Accenture Survey Points to Untapped Opportunity for Girls to Fulfill Their Creative Aspirations with STEM Careers

Findings indicate that businesses could play a more active role in highlighting the creative aspects of STEM

LONDON; March 15, 2018 – Although the vast majority of young people in the U.K. (84 percent) believe that many jobs in the future will involve science, technology, engineering and mathematics — known as STEM — U.K. girls believe that STEM jobs lack the creativity they seek in their careers, according to results of a survey from Accenture (NYSE: ACN).

Accenture’s survey of 5,000 young people, parents and teachers in the U.K. uncovered a disparity between girls’ aspirations for what they want to do in their future jobs and their perceptions about STEM careers. For instance, the leading career aspiration among girls is the opportunity to be creative — cited by slightly more than half (52 percent) of the girls surveyed — yet only 32 percent of girls and young women associate a career in science and technology with being creative. While working with new technology ranks as the top career aspiration for boys, cited by approximately half (48 percent) of those surveyed, it holds significantly less appeal for girls (26 percent).

The survey found that while STEM subjects such as mathematics and computing top the list of school subjects that young people believe lead to career success, half of girls and young women (49 percent) said they find STEM subjects too difficult to learn. In addition, while almost half (48 percent) of boys feel confident in their ability to excel at STEM subjects, less than one-third (29 percent) of girls feel the same way.

At the same time, however, almost two-thirds (62 percent) of older girls (ages 14+) said they regret not having studied STEM subjects for longer. Among those who regret their decision, approximately one-third (31 percent) said that STEM subjects are more relevant than they realized, and approximately the same number (30 percent) said that studying STEM subjects would have broadened their career options.

The findings indicate that businesses could play a more active role in inspiring young people about STEM and dispelling some of the myths, as only one-third (34 percent) of young people look to employers for career inspiration — behind parents and family (65 percent), schools career services (45 percent) and universities (42 percent).

Parents and teachers agree that children need guidance from businesses to visualize the career options that STEM opens up. Almost half (48 percent) of parents surveyed said that children should get work experience in companies that use STEM skills, and more than one-third of the teachers surveyed said they believe that more information about career paths related to STEM skills (cited by 38 percent of teachers) and talks in schools from industry professionals (36 percent) would help to make these subjects more appealing.
“While it’s encouraging to see that young people understand the key role that STEM will play in the jobs of the future, girls’ lack of confidence in their STEM skills and misperceptions about STEM jobs lacking creativity are holding girls back when it comes to developing these important skills,” said Emma McGuigan, group technology officer for Accenture’s Communications, Media & Technology practice. “It’s important to challenge traditional notions around STEM careers to show girls that the creative application of STEM is increasingly relevant to jobs across a range of industries that have been disrupted by technology, from fashion to music and sport.

“At Accenture, we believe that businesses — in collaboration with the education sector — have a key role to play in helping to expand girls’ perceptions about how STEM skills can be applied. We are at the forefront of the digital revolution that is rapidly transforming society, and we have a responsibility to ensure that young people understand and are prepared for the jobs of tomorrow.”

The survey findings are published as Accenture hosts its annual ‘Girls in STEM’ events today across the U.K., designed to ignite girls’ interest in STEM and expose them to the variety of STEM-based careers available. Approximately 1,500 girls aged 11-13 will participate in the events, which are taking place in London, Manchester and Newcastle.

“Accenture’s Girls in STEM events bring together some of the most creative thinkers in STEM to show how human ingenuity and technology are coming together to shape the way we live,” McGuigan said. “Inspiring more girls to develop STEM skills will not only help us tackle the U.K.’s technology skills gap, but also help to create a more diverse workforce that enhances innovation and competitive advantage.”

Accenture’s research found that perceptions around STEM and different career aspirations are reflected in young people’s study choices. Just 5 percent of girls over the age of 11 hope to study computer science at university, compared with 27 percent of boys.

The research also found gender biases in parents’ and teachers’ attitudes around STEM. Half (50 percent) of parents and two-thirds (67 percent) of teachers surveyed admit to stereotypes about girls and boys in relation to STEM, and two-thirds (68 percent) of teachers said they have seen girls drop STEM subjects due to parental pressure. Four in 10 teachers (40 percent) believe that gender biases around STEM have already been established by the end of primary school.

Beyond school, gender biases extend to parental guidance on career choices in relation to the STEM-dominated apprenticeship sector; 27 percent of parents said they would encourage their son to do an apprenticeship, while only 17 percent would encourage their daughter to pursue this route.

The survey also revealed a strong sense of uncertainty among young people, teachers and parents about what the future job market will look like. More than four in 10 teachers and parents (44 percent) said it was hard to predict what the jobs of the future will be, and a quarter (25 percent) of teachers said that the digital economy is creating a need for skills they don’t understand. Meanwhile only 37 percent of the young people surveyed believe their job prospects will be good. This rises to 52 percent among young people who are studying or aspire to study STEM subjects at degree level but dips to 33 percent among young people who aren’t studying or aspiring to study STEM.

Methodology
Commissioned by Accenture and conducted by Loudhouse, a specialist research division of the
Octopus Group, the online research covered approximately 5,000 people in the United Kingdom, including 1,504 boys and 1,522 girls at Key Stage 2 (aged 7-11), Key Stage 3 (aged 11-14) and Key Stage 4 school age (aged 14-16). The survey also included 501 young men and 518 young women (aged 16-23), beyond GCSE education. In addition, samples of 646 parents and 300 teachers were taken to determine the influencing factors for boys and girls in their school subject choices and perceptions of various subjects and careers. The survey was conducted in February 2018.