

Career Profile: National Center for Women & Information Technology

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This is the fifth article in my series of profiles on career opportunities. This month, rather than focus on one specific industry or career, I wanted to bring some attention to the National Center for Women & Information Technology (NCWIT). Counselors4Computing, a program of NCWIT, was presented as part of the “Careers Your Students Need to Know About” session at the 2017 ASCA conference.

The purpose of NCWIT is to assist organizations in the recruitment, retention, and advancement of women through support, evidence, and action. More than 1100 institutions are part of this national, non-profit group, including universities, non-profit organizations, government, and corporations. As counselors, we have the opportunity to influence the next generation of workers. Hopefully you will find this information useful in your practice.

It probably doesn't surprise many people to know that computing drives our economy and directly impacts the labor market. According to the Massachusetts Career Information System, a Computer Science major leading to a bachelor's degree prepares you for nine different careers, including Computer Engineer and Computer Programmer. However, computing touches every industry. NCWIT reports that according to the US Department of Labor, by 2024 there will be about 1.1 million computing-related job openings nationwide, but there is an insufficient pool of college graduates with the appropriate degrees to fill these jobs. It is believed that more than two thirds of these will

go unfilled.

It is well known that diversity is lacking in computing jobs. Despite offering some of the highest salaries available (in Massachusetts, the median annual salary for a Computer Programmer is over \$90,000), as a nation we are not succeeding in providing access to all in computing education. Additionally, women employed in these jobs are leaving the technology industry at astonishing rates.

It may be worth considering that, according to NCWIT, in 2015, 57 percent of bachelor's degrees awarded to females. However, only 18 percent of computer and information sciences bachelor's degrees were awarded to females. Other statistics of note include the number of states that allow Computer Science to count as a math or science graduation requirement (34 and the District of Columbia) and the percentage of professional occupations held by women compared to the percentage of professional computing occupations held by females (57 to 26).

The National Center for Women and Information Technology uses a three-pronged approach to try to “increase girls’ and women’s meaningful participation in computing.” These three components are alliances, free research-based resources, and programs. I encourage you to visit the website, www.ncwit.org, to learn about all of the components. However, I have taken the opportunity to highlight some relevant pieces for school counselors.

The alliance most relevant to us as school counselors is the K-12 Alliance, comprised of over 300 organi-

zations. The K-12 Alliance “directs national outreach programs and projects that increase the recruitment, retention, and advancement of girls in computing and inspires girls to become more interested and confident in technology pathways.” Some well-known member organizations include 4-H, Boys and Girls Clubs of America, Girl Scouts of the USA, and the American School Counselor Association.

Also of interest to counselors are the free resources provided by NCWIT. These are all available online at www.ncwit.org/resources. You can sort the resources by goals and intended audience. Everything from one-page information sheets to newsletters and counselor lesson plans are available. We can do our part to make sure ALL students are exposed to the computer science and computing jobs. You will notice in the resources that they are not just geared toward high school students. It is important that we begin exposing students at an earlier age.

Finally, the third strategy employed by NCWIT is programming. Counselors4Computing (C4C), the program that provided this session at the ASCA Conference. C4C provides information and resources for school counselors to assist them in supporting students as they explore computer science and related careers.

The National Center for Women and Information Technology website (www.ncwit.org) along with the Massachusetts Career Information System (masscis.intocareers.org) provided information used in this article.