



STEMconnector®

White Paper

Corporate Best Practices for Mentoring Women in STEM

North America Corporate Social Responsibility

Insights from industry leaders



Tata Consultancy Services and STEMconnector® hosted a roundtable in 2016 for leading businesses to share challenges and offer solutions for supporting women in STEM. The recommendations contained in this white paper emerged from conversations held at the roundtable. Here's what a few participants had to say about the experience:

My main takeaway was that mentoring is more than just pairing two people with like interests. Cultural relevance and affinity are foundational for meaningful and lasting mentoring relationships.

— **Gabriela Gonzalez**, *Intel*



The corporate best practices meeting was a great opportunity to engage with other corporate leaders. Ultimately, it provided a forum to advance successes in developing strategic mentorship programs.

— **Kathleen Martinez**, *BP*



It was exciting to see thought leaders from the greater STEM community have an intentional conversation about best practices for mentoring women in STEM and how to grow the STEM pipeline as a whole.

— **Matthew Ladhoff**, *3M*

Corporate Best Practices for Mentoring Women in STEM

Introduction

In today's national workforce, there are a few numbers that just don't add up. Women fill close to half of all jobs in the U.S. economy, but they hold less than 25 percent of jobs in science, technology, engineering, and math (STEM) fields. Although women comprise more than 20 percent of engineering school graduates, only 11 percent of practicing engineers are women. Of 100 female students working toward a bachelor's degree, only three will be working in a STEM job 10 years after graduation.

Where have all the women gone? To find the answer, look back a decade or two. Research indicates that interest in and willingness to persist in STEM careers is formed in childhood. In 2014, college planning service My College Options surveyed 368,000 girls who planned to pursue STEM careers. A mere four percent of them indicated they had been encouraged to pursue one, and this figure increased to only six percent two years later. Even worse, one out of three young people has never had a mentor or someone to turn to for guidance. It's no wonder that by the time they reach adulthood, few STEM-trained women remain.

Why does this matter? Gender parity is good for everyone, not only women. According to a 2015 report published by McKinsey Global Institute, advancing women's equality could add \$12 trillion to global GDP by 2025. And more women in the workplace, including in leadership roles, will lead to a more diverse exchange of ideas.

Corporations should take it upon themselves to bring about this new reality. An important way they can do so is through mentorship. Mentoring programs can help break the cycle of girls and young women shying away from STEM. By meeting and learning from STEM professionals, girls may be better able to see themselves in STEM related careers and learn about what it takes to become a STEM professional. Over time, this will lead to more STEM-focused women students, graduates, and professionals—and eventually, to a more equitable workforce.

Corporate mentorship programs vary widely in emphasis and scope. The specific features of your program will be determined by your business' industry, your employees' interests and strengths, and the resources you have available to devote to the effort. In our experience implementing and overseeing such initiatives, we have learned that successful programs share a few critical features.

We recommend following these 5 steps as you begin your venture into corporate mentorship.

1. Set realistic goals

A corporation must decide what exactly they will do to advance women in STEM. Will they provide extra support to women employees? Mentor school-age girls interested in STEM fields? Volunteer time with STEM-focused organizations? Offer paid internships? Provide mentoring resources online?

The answer will depend on an individual company's size, culture and capabilities. A good place to start is to look at what has worked well (or not) in the past. Many organizations are less than enthusiastic about the announcement of yet another corporate initiative, as there is no need to reinvent the wheel. Instead of building something from scratch, find out what your company is already doing by reaching out to internal teams who are responsible for professional development and growth of employees. Informal mentoring may already be taking place that can potentially be scaled up. When setting goals, the S.M.A.R.T. framework—specific, measurable, achievable, relevant, and timely—is a proven way to convert goals into actions.

An important aspect of the approach you will take is the demographic you want to target. Do you want to reach career-age women? College students? 12-year-olds? Women or girls from underrepresented minority groups? Keep in mind that the demands of mentees searching for a job will be very different from those for high school students trying to identify a career path, or elementary school students just beginning to learn about science. Look at your company's internal goals and priorities to determine what groups you can best support.

