

STEM Girl Power

middleweb.com/3356/stem-girl-power/

Anne Jolly

Dear Becky,

I hope you are sitting in your engineering office reading this. Remember when we were in college together in the Dark Ages? You were the only girl in the school of engineering. And you would not give in to well-intentioned advice from colleagues and professors that you needed to find a different profession if you wanted to get a job.

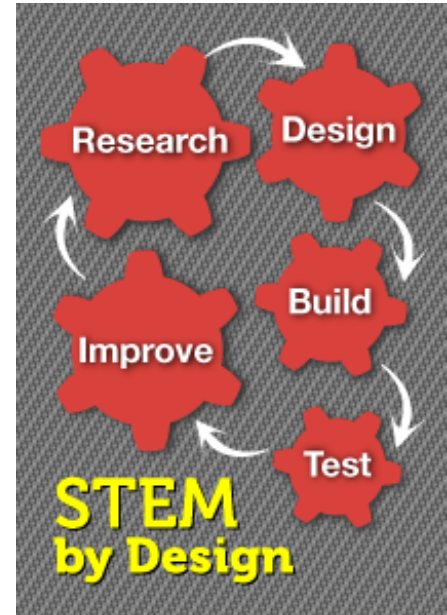
You persevered and graduated with a degree in metallurgical engineering – not an accomplishment generally celebrated in those days. Then you began your round of job interviews. I'll never forget the responses you got from private industry. One company told you that you were the most qualified candidate who applied, but they were not going to hire you. The reason? They didn't have women's restrooms. (Obviously, in those days getting women into math, science, and technical fields wasn't just about educating the girls; it was about educating the guys.)

My pioneering friend, we've lost touch over the years. You know now that women are accepted and encouraged in engineering, as well as other STEM-related fields. And I just want you to know that the times – they are *still* a changing, and so are the challenges. Keep reading.

Changing Times

Not surprisingly, today's girls are overwhelmingly interested in STEM. They are intrigued by solving puzzles and problems and understanding how things work. These girls are ready for new and innovative STEM careers. They're ready to tackle 21st century challenges and make a difference in the world. [Read what today's girls say about STEM](#)

Here's the rub. A new study by the Girl Scout Research Institute points out that [girls start losing interest in math and science during middle school](#). Armed with that knowledge, plus additional information from the Girl Scout Research study, I'm posting a MiddleWeb Alert!



MiddleWeb Alert: Six Things Teachers Can Do to Support STEM Girl Power!

1. Provide our girls with engaging STEM work.

According to a middle school girl interviewed by the Girl Scout researchers, she had some “pretty fun” science activities in elementary school. But when she entered 6th grade . . . “We just had to do book work and questions. Science wasn’t my favorite anymore.” How about offering STEM work to specifically involve girls in acting as architects, designers, and engineers? You might get some ideas [from sites like this](#).



2. Empower our girls to believe in themselves. STEM girls have higher confidence in their academic abilities than girls not interested in STEM subjects. Girls interested in STEM fields believe that they are smart, and firmly believe that they can do anything boys can do. Teachers can intentionally and continually reinforce that belief. This inspiring video [Girls in STEM](#) spotlights some extraordinary young role models and their exciting STEM projects. Show this to your girls – it will make them believers.

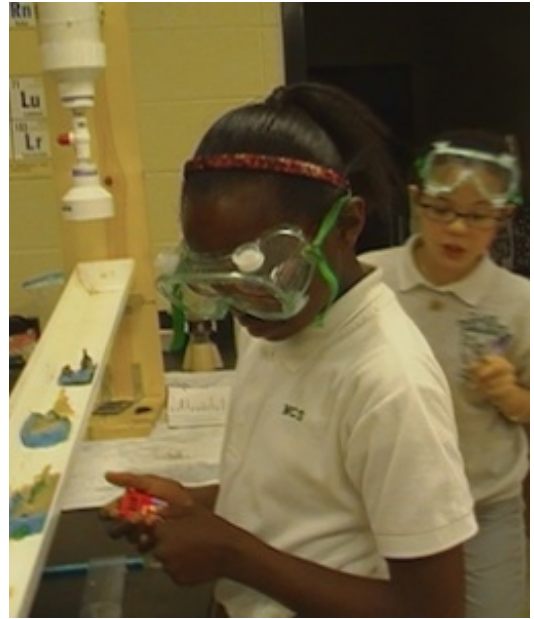
3. Encourage girls to set higher academic goals and aspirations for themselves.

Let’s help our middle grades girls set higher academic goals for both high school and college. Encourage them to choose high-level course work in the maths and sciences and seek out challenges. Assure them that they can successfully grapple with difficulties and overcome obstacles. You’ll find specific suggestions for ways to help your girls in that line of thinking that at this site: [Engineer Your Life: Ways We Can Inspire](#)

4. Give girls exposure to STEM fields. Plan field trips and extracurricular activities to give girls contact with STEM-related fields. Girls who are interested in STEM careers do hands-on science experiments at earlier ages, go to science museums, and engage in extracurricular STEM experiences earlier. [At this Edutopia site](#) you can exchange posts with people who discuss how they involve middle grades kids in different STEM experiences and programs.

5. Give girls support in career planning. STEM

girls are motivated by careers that require them to think, that help people, and that make a difference in the world. Providing strong support to help girls plan their careers and futures is essential. STEM girls have more career support from parents, family members, family friends, teachers, and friends, compared to non-STEM girls. [This site](#) is loaded with links and information that you can use with your girls as they consider careers.



6. Break down gender barriers. They still exist.

Let's do it!

Let's build girl power in the STEM workforce and get rid of these kinds of tales of woe I love you boys and young men, but for now let's *all* promote STEM Girl Power! Do I have any high fives on that?