Want to Encourage Gender Diversity? Choose your words WISEly

By Lesley Shannon, Simon Fraser University

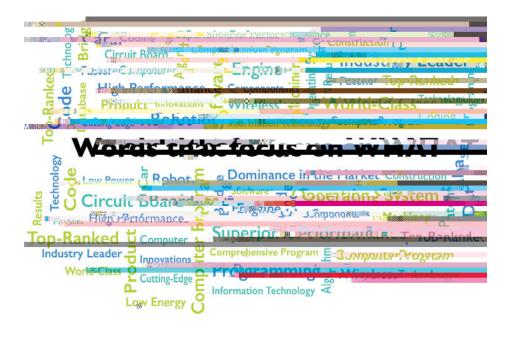
In recent decades, there have been many Women In Science and Engineering (WISE) initiatives aimed at increasing the participation of women in these fields. In computer science and engineering, the percentage of women pursuing degrees and careers has remained relatively low. According to CRA's annual Taulbee Survey of Ph.D. granting institutions, less than 15 percent of undergraduate computer science degrees were awarded to women in the 2013-14 academic year [1]. Given the significant increases of women in other traditionally male dominated fields such as law and medicine in the past 50 years [2], computing's persistent low representation of women is rather disappointing, to say the least. Women's low participation is also alarming when we consider the increasing number of jobs in computing, as well as the positive impact of improving gender diversity on innovation in research settings [3] and on collective intelligence [4]. So the question becomes, how do we change things?

While there are likely many contributing factors, I would argue that one of the key challenges is how computing degrees and careers are perceived by society at large. A recent study in Canada has found that parents are the primary influencers of their daughters' educational pursuits, and teachers are the second major source of influence [5]. Since most children do not grow up in a household where a parent has a computing or engineering background, we have to think about how we describe computing degrees to potential students, as well as to their parents and teachers.

Gendered Language

Imagery and words have a powerful impact on people, informing both what they think and how they feel. Research has shown that the words we use to convey information are extremely important to how that information is perceived by its audience. While we have significantly changed the optics of computing with imagery that is diverse in gender and race, how much has the way we talked about it changed?

Not surprisingly, English contains gendered language, with obvious examples like "he" and "she," and there is experimental evidence indicating that the use of gender-exclusive language



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Three simple things you can do to increase gender diversity?

- Revisit your website and marketing materials. You
 cannot avoid using any agentic language in describing a
 computing degree- and you should not try. However, make
 it accessible, remembering that this audience may have a
 non-technical background; ensure that there is a balance
 of agentic and communal language so that both girls and
 their advocates (i.e. teachers and parents) see how these
 programs and careers are exciting opportunities for women.
- 2) Encourage recruiters to focus on the "why" of computing and less on the "what." Computer science and engineering programs are already recruiting the men and women who respond to agentic language; now it is time to open it up to a broader audience and recruit those who are of a more communal persuasion and want to know "why."
- 3) Get involved in your community (e.g. science fairs, school visits) to increase awareness of computing careers. When you describe computing careers, focus on the fact that they generally require individuals to work in teams to find creative solutions to interesting problems. Note how solving these problems generally improve people's quality of life, protect the environment, etc. Highlight the fact that computing requires creativity and teamwork and how having strong communication skills is a valuable asset.

Remember the age-old adage: "Be careful what you ask for, you just might get it!" So the question we should all be considering is: Are we getting what we asked for, even if it is not what we want? If so, perhaps it is time to choose our words more WISEly and ask for something different.

About the Author:

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