



The Future of Education:

Gender Stereotypes Threatening the Digital Revolution

/ The Need for More Women in STEM

Over 80% of jobs advertised in the UK require at least some digital skills, and **the digital skills gap** is estimated to cost the UK economy £60 billion per year.

Five years ago, Tech She Can reported¹ that **only 3% of young women see a career in tech as their first choice**. Although governments and businesses across the UK are increasingly investing, the tech skills gap is rapidly growing, and **female professionals remain chronically underrepresented** in tech jobs.

Technology is **shaping our future** and impacting every area of our daily lives, redefining careers today and in the future. The pace of change has never been more rapid - now, more than ever, we need to **engage and inspire girls to create and use technology**, so that it is more likely to benefit everyone.

¹ [Time to close the gender gap \(2018\)](#)

More diverse tech teams are vital in creating a future where tech is fair, accessible and beneficial globally. Not only is the country **missing out on wide pools of potential talent**, but girls and young women are missing out on rewarding career paths and lifetimes of opportunities.

Tech She Can and Templeton are united in our mission to make the tech industry more equal, by providing girls and young women with STEM education opportunities to become **the tech leaders of tomorrow**.

/ The Future of Education Research Project

Tech She Can is a charity working together with industry, government and schools to **improve the ratio of women in technology** roles. Tech She Can are educating, equipping and inspiring young people to choose technology careers and change the ratio of the tech world.

Templeton and Partners recruit tech specialists across global customer sites, providing career opportunities and supporting some of the world's largest companies. Templeton's **85% diverse team** have first-hand understanding of diverse candidate challenges, uniquely positioning us to engage diverse tech professionals across the globe.

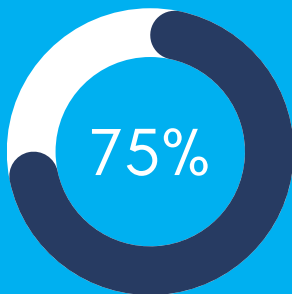
Tech She Can and Templeton teamed up in December 2023 to launch a research project that campaigns for more school STEM resources and supports the future STEM careers of all students. We spoke to **287 UK primary teachers** about barriers in delivering STEM education, stereotypes and gender-related achievement, and how the government, businesses and charities can help schools to support female students into STEM careers.



/ Importance of Careers Education from a Young Age – Teacher Perspectives



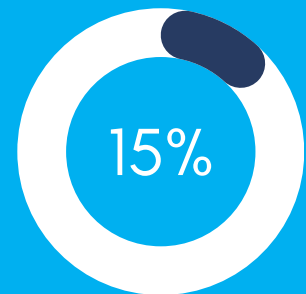
The saying, ‘You can’t be what you can’t see’ has never been more pertinent. Teachers overwhelmingly believe that children need real-life examples of relatable role models and access to career paths, to grasp a wider understanding of **tech careers across less traditional industries** such as the arts and the public sector.



Teachers’ support of primary careers education



Students’ access to primary careers education



Students’ access to primary careers experiences

75% of primary teachers believe that careers education is important in primary schools, however **only just over half have access to careers education** that is both good quality and inclusive for diverse groups.

Only 15% of primary teachers felt that the careers experiences they had access to was sufficient for their students, meaning **the majority of children are missing out on meeting** people from different career paths. More needs to be done to provide STEM careers experiences that actively involve and engage students and support the work of schools.

/ Gender Differences in STEM Careers Awareness

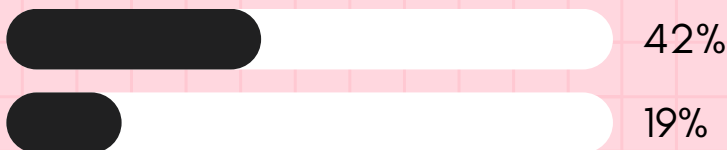


Overall Careers Awareness



6 in 10 primary teachers believe their students (both boys and girls) have awareness of at least some STEM career options.

