation of STRIDE was that in order to recruit more women faculty in science and engineering at Michigan, faculty would have to believe that cultivating "the pipeline" alone (increasing the participation of women students at the beginning of the science career) would not solve the problem of the low participation of women scientists and engineers at the highest levels of academia. Faculty would need to believe that it was also important to recognize and address the "leaky pipeline" problem—the fact that at every transition point, from college through postdoctoral fellowships and faculty appointments, women leave academic science and engineering at a higher rate than men (Valian 1998; Etkowitz et al. 2000; Long 2001). Finally, they would need to believe that hiring more women was not only
The ability of this group of scientists and engineers to draw on social science knowledge and convey it to colleagues has turned out to be a key to STRIDE’s success. In their early days, the committee members spent many hours not only learning about gender schemas (hypotheses about what men and women are like), and evaluation bias (the tendency shown by both men and women to overvalue men and undervalue women), but also debating how to present what they learned to a science and engineering audience they presumed would be skeptical. In their initial study they found Virginia Valian’s work, which draws heavily on experimental psychology, consistently persuasive, and they believed their peers would, too. In addition, they found her self-presentation (as seen in the Rice videotape) authoritative and effective. Feeling insecure at first about presenting these concepts themselves, but having decided that the most efficient approach to intervening in the hiring process would be to present what they had learned about gender and science to faculty search committees and even entire departmental faculties, they created a Microsoft PowerPoint presentation into which they integrated clips from Valian’s lecture, with her permission. To accompany the presentation and serve as a reference for search committees, STRIDE also created a recruitment handbook.

Creating these materials required a substantial amount of discussion. STRIDE members had different intuitions not only about what would be most persuasive to recruitment committees but also about what would be the most effective tools to address bias or appeal to potential job candidates. Sometimes their differences in perspective tracked gender; for example, the men on the committee thought it would be helpful to let women candidates know that a department was eager to hire more women and was actively trying to improve its climate, while the women were wary of making women candidates feel that they were being recruited for their gender rather than for their scientific accomplishments. After several rounds of discussion, the committee finally came to consensus on recommending that departments “recruit women as scientists and not as women,” or in other words, emphasize their interest in women candidates’ academic work and not talk directly about gender issues unless candidates raised them first. Anecdotal evidence suggests that this approach helped at least one science department hire two extremely competitive women candidates who were being courted heavily elsewhere during STRIDE’s first year, because they believed their scientific work would be valued more at Michigan than elsewhere.
During the first year or two of STRIDE's existence, the committee members became increasingly comfortable that they knew their material and could present it convincingly. Between September 2002 and April 2003, STRIDE made twenty-six presentations and distributed over 300 copies of the handbook. While this made a baseline of information available to a large number of faculty, STRIDE wished to cultivate a deeper understanding of the issues as well. During the summer of 2003, the committee created a program to develop additional colleagues who would have a fuller understanding of the issues and who might eventually become new members of STRIDE. They designed a 6-hour program (which took place in two half-days), based on their own past curriculum, to share what they had learned with selected colleagues. Because having specific tasks and problems to solve (for example, a presentation to design and a handbook to write) had given them concrete ways to apply new theoretical insights, they invited their colleagues to work on a project as well: helping to improve STRIDE's approach to departments and search committees. The new group named itself Friends and Allies of Science and Technology Equity in Recruiting (FASTER). STRIDE has since acquired two new members, one of whom attended FASTER in 2003.

By the end of its second year, STRIDE was confident enough to develop a new mode of engaging other faculty, one that was longer and more interactive and therefore less "safe" than the original lecture presentation. In addition, in fall 2004, the provost expressed an interest in having STRIDE offer its workshops to units outside of science and engineering. The group began to offer 3½-hour workshops to search committee chairs, including some from social science and humanities departments, during fall 2004. These workshops included brief presentations on six topics: (1) What is the problem? (2) Why diversity matters; (3) Unconscious bias in evaluation; (4) Recruitment strategies; (5) Dual career and family policies; (6) How family matters for evaluation bias. Abigail Stewart introduced the presentations, summarized key points at the end, and facilitated discussion of issues raised. This offered fuller coverage of each issue. A total of fifty-nine faculty heading or participating on search committees in the three largest colleges (the School of Medicine, the College of Engineering, and the College of Literature, Science, and the Arts) participated in the workshops in 2004.

