### DIVERSITY SNAPSHOT

## PROJECT NEXT GENERATION WOMEN IN STEM

UCAS



## INTRODUCTION

Students are mapping out their future pathways earlier than ever. But younger audiences often lack the guidance they need to make informed choices.

Welcome back to <u>Project Next</u> <u>Generation.</u>

This follow up to our **Early Careers and Apprenticeships** report dives deeper into the data through the lens of distinct diverse groups.

We uncover what young people aged 13 – 17 are thinking and feeling about the here and now and their future. In this snapshot, we look at how **young women considering STEM careers** make decisions and what influences them.



## THE HEADLINES

The research reveals key insights into the factors shaping young women's decisions around STEM careers, highlighting the influence of education, family support, and misconceptions about alternative pathways.

Women interested in STEM are less likely to consider apprenticeships compared to those interested in other careers, with a stronger preference for university pathways.

This decision is shaped by a lack of awareness around the benefits of apprenticeships, including specialisation and financial support.

Despite recognising these pathways, many are uncertain about their options, and misconceptions around wages and continued study need to be addressed.



### CONSIDERING AN APPRENTICESHIP?



Teachers are seen as critical in helping women in STEM understand how their learning connects to future careers, but the lack of STEMrelated knowledge in their families presents a barrier.

40% of the young women interested in STEM careers do not have family members in the sector, making it crucial to equip parents and carers with the information needed to guide these students confidently.

### CONSIDERING UNIVERSITY?

**MORE LIKELY** THAN NON-STEM WOMEN

## GIRLS EXPLORING STEM CAREERS FEEL LISTENED TO ABOUT THEIR FUTURE

I FEEL LIKE I AM BEING LISTENED TO WHEN MAKING DECISIONS ABOUT MY FUTURE





78% of girls considering STEM careers feel listened to when discussing their future, slightly behind their non-STEM peers by 2%.

This shows that, whilst these girls feel engaged in their decisions, they still seek more guidance and support, especially in a field with fewer female role models.

Schools and teachers are crucial in providing this support.



## SCHOOL OR COLLEGE IS A STRONG SOURCE OF INFORMATION FOR POST-18 CHOICES



Whilst over a quarter of women interested in STEM are proactive in learning about post-18 options, when asked who had done most of the work to provide them their post-18 options, school and college settings outweighed parents by 18% for those young women interested in STEM careers. This talks to a need to effectively engaged with schools at an earlier point in the academic journey.

13% of women interested in STEM reported that they still did not know much about their post 18 options, which was 4% less than non-STEM focused women and provides a cohort who require further intervention.



# THE VALUE OF INFLUENCERS ON YOUNG GIRLS CONSIDERING CAREERS IN STEM

TEACHERS HELP ME UNDERSTAND HOW THE THINGS WE ARE LEARNING RELATE TO MY FUTURE CAREER



80% of women interested in STEM agreed that teachers help them see the career relevance of their studies, compared to 71% of non-STEM women.

This underscores the importance of ensuring teachers have up-to-date knowledge about STEM career pathways to better guide their students toward these exciting opportunities.

40% of women interested in STEM reported that none of their family/friends had worked in a role similar to what they were considering which perhaps points to why, compared to those interested in different careers, so few felt it extremely advantageous to discuss their options with their parents or carers. IT IS EXTREMELY USEFUL TO DISCUSS CAREER OPTIONS WITH MY PARENTS OR CARERS

![](_page_5_Figure_7.jpeg)

## MAIN CHALLENGES OF APPRENTICESHIPS FOR GIRLS INTERESTED IN STEM CAREERS

![](_page_6_Figure_1.jpeg)

Women interested in STEM are more likely to see low wages during and after apprenticeships as a disadvantage compared to non-STEM women. 51% thought wages during training were low and 39% thought an apprenticeship would lead to lower wages in the long term. This underscores the need to address common concerns, such as perceived lower wages and a lack of clarity around long-term career outcomes, to shift perceptions and encourage more young women to explore this route.

DURING TRAINING

A LOT TO COPE WITH

![](_page_6_Picture_5.jpeg)

## WOMEN INTERESTED IN STEM CAREERS ARE LESS LIKELY TO CONSIDER APPRENTICESHIPS THAN NON STEM WOMEN

### IS APPLYING FOR AN APPRENTICESHIP SOMETHING YOU ARE CONSIDERING?

![](_page_7_Figure_2.jpeg)

■ STEM Women

Women interested in STEM are 17% less likely to consider apprenticeships as a pathway compared to their non-STEM peers. While some remain open to the option, 15% have ruled out apprenticeships higher than entirely-5% their non-STEM counterparts.

Conversely, these women are 18% more likely to see university as their preferred route, reinforcing the perception that STEM careers are primarily accessed through traditional degree pathways.

