

Herald Magazine

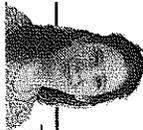
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Higher learning
Seeking leaders to tackle change

Fresh force
Vibrant youth inspire, motivate

Power broker
Kathy Dunderdale's revolution starts now

Leading the next generation of female scientists



Tamara Franz-Odenaal

Leadership means different things to different people. It can mean having a vision, strong values and inner strength. To others it is someone with a strategic focus, someone with the ability to inspire and motivate, someone who leads by example. It can come in many forms.

I do not consider myself a leader but, as the Natural Sciences and Engineering Research Council of Canada's Atlantic Chair for Women in Science and Engineering, others may. I do consider myself a role model who can inspire youth, particularly girls, to pursue science-related careers and have been involved in science outreach since my graduate degree.

I grew up with two older brothers who teased me about my ability in math. I remember one time when I came home from school with a math problem. They tried to explain it to me but I just didn't

get it. I was illogical, they said. "The formula works so use it." But my enquiring mind needed to know why. They tried to explain the reasoning to me, but it was beyond my level so I couldn't grasp it, which led to much frustration and many tears. This happened repeatedly until they just refused to help me anymore, they had no patience and I asked too many whys. I turned to peers for assistance after that. But these experiences only made me stronger.

I realize now that I was surrounded by strong female role models. Both my Masters and PhD thesis supervisors were women (mothers), and excellent researchers.

In Grade 7, I had an awesome math teacher — to us she was eccentric, crazy hair, crazy clothes, nothing like the other smartly dressed, strict teachers. I went to an all-girls public school, but we wore uniforms and there was a lot of discipline. This eccentric teacher was also strict but she made math fun and from that grade on, I started to take an interest in math and to ace math class. She had

such patience and kept telling us we could do it. And so we did.

My parents also played a large role in encouraging my interest in science. Although they did not have a science background and worked in retail, my father always told me to do the subjects I was passionate about and a career would fall into place. He said the worst thing is to be in a job that you hate because it takes up a large part of one's life.

I have been interested in biology since I was in elementary school. I used to watch a lot of documentaries on nature and was very intrigued by how everything worked. So it was only natural for me to follow this route. At one stage I thought I might go into medicine.

A career in science has enabled me to influence potential leaders in our community. Creating an all-girls science camp is one way I encourage girls. The opportunity to do hands-on science surrounded by female role models is unique in Atlantic Canada; these opportunities do not exist in mixed-gender large science classes at school. Many of our camp

attendees told us that they didn't realize learning science could be that much fun.

So what can youth do? Get involved in your local or school community. Start to develop a co-curricular transcript of your active involvement (committee membership, food drive collections, etc). These informal leadership quests give employers and administrators insight into your values and principles, both important features of leadership.

Teachers need to listen to expressions of interest from students and aim to be the catalyst that enables them to turn their ideas into reality. Help them find resources, or organizations or other students with similar interests. As part of my chair program (WISERAtlantic.ca), we bring female role models and girls together to discuss science and engineering careers.

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