UM ADVANCE's evaluation staff sent an online survey to the fifty-nine attendees. Twenty-three of the twenty-six respondents (88 percent) rated their workshop overall as very effective or somewhat effective; three attendees gave a neutral rating. There was relatively little variation in specific topic ratings, though the section on "unconscious bias in evaluation" received the most uniformly positive rating. No respondents reported a "not at all effective" rating for any topic. Another set of workshops, slightly redesigned, was held in fall 2005, with similar ratings.

There has been a marked increase in the hiring of women faculty in science and engineering since the creation of STRIDE. As we noted earlier, STRIDE is only one of many ADVANCE interventions currently operating at Michigan, but while many factors no doubt contributed to departments' willingness to hire more women, STRIDE is the intervention that most directly provides tools and ideas to aid in recruitment. Hence, we believe that the increase in women's hiring reflected in Table 10.1, which presents data for the three colleges that employ the largest number of scientists and engineers at Michigan during two "pre-STRIDE" years (AY 2001 and AY 2002) and three "post-STRIDE" years (AY 2003, AY 2004, and AY 2005), is substantially attributable to STRIDE. In the two pre-STRIDE years, ten women scientists and engineers were hired, or about five each year in absolute numbers (and 14 percent in percentage terms); in the three post-STRIDE years, forty-six women scientists and engineers were hired, or about fifteen each year (and 34 percent in percentage terms).

The university administration also believes that at least some portion of this hiring success is due to STRIDE. In addition to asking the committee to broaden its mission and work with departments beyond science and engineering, the president and provost announced in 2005 that although Michigan's NSF ADVANCE funding will terminate in December 2006, the university will continue to support STRIDE (and the ADVANCE program) until at least 2011. STRIDE-related expenses include not only staff support

<table>
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<th>TABLE 10.1</th>
<th>Men and women hired in natural science and engineering departments in three University of Michigan colleges.</th>
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<td>Pre-STRIDE</td>
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<tr>
<td>Number hired</td>
<td>41</td>
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<tr>
<td>Percent women</td>
<td>13</td>
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and physical materials (handbooks, presentation equipment) but also sufficient compensation to committee members to allow them to support students or laboratory staff or to release themselves from some portion of their usual teaching load. Not only does this enable them to devote more time to STRIDE—a demanding committee that currently holds two 1½-hour meetings per month, in addition to providing presentations and workshops—it also signals the value of the committee’s activities to the university.

Institutionalizing STRIDE

It is fair to say that many, if not all, members of STRIDE experienced a significant transformation in their understanding of academic science as a gendered system through their participation on the committee (Stewart et al. 2004; Stewart et al. 2007). As a result, they have become committed and articulate activists. They have also continued to gain knowledge and confidence over time; where they originally felt most comfortable talking about these issues in groups, so they could fill in the gaps for one another if they forgot any information or had difficulty expressing any ideas, they have now internalized what they’ve learned to such an extent that they routinely respond to questions and intervene spontaneously in situations outside the context of workshops and presentations. In an interview in 2006, one of the women said:

STRIDE has had a big effect on me, I mean, in what I’m willing to talk about routinely, when I go to universities . . . This is new . . . It’s just happened in the last year . . . I say, “Well, I can give a research talk, but I also have this other talk that I can give about women in science and ADVANCE at Michigan and what we’re doing.” And so I’m much more willing to talk about it, not just at Michigan, but at places around the country.

One of the men noted that he often finds himself talking about gender and evaluation bias even in casual conversation:

And I think every time you make somebody really aware . . . even coincidentally, I think it can make a big difference in the world because there’s a cascading effect as that person influences other people. I mean, I know that making me aware has had a large effect, because I am always telling about what the literature is like in casual conversations, dental hygienists, whatever. . . . I’ll talk to anybody about this. You know, it ranges from just random people to other participants at conferences, to reporters from the New York Times.

