

GETTING OFF THE PLATEAU: INCREASING THE REPRESENTATION OF WOMEN BEYOND 20%

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Abstract *¾This position paper is designed to facilitate a productive, guided discussion about how to reach beyond the 20% women that tend to make up engineering programs. It does so by focusing on the following questions: How radically do things have to change to accomplish this? Where do the changes have to happen? Can these all be done at once or can we prioritize a sequence? If we could only do one thing, what would make the biggest difference? What is the most effective way to implement that one change? Positions presented in this paper represent four perspectives from different institutions and should be viewed as a starting point for the conversation, rather than absolute answers.*

Index Terms *¾critical changes, increased representation, making a difference.*

MOVING BEYOND THE PLATEAU

As people began to be aware of the need to encourage more girls to understand engineering in the 1970s, they believed that “if we open the door they will come.” To a degree, it worked; the percentage of women studying engineering jumped from 4% in 1965 to 14.8% in 1985 and 19-20% by 1995. Women in Engineering Programs, or something like them, with a lot of hard work, good programming, and effective marketing, have helped to bring the numbers to a steady state 20% by the turn of the century and the dawn of a new millennium. Unfortunately, it seems a percentage on which we are stuck. It is a good time to look at where things started, where we are now, and what can we do to move off the plateau into the mountaintops.

John White, former Dean of Engineering at Georgia Tech, asked a shocking question at the *Bridging the Gender Gap in Engineering and Science* Conference at Carnegie Mellon in 1995: “Women in Engineering and Science: Does Anyone Care?” His dispirited answer was “It’s not obvious to me that many do.”

This is too often echoed by many faculty and older engineers (who are, notably, no longer actively involved in recruiting for their workforces). Fortunately, schools like MIT (34% women, with three majors enrolling more than 50% women) and the University of Puerto (36% women) have proven that it is possible; others, like the Michigan

higher education system and Carnegie Mellon, have shown that policy and money well-directed can also make a difference.

In 1995, James Duderstadt, then president of the University of Michigan, promulgated the landmark Michigan Agenda for Women: Leadership for a New Century in which he stated that by 2000 the University of Michigan would be a leader “in promoting and achieving the success of women of diverse backgrounds as faculty, students and staff.” Duderstadt’s initiative resulted in legislative, financial support to attract more women faculty and students in engineering and achieved his stated aim. Today the University of Michigan has an undergraduate engineering enrollment that is 27% women. (The initiatives also helped to attract a landmark lawsuit, but that is a story for another paper.) White’s leadership at Georgia Tech helped to achieve an early lead in attracting women that has since dissipated—which is what made his 1995 statement so disturbing.

What is it going to take to increase the representation of women in engineering programs so that it is above the 20% plateau? Is it a radical change that will drive this, or will it come around in its own time and we are still early on the curve to change? Where do these changes need to take place? And if there was only one thing we could do, what would it be, and how could it be done most effectively?

This paper reports the responses to these questions by four individuals at four diverse institutions. Each of the authors has responded to each question to give the reader an idea of how perspectives on this issue are shaped by our experiences. After all, in engineering there is more than one appropriate solution. These perspectives set the stage for a discussion on this topic, to take place at the WEPAN 2002 conference. A short bio of each author, their institution, and their position at that institution, follows:

Martha Cyr, Ph.D., is the Director Center for Engineering Educational Outreach (CEEEO) at Tufts University. Cyr is also a research assistant professor with the Mechanical Engineering Department at Tufts. As the director of the CEEEO she oversees a variety of programs aimed at getting gender neutral engineering into K-12 schools. Tufts has a School of Liberal Arts, School of Engineering, School of Medicine and Dentistry, School of Law & Diplomacy, and a

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Veterinary School. The School of Engineering has an undergraduate female population of 32%.

Carrie **Schade**, M.Ed., is Program Coordinator for the Women in Engineering Program at The University of Texas at Austin. Schade's primary role is to oversee retention programs for undergraduate women in engineering. She also actively works with industry partners and assists with outreach and recruitment programs. The College of Engineering at UT Austin currently has a 22.2% undergraduate female population and offers 8 undergraduate and 15 graduate programs. UT Austin currently enrolls almost 50,000 students, about 25% in graduate and professional programs. More than 100 undergraduate degree programs and 170 graduate degree programs are offered by The University's 14 colleges and schools.