2. Engage your employees

Once you've come up with a plan, you and your team will be excited to get started. But first, you must get leadership and employees across your organization on board. If your company is large and geographically dispersed, it may be harder to build momentum. Employees who are disconnected from the corporate center may be less aware of or engaged with initiatives like yours.

Start with your leadership. Get buy-in from prominent and influential members of your C-suite who can make mentoring a priority. But don't stop there. You should also work to recruit mentoring champions throughout your organization who can motivate peers to get involved. In many cases, these champions may be more effective at connecting with employees than corporate leaders.

Where you can, leverage existing affinity groups. For example, if your company has a large veteran population, there may be opportunities to match women veteran employees with mentees from similar backgrounds. Or perhaps your company has a robust alumni network. Your past employees are likely to be fairly advanced in their careers, and could make effective mentors. Employee resource groups can also be an important source of support.

Most importantly, companies should remove employees' barriers to action. Engage with HR to ensure employees can get time off work for mentoring engagements, and provide incentives for participation. Make it easy to sign up, log, and track hours, and ensure that senior leadership sets the example by participating in mentor-mentee activities inside and outside the organization.

Be sure employees understand that being a mentor benefits them, too. A study by Triple Creek Associates, a Colorado-based firm that helps companies set up mentoring programs, revealed that employees who mentored others were more than 20 percent more likely to get a raise—and six times more likely to get promoted—than those who didn't mentor. Mentoring shows that employees care about professional development—not just their own, but also the development of newcomers to their field.

BP: Making Mentorship Easy

Many of your employees may be unfamiliar with mentoring and may be reluctant to try something new, so make it as easy as possible for them to get involved. That's what BP did, with a dedicated mentoring website and a leadership council tasked with encouraging employees to become mentors.

When employees clicked a link to sign up for mentoring on the BP website, they were directed to the BP account on the Million Women Mentors portal. As a result of this initiative, BP formed 147 mentoring partnerships.

3. Create a resource toolbox

You've created a program and your employees are involved. Your mentors are ready to take on their first mentoring sessions—but what exactly are they supposed to do? What questions should they ask? What advice should they give?

*Employees who mentor others are **6 times more likely to get promoted** than those who do not.*

Take the guesswork out of mentoring by offering training and resources mentors can use during a session. Million Women Mentors (MWM) is an organization whose mission is to mobilize two million STEM professionals to increase the interest and confidence of girls and women to persist and succeed in STEM programs and careers.

MWM has developed a variety of tools and resources for mentors including handbooks, training guides, and worksheets that mentors can use to get to know their mentees.

Corporations can use these materials as they are or adapt them to suit their needs. One company, for example, developed an internal mentoring guide, plus downloadable lesson plans and educational materials appropriate for a range of age groups, from preschool to high school. This may be particularly useful for companies that do not have a dedicated team for mentorship or for Corporate Social Responsibility (CSR) initiatives.

Make materials available wherever your organization stores information, whether on an intranet or an employee-only area of your website. Depending on your company, keep in mind that all employees may not have corporate email accounts. Make resources available in hard copy as necessary.

4. Measure and track your results

As in all areas of business, you can't manage what you don't measure. Likewise, you won't know whether your mentoring efforts are making a difference if you don't track and evaluate what you do.

Before launching a mentoring program, decide what you will record and how you will measure success. Will you count the number of mentor-mentee pairings formed? The number of hours spent mentoring? The number of girls who stayed involved in STEM as a result of the experience? You may also want to gather qualitative data through mentor-mentee surveys and entry and exit interviews.

If you choose to track mentoring hours, encourage mentors to log their time in an online portal. MWM has created one that its mentors can use, and companies can use this platform to view their progress on a custom company-only website.

5. Celebrate success

Let enthusiasm for your program build over time. One way you can do this is by writing profiles of highly engaged mentors and STEM champions. Share profiles publicly on your website and in internal and external communications like company newsletters and magazines. Recognizing employees will not only inspire others to get involved, they may even persuade other organizations to partner with your company or reach out to mentors for speaking engagements.