In interviews conducted in 2002 and 2003, several STRIDE members attributed their newfound activism to the “consciousness-raising” experience they shared in 2002. For example, one of the men said:

The process that we went through worked so well. I don’t know whether it was just the chemistry of the particular group, or whether the process could be replicated . . . the process being to identify a group of senior faculty, both men and women, in the sciences and engineering, who have shown some evidence of being concerned about these issues, but who clearly don’t know all the literature. And I think every one of us on the committee now is like that. That is, we all had some previous commitment, but what we realized when we got together and started actually looking at the data and learning together was that we didn’t understand, we didn’t really know what was going on, we really were quite naive . . . that discovery process, I think, was so critical to building the passion that the current group has.

This might lead one to wonder not only whether such a discovery process could be replicated but also whether it would be difficult to sustain and institutionalize this group by adding new members over time. STRIDE will continue operating through at least 2011, and it is not reasonable to expect the original members to stay on the committee for ten years. So what happens next?

In fact, STRIDE has already added three new members, all of them men, since its inception. One was invited to join in 2003 and participated for a few months but ultimately chose not to stay. Two others joined in 2004 and remain enthusiastic participants. All three were interviewed in 2006.

The new member who chose not to stay on the committee had never seen a STRIDE presentation before joining and did not have a clear sense of what he was signing up to do, though he was “taken by the charge of the committee . . . [and] interested to learn more about what ADVANCE . . . was trying to do.” He had been asked to join as a replacement for a member from his department who had retired from the university. Soon after his first few meetings with STRIDE, he left the country for a year on sabbatical, and by the time he returned, he had decided not to continue with the committee. In addition to signing on with STRIDE, he had also taken on another administrative role that he felt “more committed to in that [it] originated from [him].” In the end, he said, “I didn’t leave because I didn’t accept what STRIDE was trying to do, but I left because I felt that the time it would take to get up to speed and to deliver that message with conviction was just going to be more than I could afford.”
The new members who stayed joined under very different circumstances. One had been through the FASTER sessions in summer 2003, and both had long-standing interests in gender and science. Both joined in December 2003 and were able to catch up on the reading. The other members were already familiar with the following summer, when most of the planning for the following academic year took place. They were thus able to play a role in making decisions for the upcoming season. They had a better sense of what they were agreeing to in the first place, experienced no extended interruption in their interaction with the rest of the group, and may have been helped by the fact that there were two of them starting at the same time. As one of these new members said, "[W]e both came, I think, with our own ideas and enthusiasm for doing something, and at the same time, since there were two of us, it was more comfortable to say, 'Hey, wait a minute, I don't remember that. I don't remember it because I wasn't here a year ago,' or something. And we both did that."

One said he had been eager to join in part because he had become familiar with some of the problems of gender and science while serving as an associate dean for his college, and he had a sense that STRIDE was a "positive, action-oriented" committee. He appreciated its style of operation, which he described as following "pure academic principles of engagement . . . It was clear that they wanted you to study, work, read, form opinions, validate or invalidate current approaches . . . to become educated."

The other new member was motivated to join in part by his observations about his graduate students' careers:

Most of my graduate students have been women, and so, you know, I want to see them . . . succeed, and so to know that there are glass ceilings beyond the areas where I had direct impact, which is getting them trained . . . to me was just something I found very discouraging. And so the opportunity to actually participate in a program that could begin to . . . address and reverse those and actually get involved with trying to change those within the university, I . . . was . . . I mean, I jumped at that opportunity.

While this new member also noted that joining was "intimidating at first . . . having to bring myself up to speed with everything that they had read and discussed in the previous couple years," both described the group's atmosphere as being "welcoming."

