

**3 Big Mistakes
That
SQUASH
Women
in STEM**



by Donna Milgram

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Hi! It's Donna Milgram here.

You're in the right place if you have an excellent STEM program but you have very few students that are women and girls, or maybe even none. Or, when you finally manage to recruit one or two, they end up dropping out before the end of the semester and a lot of your male students drop out as well.

Welcome to the **3 Big Mistakes That Squash Women in STEM**. I'm Donna Milgram and I'm the Executive Director and Founder of the Institute for Women in Trades, Technology and Science (IWITTS). I have been Principal Investigator of 5 National Science Foundation grants on women in STEM. Sometimes it's hard for me to believe, but I have been working in this field for over 30 years, and in that time I have seen so many educators sincerely try to increase the number of women and girls in their STEM programs. They work really hard, yet they don't have positive results. They feel it's impossible to move the needle on women in STEM. That's why in this eBook I'm going to share with you the "3 Big Mistakes That Squash Women in STEM." I want to be sure that you avoid these pitfalls, and I want to help you to proactively increase female recruitment and retention (and male retention as well). Read through to the end to find your invitation to my free webinar, the "Women and STEM Success Blueprint."

Mistake #1 – Ineffective “Feel Good” Career Events

The first mistake is **selecting the wrong target audience by focusing your recruiting efforts on students who are not eligible to enroll in your program.** You can have the right recruitment strategies but if you have the wrong target audience then you’re not going to have any actual increases in female enrollment.

I had the chair of an engineering department at a two-year college call me and say, “You know Donna, for over 10 years, my mechanical engineering department has sponsored an entire day for girls in STEM.” He described the day, it had hands-on activities and collaborative activities, there was even a webpage that he sent me to with pictures. The girls loved the day, the parents loved the day and he said, “But yet here we are, 10 years later, no increases in the number of women in my mechanical engineering program.”



I asked him, “Now, these middle school girls won’t be eligible to enroll in your college for at least several years, do you have any connecting activities between this middle school program and the time they are eligible to enroll?” There was a long pause, and then he said, “You know, I guess that’s why we don’t have more women enrolling in our engineering program--that’s it.”

I've seen many educators who put a lot of effort into recruiting women to STEM, often using strategies that are based on live events and are very time-consuming.

The events get good reviews from participants, but there are no actual increases in recruitment numbers. Here's why: These events are career awareness activities, not recruitment.

This is why in the WomenTech Educators Online Training, **I teach you how to select the right target audience and how to go after the low hanging fruit** so that you can have actual increases in female enrollment in about a year's time. My belief is that success begets success, so I help you realize how to achieve some increases as soon as possible.

Mistake #2 – Not Appealing to Female Interests in STEM

Mistake number two is **not appealing to female interests in STEM**. Research shows that overall, as a group, women and girls really care about how STEM is used to help others, whereas males as a group care most about the features of the technology. So while female students might care about developing a playground that works well for students who have physical challenges, males typically care most about how big the hard drive is, or how fast the engine goes.



In the WomenTech Educators Online Training, **I teach educators how to engage females in things that interest them, and how to teach to their learning style**. Instead of robotics only being about LEGO Mindstorms® and monsters (see image of LEGO Mindstorms® robot R3PTAR above); it can be about SciGirls “Robots to the Rescue” in which robots are programmed to have human emotion so that they can be present in disaster scenes, helping perform rescues. When you learn what appeals to female students, you can create a more inclusive and engaging classroom.

Mistake #3 – Scaring Off Female Students the Very First Day of Class!

Most STEM instructors spend the first day of class talking about expectations, grades, requirements, and tests—this is both boring for students and raises anxiety levels about if they can be successful in the class, especially if they don't come with much STEM experience, which is the case for most women and girls.

STEM programs that set students up for success from day one, send a message that it's a fun, interesting course that students can be successful in.



What is the number one thing that is going to give your female students some confidence right from the start?

The answer is hands-on experience.

In the WomenTech Educators Online Training, I teach you how to engage students with hands-on experiences from day one to help them gain STEM exposure, build their confidence and see that they can be successful. This includes developing a Welcoming Conversation so you set the right tone from the first day, incorporating hands-on activities at the beginning of class, and so much more.

Now that I have taught you about the “3 Big Mistakes That Squash Women in STEM,” I’d really like to share with you the program elements of recruitment and retention on a bigger picture level that are important in order to increase the number of women in STEM Career Pathways. I’d like to invite you to come to my webinar, the “Women and STEM Success Blueprint,” where I will talk about the recruitment and retention program elements needed to increase female enrollment in your program. PLUS, these same strategies also work for your male students!

Read on to learn more about the “Women and STEM Success Blueprint” ...

Save Your FREE Spot Now for the “Women and STEM Success Blueprint” Webinar!

In my new, free webinar, the “Women and STEM Success Blueprint,” I go even more in depth into the best practices STEM educators need to put in place in order to enroll up to 25-50% female students in their STEM classrooms. I’ll go into detail about key mistakes educators make that weaken the recruitment of women to STEM and dampen retention—including one mistake you may not have even realized you are making. I’m also going to provide examples of STEM classrooms that are doing it right, and teach you how you can apply their approaches to your program.

I’m going to have more time on the webinar to explore these topics and teach you how to increase the number of women in your STEM classes, so I invite you to sign up and attend this important free training. It’s going to help you better understand these strategies so you can apply them to your classroom and STEM programs.

Make sure you save your free spot for our webinar, the “Women and STEM Success Blueprint” at <http://www.iwitts.org/free-blueprint-webinar.html>. Go ahead now and save your spot. I look forward to “seeing” you on the webinar!

