

***Science with Impact*[®] – by Let's Talk Science**

Bonnie Schmidt

Public, and youth, engagement in science is increasingly important as global challenges, policy frameworks, and emerging jobs require a greater understanding and participation in science.

Recent data from StatsCan indicates that postsecondary enrolment in some science fields, including physical sciences, is beginning to increase. However, increases in these fields are offset by decreases in other fields and the overall picture remains one of a declining proportion of enrolment in postsecondary science and technology studies. This is particularly true at the college level.

Global research suggests that young people realize that science is important for society but too few believe that it is relevant to them and, subsequently, leave science studies in high school, thereby closing many doors to future opportunities. Barriers to youth engagement include a lack of role models, a lack of career awareness, ongoing negative stereotypes about scientific work and several issues related to school science.

Scientists can play an important role in raising public awareness of science and improving youth engagement. In this session we'll review the research into barriers for youth engagement and findings from a Let's Talk Science outreach survey of researchers into the barriers and motivations to their participation in outreach.

Following the address by Bonnie Schmidt, join Let's Talk Science for our *Science with Impact*[®] outreach training workshop. Whether you have been doing outreach for years or are new to it, this workshop will help you to actively engage, and impact, our next generation of stewards, citizens and innovators. Earth scientists are powerful role models who can educate our youth to manage our earth's resources sustainably by actively engaging them in hands-on, minds-on earth science activities.

Science with Impact[®] will train you for volunteer opportunities like those offered at the University Outreach booth at GeoCanada 2010 and through Let's Talk Science. *Science with Impact*[®] provides researchers and postsecondary science, engineering and technology students with strategies and skills to deliver fun, effective, hands-on activities to children and youth. The skills you gain could also be adapted to an adult audience.

The 3-hour workshop focuses on educational learning theory, teaching strategies and learning styles, and how to make outreach experiences relevant and fun. The workshop is very interactive, and involves a hands-on component where participants work together in groups to design an earth science hands-on learning activity.

Each participant will receive a workbook with exercises and background information on learning theories and teaching strategies. With an appendix full of tips on creating effective presentations and choosing age-appropriate content, the workbook is a valuable lasting reference.