Stephanie **Blaisdell**, Ph.D., is the Director of the Office of Diversity and Women's Programs at Worcester Polytechnic Institute in Worcester, MA. Blaisdell's role at WPI is to provide leadership in campus efforts on issues of diversity and pluralism, provide support and advocacy to women students, and to provide pipeline programs aimed at achieving greater diversity at WPI. WPI is home to roughly 2,800 undergrads, 23% of which are women. Academic departments include six engineering fields, five science fields, Computer Science, Humanities and Arts, Interdisciplinary and Global Studies, Management, Math, Physical Education and Athletics, and Social Science and Policy Studies.

Barbara **Bogue** is the Director of the Women in Engineering Program at Pennsylvania State University. Bogue's role is to promote the recruitment and development of women undergraduates, provide support for faculty and graduate women, and promote and effect positive change in the learning environment. Penn State is one of the largest engineering programs in the country; in 2001 the College ranked second in the number of women graduating in engineering in the United States. Women make up approximately 20% of the 5,682 student undergraduate population. Penn State is spread out over 20 campuses, offers 15 engineering majors, boasts law and medical schools, and a football team.

Are Radical Changes in Order?

Cyr: Trying to figure out ways to increase the number of women in engineering programs is by no means an exact science. At most we are trying to predict through our experiences what might actually make the differences that will draw them into the field. It is my opinion that there does have to be a radical change to start the pendulum swinging towards seeing significant increases in the percentage of women deciding to enter engineering programs.

If we don't implement a radical change, I believe that we will continue to see a 'self-replicating' portion of the

population entering engineering. This will be driven by the simple relationship that currently is in place and starts girls down the engineering track. The relationship I am referring to can be characterized as girls with a parent or relative engineer. These girls are predominately the ones we currently find in engineering programs. If we do not make a radical change then we will essentially only create new female engineers in existing and future engineering families. This will not lead to a significant change in the numbers.

Schade: With the knowledge that on average less than 3% of college bound women consider majoring in engineering, it is obvious that there is a need for radical change. Many entities will need to be involved to facilitate change. Not only that, but a great number of people within each organization will be necessary to affect critical mass. We need to radically change the way that society views engineering (which currently is with very little comprehension of the field). There is a demonstrated desire by many to increase the representation of women in engineering. Through hard work and persistence, the numbers will grow. When radical change has been achieved, parents, teachers, and students themselves will have an understanding of the myriad of opportunities offered by a career in engineering.

Blaisdell: Do things have to radically change? Not necessarily. Engineering suffers from an identity crisis. What we really need is a good marketing campaign! We already have a lot that implicitly appeals to young women – engineers help people, the environment and animals (Baker, 1995). We need to do a better job of explaining that to young women. I'm convinced that if we continue to outreach to girls using the same techniques we use for the boys, we're going to see the same number of women entering engineering. These are the women that have a parent who is an engineer, or who have been mentored by a math or science teacher or guidance counselor to consider engineering. That's how they find our programs to begin with! What we need is to better explain engineering, in terms that young women can relate to, to the MASSES. That doesn't necessarily mean a radical change for the field – it DOES mean a radical change for those of us that talk to pre-college students, educators, and parents.

Bogue: We need radical change if we are going to increase the numbers of women past 20%. The change needed is one of vision and attitude. The mission of attracting and retaining more women in engineering has to move beyond WIE and WISE programs to engage all faculty and administrators, all students, all parents, and all of the individuals in industry, foundations, government, and non-profits whose jobs are not directly responsible for the realization of our mission.

Where Do We Make the Changes?

Cyr: I think that the changes should be made in the early education of students. If every student were given the opportunity to experience even simple engineering projects in the elementary and middle school years, they would gain a basic understanding of the engineering field. This in turn not only increases their technological literacy but also shows them the relevance of engineering work to solving everyday problems. In particular, girls will see that they can pursue interesting careers that will benefit people through an engineering track. Without the exposure to engineering, girls have no basis to select or consider it as an option.

Schade: Ideally, changes need to happen throughout our society. Educationally, most changes need to happen by the time students are in middle school. Students largely determine their educational future, through high school and into collegiate study, while in middle school. Yet this is the time when many girls feel peer pressure; if they are good at math and science, they might be seen as “nerdy.” Excelling in math, science, and technology classes is too frequently not the expectation for girls. However, we need as many girls as possible to be taking (and excelling in) math, science, and technology courses in middle and high school. Most importantly, let’s include engineering concepts in the classroom, and put the students in front of teachers who have knowledge of and are excited about engineering.