Make mentors feel valued by hosting events over the course of a program. You could organize a launch event to familiarize employees with the program, including a designated day for

Should you require a certain number of hours of mentorship?

While you might suggest an “optimum” amount of time for volunteers to spend mentoring, don’t discourage those who want to help, even if they can’t make a large time commitment. Invite employees to set personal mentorship goals against which they can measure their progress.

employees to sign up to become mentors. During the program, send prompts to encourage volunteers to keep mentoring and reach their goals.

Be sure to hold post-initiative events to recognize all participants and give special thanks to mentors who went above and beyond. If desired, schedule events to coincide with national celebrations, such as National Mentoring Month in January or Women’s History Month in March.

Conclusion

Mentoring programs can create a pipeline of talent, engage employees and help companies meet their CSR goals. They can also help organizations build and reinforce a caring, service-oriented corporate culture. As more and more professionals seek out employers who are mission-driven, initiatives like mentoring programs can offer lasting value.

Most importantly, however, mentorship allows women to thrive. It’s time for companies to stop looking to the past to inform how their workplaces should look in the future.

Businesses have an opportunity and an obligation to imagine a new, more inclusive workforce—one where everyone has the tools required to succeed.

TCS' Commitment to Million Women Mentors (MWM)



As a founding member of Million Women Mentors, TCS initially pledged 15,000 mentors from its highly skilled global workforce, with the hope of inspiring girls and women to pursue and persist in STEM careers in the U.S. and around the world. TCS exceeded this pledge goal through internal mentoring initiatives like STEM Career Accelerator, iConnect, and iNSPIRE, and TCS goIT. TCS' flagship student engagement program, TCS goIT, has engaged more than 13,000 middle and high school students across 50 cities in the U.S. and Canada with hands-on experiences in computer science, inspiring them towards tech careers in all sectors. TCS' iConnect and iNSPIRE mentoring programs connect thousands of new and seasoned TCS professionals for guidance and mentorship. In total, the company has formed 55,507 mentoring relationships since 2014.

Since 2014, TCS has also been providing pro-bono services to design, develop and update the MWM technology platform; capture mentor pledges; provide mentoring opportunity maps by ZIP code; connect mentors to organizations serving mentees; and track progress. The latest mobile-friendly version of the platform, released in fall 2016, has new engagement features for companies and organizations. The website is used by thousands, from Fortune 500 companies to national girl-serving partners across the U.S.

About Tata Consultancy Services (TCS)

Tata Consultancy Services is an IT services, consulting and business solutions organization that delivers real results to global business, ensuring a level of certainty no other firm can match. TCS offers a consulting-led, integrated portfolio of IT, BPS, infrastructure, engineering and assurance services. This is delivered through its unique Global Network Delivery Model™, recognized as the benchmark of excellence in software development. A part of the Tata group, India's largest industrial conglomerate, TCS has over 378,000 of the world's best-trained consultants in 45 countries. The company generated consolidated revenues of US \$16.5 billion for the year ended March 31, 2016 and is listed on the BSE Limited and National Stock Exchange of India Limited. For more information, visit us at www.tcs.com.

About STEMconnector®

STEMconnector® is a leading national consortium of companies, institutions of higher education, non-profit organizations, and public sector partners acting to improve all parts of STEM education in the United States and across the world. With programs and initiatives focused on all parts of the STEM ecosystem, STEMconnector® helps organizations develop their STEM strategy and maximize their return on investment, focusing on cross-industry and cross-sector collaboration. STEMconnector® currently works with over 150 sponsors and partners to provide information, collaborations, and effective collective action. For more information, visit www.stemconnector.org.

About Million Women Mentors

Million Women Mentors supports the engagement of two million STEM mentors (male and female) to increase the interest and confidence of girls and women to persist and succeed in STEM programs and careers. MWM is an initiative of STEMconnector® in collaboration with over 60 partners reaching over 30 million girls and women, 45+ corporate sponsors, and 39+ state leadership teams. For more information, visit www.millionwomenmentors.org.

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