School Status Impact



More than double the amount of private school teachers than state school counterparts report female students having greater awareness of STEM careers. 42% of private school teachers believe that girls have more awareness of STEM careers than boys, compared to just 19% of state school teachers.



Pupil Premium Funding Impact



Pupil premium funding is given to state schools to improve educational outcomes for children who experience disadvantages. When attending schools where more than half of pupils receive pupil premium funding, girls' awareness of STEM careers falls from 22% to 17%.

/ Gender Differences in STEM Attainment

Boys enjoying STEM

Girls enjoying STEM

Boys aspiring to STEM

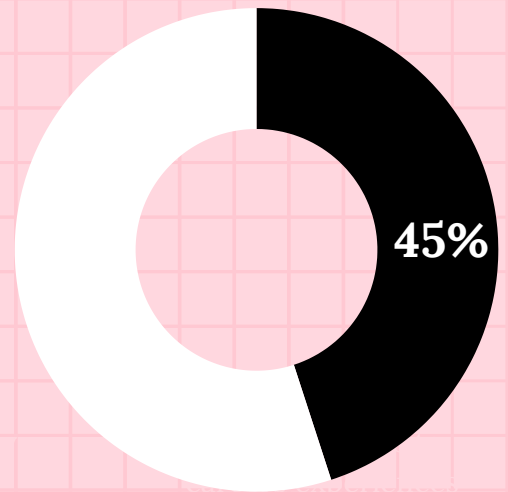
Girls

Gap Between Awareness & Attainment

Although girls are reported by their teachers to enjoy STEM subjects more than boys, girls are 69% less likely to aspire to a STEM career.

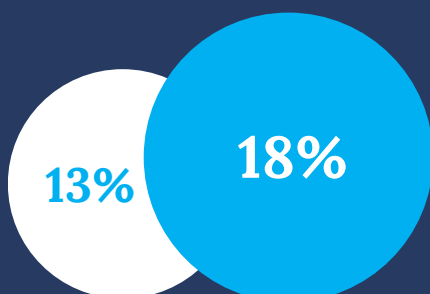
Future Career Aspirations

Only 45% of teachers said primary school children overall believe that they could have a future career working in STEM.



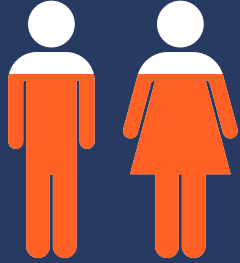
Girls excel in STEM subjects at private schools

School Status Impact



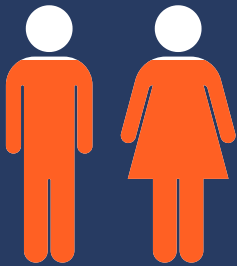
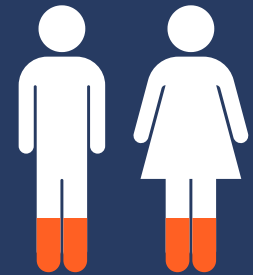
Private school teachers were more likely to report girls excelling in STEM subjects. 18% of private school teachers reported girls excelling in STEM subjects more than boys, compared to just 13% of state school teachers.

/ Gender Stereotypes in STEM Careers



71% of primary school teachers believe that **gender stereotypes around STEM start before the age of 11.**

1 in 5 teachers are confident that **stereotyping starts at pre-school age.**



State school teachers believe **stereotypes around STEM education start much earlier** than their private school counterparts.

Most state school teachers (78%) believe that **gender stereotypes around STEM start before the age of 11**, compared to only 49% of private school teachers, and compared to 71% of teachers in general.