Changes also need to take place culturally. Moms, dads, grandparents, teachers, etc. really encourage boys to be exploratory - to get dirty - to be mechanical - to play with toys that address scientific reasoning skills and so on. There is certainly a need to address our cultural expectations and gender definitions. Daughters should be encouraged to engage in tasks traditionally associated with boys (i.e., mowing the lawn, digging holes, tinkering with the family car, helping with home remodeling). As a society we must avoid the temptation to treat girls as delicate. It is also important to encourage our young women to be inquisitive. The days of “children should be seen and not heard” must change to “be respectful, but question everything!”

Lack of exposure to engineering is another issue in our society. The majority of the population does not know what engineering is or what engineers do. However, this is the beauty of engineering; it can encompass so many avenues and opportunities that it is hard to quantify. The almost limitless opportunities that engineering offers are a marketing juggernaut that we need to develop.

Anecdotal data show that many women would have been engineers, and believe they would have been successful in engineering careers, had they had awareness of the field. This will develop in part through continuous education and exposure, starting at an early age. Perhaps we need more toys that convey the joys of engineering. Remember the doctor kit you had as a child? Imagine a world where every

child has an “engineering kit” full of fun things to tinker with and problems to solve.

It is important that this education and exposure hit people throughout our society – every age – every socio-economic strata – all races and genders. More television shows featuring engineers would be an effective way to introduce engineering into human consciousness. Engineers must be presented in such a way to refrain from typical stereotypes. Plus, we need to sell the fact that engineering is present in our everyday lives and has touched almost everything around us. It will be to our benefit to help people garner a more concrete knowledge of the scope of engineering.

For much of the WEPAN audience (those who administer WIE programs), the middle school constituents can be a challenge to reach. Yet those of us at institutions of higher learning must make a commitment to work with the primary and secondary educational community to ensure that students (and their parents) are being exposed to engineering. Efforts need to be taken to forge relationships with local school districts, principals, and teachers. Programs that target both the students directly as well as their teachers, counselors, and parents can have a positive impact.

We also must work closely with students transitioning from high school to college to ensure that misconceptions are lessened. Women are too often “turned-off” of engineering careers because of their preconceived notion that all engineers have desk jobs in cubicle farms or that engineering is not a “people-person” occupation. Many college-level students also perceive the material presented in mathematics and physics courses to be the content of what engineers do in their day-to-day job functions. It is important for faculty and advisory staff to intervene with these assumptions. Teachable moments must be utilized to demonstrate relevance.

By increasing the number of young women who consider engineering as a viable career path, more women will apply to engineering school, thus increasing the number who will be accepted into undergraduate engineering study. Certainly the need remains for programs designed to increase retention rates among women. Even when students are engaged in collegiate study in engineering, education must continue to expose women to the plethora of opportunities. Special marketing programs heralding the societal benefits that come from engineering are engaging to women. Women can be sold on the fact that engineering helps people and the environment, thus encouraging them to remain in the engineering pipeline.

Our nation needs an understanding of the lack of qualified applicants for engineering jobs. We are still operating under a deficit of American workers, where workers from other countries fill many of our engineering jobs. Women could be the targeted population to close the engineering deficit. These are terms that employers and the government can understand, and if so motivated, can take

measures of intervention to increase the pool of female engineers. Large bureaucracies need to take action. Many of us are operating traditional “grass-roots” efforts, but the efforts are taking too long and are too burdensome for those of us with limited scope and power.

A systemic change of our country’s narrow view of engineering is in order. Through the efforts of people invested in all levels of education, more girls and women can be exposed to engineering. A commitment on behalf of the media, government, and those who work in engineering professions, will ensure that we have an increased and significant measure of women to fill engineering careers.

Blaisdell: First and foremost, these changes have to happen with us – all of us who talk to young women about entering into engineering. The changes have to happen with pre-college outreach coordinators, with math and science teachers, and with guidance counselors at the high school level. These people, along with parents and peers, have the greatest impact on the career plans of high school students. Unfortunately, the Women’s Experiences in College Engineering (WECE) Project lists guidance counselors among the top sources of DIScouragement for women interested in engineering.

