

# **“Go Explore”**

## **Interview with Local Female Groundbreaker, Susan E. Powers**

### **Discussion Guide for Teachers**

#### About Dr. Susan Powers

Susan Powers is a local female groundbreaker in the field of environmental engineering. She is the Associate Director for Sustainability at the Institute for a Sustainable Environment at Clarkson University located in Potsdam, New York. She has taught numerous classes in environmental engineering at Clarkson, has led many research projects and has many publications to her name. Dr. Powers received her Bachelor of Science degree in chemical engineering as well as her Master's degree in civil and environmental engineering, from Clarkson. She received her PhD from the University of Michigan in environmental engineering. In 1992 she joined the Clarkson faculty and has been sharing her talents and knowledge with the Clarkson community since then.

#### About the Interview

My name is Emily Provencher and I had the privilege of conducting this interview with Dr. Powers. I currently attend Clarkson University, the very same college Dr. Powers attended and now works at. I am a sophomore, working toward my undergraduate degree in engineering and management with a minor in environmental engineering. I conducted the interview on Monday, April 11, 2011 in Dr. Powers' office in the Rowley Laboratories at Clarkson University. I was interested in interviewing Dr. Powers because she is a female engineer who has accomplished so much in her field. The interview covered many topics including how she first became interested in the field of engineering, how her male engineering classmates responded to her presence in the engineering program, how she balances her personal and professional life, and advice she would give to young women looking to study engineering or who are currently studying it. It is very evident throughout the interview, the passion that Dr. Powers has for her career and the work she does on a daily basis. Dr. Powers also stressed in the interview the importance of being a well rounded student and getting involved in many things besides academics, such as clubs, study abroad and co-ops and internships. The interview video and this discussion guide can be used as great learning aids to students, primarily at the high school and beginning college level. The interview is approximately 26 minutes long.

### Discussion Questions:

- Dr. Powers had many role models in her life that helped her along the way in her schooling including her father and her PhD advisor at the University of Michigan. Do any of you have role models or people you look up to that have encouraged or helped you through a particular situation?
- Sustainability is defined by the U.S. Environmental Protection Agency as “policies and strategies that meet society’s present needs without compromising the ability of future generations to meet their own needs.” Practicing sustainability and being environmentally conscious and aware are very important to Dr. Powers in both her professional and personal life. What ways are you helping the environment and being eco-friendly? In what ways do you think people could do more?
- Dr. Powers mentioned in the interview that there had been people in her life who questioned her abilities and success because she is handicapped. These people wondered whether or not she could have been so successful without her handicap. This has motivated her to strive to do her best everyday to prove them wrong. Have any of you ever been in a situation in your life where you were doubted by someone and been motivated by it to prove them wrong?
- Dr. Powers talked about how she was interested in engineering at an early age and that she knew she always wanted to be an environmental engineer. Do any of you feel very strongly about a field of study you would like to go into?
- Do any of you personally know female engineers? Have any of you ever had any experiences with engineering, such as through summer camps, Take Your Son or Daughter to Work Day, through local college programs, etc.?
- Dr. Powers said she was most proud of her Distinguished Teaching Scholar Award from the National Science Foundation. Have any of you won an award that you’re proud of? Do any of you have any specific achievements that you are particularly proud of? Has anyone had one that has related to technology, science or mathematics?
- The advice Dr. Powers gave to females studying to become professional engineers was to become well rounded people, to “go explore and get lots of experiences.” She emphasized that it is not just about GPA, but the experiences you gather along the way. What activities and extracurricular activities have you been involved in that have enriched your schooling experience?