The original members, when asked what it was like to integrate the newer members into their group, typically described the process as being quite smooth. Intriguingly, a couple of them were initially confused by the question. For example, one said, "Well . . . we haven't really integrated new members. Unless you're talking about [names the two new members]." At the time of this interview, the newer members had been part of the committee for two years, and the committee as a whole had been in place for three and a half years. This interviewee said, "I would say it has been seamless. In fact, when the [addition] took place, the committee was still fairly new. We barely knew each other." Another of the original members remembered adding one new member but thought that the other, whom he had already known in other contexts, had been part of the group from the very beginning.

Based on these experiences, STRIDE plans to integrate at least two new members at a time in the future, rather than bringing a new recruit in on his or her own. And though most of the current members would describe themselves as having been "open to" questions of gender rather than as having been actual activists prior to their engagement with STRIDE, in the future they will try to bring in new people who are actively interested in promoting diversity in the academic community. While this may cut down on the potential for transformative personal experience, it is likely to make for a smoother transition to a group that has developed a strong sense of shared values. FASTER serves as one pool of potential recruits; faculty who are willing to spend six hours attending FASTER sessions, and who seem to enjoy engaging with the material presented there, are also likely to find serving on STRIDE appealing.

STRIDE is likely to be adding at least two more new members in the near future, not only because initial members are likely to begin rotating off but also to accommodate the university's request that they work with departments beyond science and engineering. As they reach out to include broader audiences, they intend to invite representatives from a wider range of fields to join them. Not only do they think it is important to include people who are respected by the faculty in those fields on STRIDE, they also assume that they will benefit from having informants who can teach them about the relevant disciplinary cultures. Further, some of them are concerned that much of what they have to offer to science and engineering departments is knowledge they've learned from the social sciences, knowledge that may already be familiar to those in the social sciences and humanities. For example, one STRIDE member said, "I have to say it's also a little intimidating for me as a . . . scientist to be talking about what are fundamentally social
science issues to people who come from the social sciences.” Others, however, see it as an exciting opportunity:

I might be the wrong person to ask about that, in the sense that . . . at [my college] I had worked for years . . . to extend what I do beyond [that] campus and into the undergraduate campus, with teaching, with committees, things like that. And because I personally like feeling part of a university community as a whole . . . for me personally, being part of a committee that involves multiple colleges and now down the road some additional departments, it’s refreshing and interesting. And so . . . I welcome it.

In response to a question about whether there is anything they wish STRIDE could add to what it already does, several members mentioned that they would like to be able to address recruitment and retention of underrepresented minorities more thoroughly than they currently do.” They also said they wish they could find more time to address climate issues that might not only improve retention of women faculty, but also make life better for faculty in general; consult more intensively with hiring committees throughout the recruitment season; find opportunities to reduce “leakage” of women postdocs and graduate students; work with the School of Education to help future K–12 teachers understand the role gender and evaluation bias might play in shaping the science and engineering pipeline; and be able to address issues of sexual orientation.

In contrast, in response to a question about whether there are any activities they would like to discontinue, none of them suggested dropping anything they currently do. All but two of the members said they feel they can continue to sustain the amount of time they’ve been putting into STRIDE for the near future, though most also plan to rotate off at some point before 201. One member who felt less able to sustain his earlier pace has been on leave from the committee since becoming an associate dean in his college two years ago; another had recently become the chair of her department. Thus, both of them confronted increased administrative demands outside of STRIDE. Several members noted that it would probably be best to rotate members off the committee over time in order to bring in “new blood,” create direct STRIDE connections to more departments, and allow the committee “to have the same effect on somebody else that it’s had on me.”

As noted earlier, STRIDE members receive modest compensation for their work, which helps free up a small portion of their time. While many committee members mentioned this as being a crucial infrastructural commitment, they also indicated that it is not primarily the compensation that motivates their high level of enthusiasm. Instead, one of the key components sustaining their willingness to participate is the sense of efficacy they get from STRIDE’s successes. As one member said, “[W]hat’s been really fulfilling is the fact that . . . we can come up with solutions . . . to make changes. And . . . now, after being there a couple years . . . if the early numbers continue . . . the way that they’re going, it looks like they’re a success. I mean, the trends are changing. And so . . . that’s been great.” Another said, “I think it’s one of the most interesting committees that I’ve ever been on. . . . so my advice would be . . . if you are interested in making, or participating in a group that actually is making change, you should do this.”