We need to help these high school-level educators to better understand the breadth and diversity within engineering. They need to be updated – that the struggle no longer needs to focus on getting young women into higher level math and science courses (they are already there – with the possible exception of physics). The struggle now is to help young women understand that if the ability is there, their values and interests do not necessarily rule out engineering.

Many of my colleagues argue that the change needs to take place earlier – the studies show that middle school is the start of the “leaky pipeline.” I believe statistics show that we’ve fixed that leak (NSF, 2000). What we’ve been doing is WORKING! That’s not to say we should stop – it just means that we need to take the next step in plugging the pipeline.

Finally, the changes need to also include how we evaluate our efforts. Often we measure success by how satisfied a participant is with their experience. This type of formative evaluation is necessary, but not sufficient, if we want to offer effective programs. Whatever changes we implement, we need to measure them appropriately so we know if they are making a difference.

Bogue: The changes need to be made *in the day-to-day environment*: Today very few faculty members are heard openly questioning whether women should be in engineering classrooms. We have increasing numbers of faculty women and successful alums, and they are having an impact on people’s image of what an engineer looks like. Unfortunately, very few faculty and virtually no male engineering students have taken ownership of the promotion

of diversity within our institutions; this is one place where change has to happen.

We need to find ways, including diverting funding, to engage faculty members in discussions of gender equity, the research supporting gender equity practices, and how to apply that research in and outside of the classroom. Too often I’ve had discussions with faculty members in which they 1) haven’t noticed the marginalization of a woman student; 2) have noticed, but didn’t know what to do; or 3) have noticed and feel that it isn’t a faculty member’s job to intervene. Unless faculty members are aware of gender equity and learning environment issues and creating equitable learning environments as part of their job, the number of women who leave engineering will continue to remain high.

We also need to educate *all* of our students about diversity and gender equity issues. I find that neither our female nor our male students are clear on why we want to encourage underrepresented students to enter engineering or whether women are less qualified to be in a program. Too often I hear students explain authoritatively “it’s because the government mandates it,” or that “girls have unfair advantage.” Just this year, I had a woman student (with a high GPA, extensive work experience, and outstanding leadership activities) explain that she had gotten more job offers than her male friend (who had none of the above) because she was a woman. Now that she has looked at her greater success on the job market in terms of her achievements, I’ve heard her explain this to other students. We need to make the case.

In addition, many students and faculty believe that affirmative action or diversity are things they can leave behind with graduation; that diversity is “PC”; that diversity is not an issue in industry. Clearly, this can place a male student at a disadvantage in his new company just as a female student’s belief that she did not make it on her own talent but on the basis of unfair advantages can be hobbling.

The changes also need to take place *in policies and curriculum development*: Curriculum renovation, particularly with the new ABET requirements, is a current and important trend in engineering education. How many women faculty or WIE administrators are actively involved in this process? How many universities and colleges set out with the objective of integrating equity and diversity knowledge and practice into curriculum development? Why not? For that matter, why is the achievement of equitable practices not one of the new ABET requirements? If these ideals are not integrated into curricular and policy initiatives from the inception, the sensibilities and the traditions that were developed as part of an all-white-male educational environment will continue. And women will continue to leave.

The changes need to be made *in the images we propagate*: In the first flush of recruiting girls into engineering, colleges and universities focused on the attributes of the prototype engineer: tinkering, love of and

excellence in math and science, affinity for erector sets, taking things apart, cars. This was effective as a cast call for those girls who had always wanted to be engineers but who were prevented from doing it by social custom and/or barriers; it's yet another barrier for those girls who don't fit the profile. While our students have gone far beyond this set of barriers (girls now make up more than half of the students who take higher level math in high school), our message has not substantially changed. In effect, we are pitching our message to the girls who are already convinced and it is likely that they are about 20% of the eligible pool. Further, we are very possibly turning off the girls with the qualifications and talent to enter engineering who do not identify with tinkering and gears.

It's time to work to attract the girls who don't know about engineering or who, if they do, are quite sure that it is not for them. It's time to talk about what a career offers to women who don't especially want to practice engineering; boys (or their parents) seem always to have been aware that an engineering degree is a key to many careers. I imagine that if we surveyed our students, that we'd find that only 20% of our male students fit the "tinkering" profile that is offered in much of our promotional literature; the rest see it as a springboard for their career. Women need to be brought into the information loop; it's time to tell them that most people with engineering degrees are managers, entrepreneurs, teachers, CEOs, and so on. It's also time to stress the social relevancy of engineering.