/ Intersectionality of Gender & Social Mobility



Boy from a Private School

More Likely to enjoy STEM subjects

More Likely to excel in STEM subjects

More Likely to believe in a future STEM career

Girl from a State School with High Pupil Premium

Less Likely to enjoy STEM subjects

Less Likely to excel in STEM subjects

Less Likely to believe in a STEM career

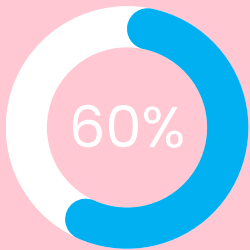


Boys from private schools are less likely to be influenced by stereotypes, as most role models that they see are male and more closely represent them. **Girls are more likely to be influenced by stereotypes** as they don't see themselves represented as often in STEM careers.

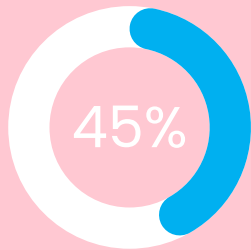
Teachers' reports show that **gender and social mobility have a multiplying effect** on gendered stereotypes surrounding careers. STEM education must focus on widening inclusion in both areas to understand, identify and address **all barriers preventing girls from getting into STEM.**

/ Barriers to Improving STEM Education

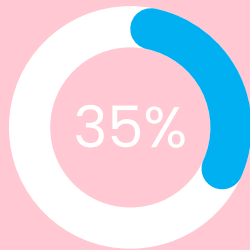
Primary teachers reported a number of barriers preventing them from delivering better quality STEM education for their students, including:



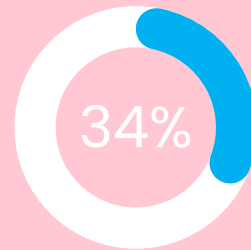
Busy curriculum



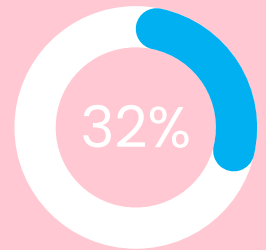
Not a school priority



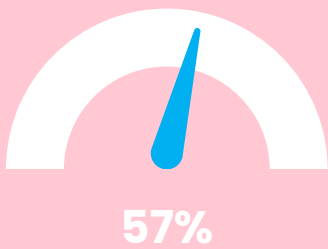
No links to STEM employers



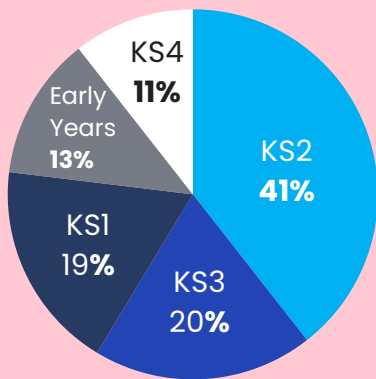
Not a national curriculum priority



Lack of teacher knowledge



When it comes to inspiring children to consider STEM careers, 57% of teachers believe **a trained volunteer visiting a school to deliver lessons** would be most effective. Other top teacher-selected methods included online interactive sessions, animations, virtual assemblies and in-depth lesson packs.



41% of primary teachers believe that careers education should start at KS2, with nearly three quarters believing **careers education is needed before KS3**. Teachers believe in balancing children's understanding and capacity for learning with tackling stereotypes and piquing interest early to prevent limited subject (therefore career) choices.

Despite gender stereotypes and differences in STEM attainment, 71% of teachers believe that a different approach to boys' and girls' STEM education is unnecessary, but that **more diverse role models are needed in careers education** to help get more girls into STEM.



/ STEM Education Recommendations

Following the report, Tech She Can recommend several actions to better support teachers deliver STEM education and inspire all children into STEM careers.

Tech She Can is calling for STEM Careers education to:



1

Start in Primary Schools, supporting teachers with easy-to-access resources, showing how technology links to multiple areas of the curriculum.



2

Bridge the gap between education and industry by showcasing **diverse, relatable real life role models**, the breadth and depth of careers and the different pathways into employment.



3

Play to children's passions and interests with **engaging and interactive lessons and materials** such as animations, digital lessons, videos, games and detailed lesson packs.



Visit techshecan.org to join the journey for an equal future in STEM.



Visit templeton-recruitment.com to diversify your tech workforce.