Another factor that contributes to their ongoing engagement is the intellectual satisfaction members get from the group’s discussions. As one put it:

[Un]iversity committees frequently are sort of nothing but administration. And . . . the responsibility of doing something that’s relatively onerous. This committee has been very different than that. It’s intellectually very stimulating. You read original literature. Get to read things that I wouldn’t normally read. And then have, you know, really, really intelligent people to discuss those things with. It’s really a tremendous committee. It’s a great committee. I really . . . I really enjoy it.

Another said:

I would characterize STRIDE as, as a very . . . very scholarly intervention into the issue of climate and recruiting practices for women faculty. And people could debate what I mean by scholarly, but it’s . . . based on knowledge and understanding the complexity of the problem with not just an emotional response to a condition. I feel that I learn something every time I come to a meeting, or spend my homework time doing reading.

Recommendations to Others

As noted above, we have now conducted three rounds of interviews with members of STRIDE. Each time, we have asked them what recommendations they could offer to other universities wishing to create STRIDE-like interventions. In keeping with the theme that STRIDE’s development has been an evolutionary process, we first offer a summary of their earliest list
of recommendations—framed not as imperatives, but as statements about
the characteristics that may have contributed to STRIDE’s success. We have
not addressed the basis for all of these here but have elaborated on them
elsewhere (see Stewart et al. 2004). We follow the original list with new sug-
gestions that emerged in the interviews conducted in 2006.

1. Having the request to serve on STRIDE come from a legitimated
campuswide project embedded in a long-term process of change un-
derscored its institutional importance.

2. Being compensated for time spent on the committee communicated
the value to the institution of this service.

3. Being asked to serve for several years convinced committee members
that plans were consistent with the scope of the goals.

4. Having access to social science expertise shored up committee mem-
bers’ confidence.

5. Having substantial staff support enabled the committee to achieve its
goals in terms of access to the literature, to experts, and to implemen-
tation of its ideas (in documents, presentations, etc.).

6. Having the freedom to define and redefine its mission, message, and
strategy gave the committee a strong sense of responsibility for its work.

7. Having representatives from the colleges with the largest number of
scientists and engineers brought crucial cultural knowledge, examples,
and experiences to the committee.

8. Including in the committee only respected scientists and engineers in
their own fields—both men and women—gave it considerable credi-

9. Debating issues they disagreed about (like whether to emphasize
Michigan’s eagerness to improve things for women scientists and en-
geineers), rather than avoiding conflict, built trust in each other and

10. Meeting frequently allowed the committee to reflect on experiences
both as a group and as individuals; this allowed a wide range of dis-
cussions about concrete examples and difficult conversations, and
built up their skill at addressing many issues.

We noted above that as STRIDE members have gained confidence in their
expertise about gender and science, they have begun to talk about these issues
with a wider range of people, including those from other institutions. One
recently visited a university with an ADVANCE project that had attempted to
create a committee that would offer presentations like STRIDE’s. However, an
administrative unit within that university was already offering recruitment
presentations and did not want to give up that role. This STRIDE member
said, “I think what I would tell universities is you need to figure out how to
provide the information and how to educate your community, but that you
probably need to figure out what the best way to do it at your university is,
because each university has a different set of constraints.”

Another STRIDE member visited a different institution whose ADVANCE
program was housed in a unit that was viewed as peripheral by some of its tar-
get audiences; it therefore had difficulty gaining the kind of access it required
to succeed. This STRIDE member suggested that “if you’re going to cater to
science departments and engineers, you want to be where they are, not dictat-
ting to them . . . [from elsewhere].”