And then there are the girls who fit the other part of the early profile: having a dad, mom, sister, brother or close family friend who is an engineer. All this really says is that if girls know about engineering as a profession, they choose it. The clear solution is to make more dads, moms, sisters, brothers, and close family friends aware of the promise that engineering holds for women as a satisfying and lucrative career.

The changes need be made *in the image that our external partners present*: WIE programs run, primarily, on soft money and that soft money is driven by corporate partners who are interested in increasing the number of well-educated and qualified women who graduate from engineering programs nationwide. Their investment is an important ingredient in the recruiting, retention, and development of women engineers. But, just as universities are guilty of departmentalization—of developing new curricula or proposals without integrating gender concerns—industry too often fails to integrate diversity concerns into all aspects of its interactions with academe and the public. At the same time that a company is offering scholarships for women in engineering, they are offering research funding to faculty with no strings attached. Requiring that a fundee recruit a diverse graduate student team in order to qualify for a funded project begins to impact the awareness of the main attitude setters and policy makers in a university: the faculty. Is the fact that industry funders make no personnel demands an expression of their own doubts about the efficacy of

diversity? Are they too quick to accept a faculty member's assertion that "we just can't find good women to do the work?" Or have they just simply not made the connection between the funding of graduate students and the number of underrepresented students entering graduate school?

Even more important is the disconnect between diversity managers and company marketing arms. Think of the impact that featuring women engineers, inventors, managers would make in prime time television ads. I remember when Lincoln Town cars featured a woman civil engineer on site in a commercial a couple of years ago. The next morning I had a stream of women students coming in to ask if I had seen it (a commercial!). Such things begin to demonstrate to coming generations and their parents and teachers that women are engineers, that engineering is a good profession for women. Commercials have an impact, as demonstrated by how much industry budgets for advertising. Integrating an awareness of how that advertising can impact the diversity of their future workforce can make real change.

What ONE Thing Would Make the Biggest Difference?

Cyr: The one thing that will make the biggest difference and significantly increase the percentage of women in engineering programs is exposure to engineering so that they can learn what it is, how it benefits people, and that it is a stable and respectable profession.

Schade: A national marketing plan, developed to target every strata of society, will effect change. Television commercials will have the most significant impact, as they draw more contact time with each person on average, than any other medium. Commercials can be developed to target any demographic and shown during peak viewing time for each targeted audience. As a method to establish this movement, connections can be made with the Ad Council. Engineering commercials could be a portion of the mandated educational spots aired as public service announcements.

The manner in which these commercials are created will be vital to their success. Engineering should be featured by highlighting the intriguing contributions that the field has made to society. An approach might be to show what the world would be like if engineers did not exist (for example: a child in a room - things in the room that have been created, modified, or enhanced by engineers disappear one by one - "imagine a world without engineers" flashes across the screen - then "you just did" when the room is empty). Eye-catching, well-orchestrated, dramatic commercials will be necessary to influence enduring impact.

The trickle-down effect of this strategy will also contribute to national change. Commercials that feature engineers may influence networks to include television shows with engineers into mainstream programming. Instead of "LA Law," perhaps there will be a new network television show called "LA Engineer" that features the captivating aspects of an engineering career. A national

commitment (which should gain momentum as exponentially more people participate in this movement) is needed to utilize strong engineering role models throughout the television medium as examples for children.

Blaisdell: My argument is already narrowly focused: We need to change how we talk to young women about engineering. We need to explain how engineers help people, the environment, and animals. We need to have hands-on projects that demonstrate this emphasis.

Bogue: Change the attitudes of the general public about what engineers do and whether or not it is a fit career for women (remembering that Engineering faculty are members of the general public).

How Do We Effectively Implement This?

Cyr: The most effective way to implement the change of providing engineering as part of what students learn in the early school years is to provide professional development for current and future teachers. In addition, having a strong set of gender neutral, reference engineering activities that these educators can then utilize in their classes is also required.

The professional development needs to be done by as many qualified engineering professionals as possible. Universities, national associations (WEPAN, ASEE, etc.), and corporations should all play a role. This will help to reach the huge numbers of teachers who are currently working in the schools. At individual institutions the pre-service teachers can be reached through collaborative efforts between the engineering and education departments. Building the reference engineering activity database can be a collaborative effort within the active engineering schools.

Schade: Many organizations and individuals need to be involved in the marketing plan. National engineering organizations must spearhead the effort and spread the movement to regional and local chapters. Most importantly, this effort must be well coordinated and focus on the maximization of available resources. This crisis is serious and begs the need for sharing monetary resources, information technology, and collaborative strategizing. Duplication of services must be eliminated so that scarce resources can be put to best use. Many efforts already exist (Introduce a Girl to Engineering Day, "Zoom Into Engineering," etc.) and it is important that these efforts are identified and included in a comprehensive national movement.

As an organization, WEPAN must be involved with and fully support the national marketing campaign. Members should be solicited to utilize their talents where they can be most effective. Industry also has a role to play. Presidents, vice presidents, CEOs, and others in high profile leadership positions should encourage (and perhaps mandate) employees to participate.

We must proceed with the knowledge that this effort will not be easy or instant. There will be many trials to face along the way including our existing cultural norms and the stringent restrictions on our public school system (which make adding engineering concepts into the K-12 classroom quite a challenge). We need teachers to be talking about engineering, but they have to know what it is before they can address students about a future in engineering. Marketing efforts will inform all people with a vested interest in our nation's educational system.

Blaisdell: When it comes to engineering, perhaps the least informed group are guidance counselors. Yet, as I've mentioned, they are cited by women engineering students as among the top sources of discouragement against going into engineering. However, this misinformation is typically not a conscious or malicious act – they misadvise simply out of ignorance. If we could only do ONE thing – I believe that working with this group of educators would have the most dramatic impact.

I have found counselors to be enthusiastic recipients of information about engineering. On April 3, 2002, WPI hosted 30 guidance counselors from around New England at a Girls COUNT: Counselor Outreach to Underrepresented Students in Engineering and Technology Program. The program helps counselors understand the field of engineering, provides them with information on the career development of young women, and how to specifically encourage them in engineering, math, and science. This and similar programs have been extremely well received. They often comment that they had no idea that THIS was engineering. Feedback from participants has indicated that this new information directly impacts how they advise their students.

WPI is offering a series of COUNT workshops – some on campus, and others through conference presentations, including the National Association of College Admissions Counselors in Salt Lake City in September 2003. These workshops are low cost and high impact, effecting thousands of students in just one half-day session.

Similar programs for math and science teachers can also be offered. Programs such as WISE Investments at Arizona State University model how math and science teachers at the middle and high school levels can learn about engineering, develop a way to introduce engineering in their classrooms, and particularly encourage young women to consider engineering as a career. In Massachusetts such initiatives are being taken to the next level. Engineering is now being taught from kindergarten up along side of science and math. The question remains, however, HOW will engineering be taught? Will it be appealing to young women? Or will it continue to result in the same 20% plateau?

Bogue: Do reviews of our own and our institutions representation (or non-representation) of engineering; create standards and model practices; advocate for positive, up-to-

date images. Work with industry partners to change the way that women are represented in their own company marketing plans. Policy initiatives can and do make change. The work of Jane Margolis and Allan Fisher at Carnegie Mellon University have demonstrated how fundamental institutional change and investment can result in the substantially increased enrollment of women in computer science. With policy and curricular changes, the percentage of women computer science undergraduates jumped from 7% in 1995 to 42% in 2000. At MIT, Sheila Widnall, the Abby Rockefeller Mauze Professor of Aeronautics and Astronautics, reports that an investigation of admissions performance measures indicated that women outperformed their predictors, which had been primarily based on the math SAT. MIT changed admissions requirements accordingly and, in one year, the percentage of women entering MIT jumped from 26% to 38%. Proactive policies can and do make change.

CONCLUSION

While the four authors might disagree on what scale of change is called for, to what audience (or at least what age) it should be directed to, and who should be involved in delivering the message, we all agree on one thing: much of the change needed to “get off the plateau” needs to come through marketing engineering differently. The way we represent engineering needs to reflect the interests and values of young women. Marketing has the power to change minds and mend stereotypes. The question remains then, how can our programs, and our organization, spearhead that change?

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