A third STRIDE member pointed out that while articles or chapters like
this one may be a helpful source of inspiration, they are necessarily “archi-
val” in nature. He recommended that other institutions “benchmark” against
Michigan, by which he meant that they should gather information from us in
real time, and at all relevant levels of administration, including, for example,
provosts and presidents. Those administrators should then discuss pertinent
issues with “their counterparts here. Because we all know that there are bud-
get constraints. There are many good things to do. How did you pick it . . .
how did this work? . . . Who do you engage in the faculty? How do you sup-
port them? How do you reward them? How do you define unique circum-
stances there versus Michigan?”

These comments lead us to offer the following additions to the list above:

11. Being aware of potential “turf” issues will help institutions identify the
right kind of interventions; even if another group meets with search
committees, perhaps STRIDE’s “workshop” format (which is aimed
at committee chairs from the entire institution) could be adapted to
work. Or perhaps a completely different focus (on workshops for all
faculty, or for all chairs) would be more successful. And meanwhile, of
course, it is important to be sure that the people who are meeting with
search committees have themselves been exposed to the same issues.

12. Locating an institutional change effort at the heart or center of the
institution enables that effort to be viewed as both important and
“central.” There are reasons to make trade-offs (for example, centrality may cost some measure of independence, or focus on a particular unit), but those trade-offs should be intentional, and may be more costly than anticipated.

13. Gathering up-to-date ideas and information from a range of institutional sources will make it easier to build on the experience of others without necessarily replicating that experience.

Finally, we ourselves learned from the STRIDE committee interviews how important it has been that the STRIDE process is an academic, scholarly process. Faculty not only enjoy learning and evaluating information, theories, and evidence, but those practices are at the core of their understanding of their academic roles and identities. If institutional change efforts are thoroughly grounded in that set of intellectual and collegial practices, they are much more likely to enable the sort of deeply personal commitment that is associated with becoming an ongoing organizational catalyst—on the STRIDE committee or elsewhere.

Notes to Chapter 10

1. STRIDE’s acronym originally stood for “Science and Technology Recruiting to Improve Diversity and Excellence.” However, the group’s expanding mandate, as described in this chapter, required it to adopt a more disciplinarily inclusive label.

2. The other eight were Georgia Institute of Technology; Hunter College; New Mexico State University; University of California, Irvine; University of Colorado–Boulder; University of Puerto Rico–Humacao; University of Washington–Seattle; and University of Wisconsin–Madison.

3. More information about all activities undertaken by NSF ADVANCE at the University of Michigan is available online: http://sitemaker.umich.edu/advance.

4. This commitment was partially stimulated by recommendations for institutionalization made by the NSF-sponsored site visit committee; their report is also on the website: http://sitemaker.umich.edu/advance/files/sitevisit.pdf. The university subsequently announced that it would continue to fund other core components of its ADVANCE project as well.

5. We are grateful to STRIDE committee members for their seemingly endless goodwill, insight, and commitment. In addition, we depended in this chapter on the support and help of Janet Malley and Keith Rainwater, who collected and analyzed the evaluation data, and Cynthia Hudgins, who provides support to STRIDE.

6. The initial committee included Pamela Raymond and Michael Savageau from the School of Medicine; Anthony England and Martha Pollack from the College of Engineering; and Carol Fierke, Melvin Hochster, Samuel Mukasa, and John Vandermeert from the College of Literature, Science, and the Arts. Michael Savageau retired from UM and the committee at the end of the first year. Joel Swanson from the School of Medicine participated during the beginning of 2003. Gary Huffnagle from the School of Medicine and Wayne Jones from the College of Engineering joined the committee in December 2003. Kathy Spindler from the School of Medicine and Charlie Brown from the College of Literature, Science, and the Arts joined in 2006, after this chapter had been completed.


8. The PowerPoint presentation, recruitment handbook, and other materials developed by STRIDE are available online: http://sitemaker.umich.edu/advance/STRIDE.

9. In January 2007, STRIDE and the University of Michigan’s Center for Institutional Diversity sponsored a UM conference on increasing racial and ethnic diversity among students and faculty in science and engineering on our campus.