Additionally, 11% of STEM-focused women report uncertainty about whether they would consider an apprenticeship, compared to 7% of non-STEM women, this highlights an opportunity for further intervention.

They may need information on the academic rigor and the chance to specialise in a subject of interest in an apprenticeship, which is one of the perceived benefits of university.

Non-STEM Women

## **RECOMMENDATIONS FOR EMPLOYERS TO ATTRACT, RECRUIT. AND RETAIN WOMEN INTO STEM CARE**

![](_page_8_Picture_1.jpeg)

CHALLENGE MISCONCEPTIONS

![](_page_8_Picture_3.jpeg)

### EMPOWER TEACHERS WITH KNOWLEDGE

![](_page_8_Picture_5.jpeg)

ENGAGE PARENTS & CARERS

![](_page_8_Picture_7.jpeg)

SHOWCASE PATHWAYS

![](_page_8_Picture_9.jpeg)

TARGET UNDECIDED STUDENTS

![](_page_8_Picture_11.jpeg)

HIGHLIGHT FINANCIAL BENEFITS **Challenge Apprenticeship Misconceptions** Many women interested in STEM don't consider apprenticeships due to preconceptions. Addressing misconceptions around academic rigor, career progression, and salary potential is key.

**Showcase STEM Career Pathways** STEM routes should be more visible, with clear examples of how apprenticeships lead to success. Industry partnerships and real-life case studies with female role models to help shift perceptions.

**Engage Parents and Carers** With many girls lacking STEM role models at home, parents and carers need targeted support. Providing accessible information and myth-busting resources will boost their confidence in discussing these careers.

**Target Undecided Students** A cohort of girls interested in STEM remain unsure about post-18 options. Proactive engagement, such as tailored guidance and employer outreach, can help them explore STEM apprenticeships as a path.

### **Empower Teachers with Knowledge**

Teachers play a key role in the decisions of girls interested in STEM but need more support to explain the opportunities. Training and resources will ensure they can provide informed guidance.

### Highlight Financial Benefits

Concerns about low wages deter seem to deter female students. Providing clear salary progression data and real-world examples of financial success can help ease worries.

## **CLOSING COMMENT FROM UCAS**

It is encouraging to see so many women interested in STEM taking a proactive approach to exploring their post-18 options. However, the lower consideration of apprenticeships highlights an opportunity to **challenge misconceptions** and **improve visibility** of STEM pathways outside of the traditional undergraduate route.

We want all students to feel **informed and confident** when making decisions about their future, ensuring they have access to **clear**, accurate information about all available routes.

For employers and providers, **supporting key influencers**, such as parents, carers, and teachers, is essential. With fewer women considering STEM careers having family members or friends working in similar roles, **additional outreach** is needed to equip these support networks with the knowledge to guide students effectively.

By **strengthening awareness**, addressing concerns around pay and progression, and showcasing the **value of STEM apprenticeships**, we can empower more young women to pursue the careers that match their **skills and ambitions**.

## **RESOURCES FOR STUDENTS AND INFLUENCERS**

### Find targeted information & support for STEM careers on ucas.com

- <u>UCAS Careers Quiz | Discover Your Future</u> match your ideal job or career with your personality type.
- <u>Ultimate Guides Traditional Degrees Vs Degree Apprenticeships</u> a guide to next steps.
- Learn About Apprenticeships And Find The Right One For You –resources, hints and tips and apprenticeship vacancies.
- $\rightarrow$  <u>Industry guides | UCAS</u> find out what industries might be a good fit for you.
- Employer Guides explore employers and apprenticeship providers.
- <u>Apprenticeship Application Guides | UCAS</u> tailored guides and top tips from employers and existing apprentices to guide you through the application process.
- <u>Parent and guardian guide to apprenticeships | UCAS</u> what you need to know when supporting someone to apply for an apprenticeship.
- Teachers and advisers: Talking about apprenticeships | UCAS what you need to know when talking to students about apprenticeships.

![](_page_10_Picture_18.jpeg)

## UCAS EARLY CAREERS

Whether you want to drive applications to your apprenticeship or graduate programmes or look at raising awareness with future talent, UCAS has the attention of those considering their future. We'll work with you to craft a campaign plan with the right audience and channel mix to maximise your budget and meet your ambitions – whatever these might be.

### REACH YOUR FUTURE TALENT WITH UCAS

### CONTACT US:

![](_page_11_Picture_5.jpeg)

EarlyCareers@ucas.ac.uk

![](_page_11_Picture_7.jpeg)

ucas.com/recruit-apprentices

![](_page_11_Picture_9.jpeg)

linkedin.com/company/ucas linkedin.com/showcase/ucas-early-careers

![](_page_11_Picture_11.jpeg)

x.com/ucas\_corporate

This research surveyed 1,000 students aged 13–17 through a combination of quantitative and qualitative methods. This group accounted for 151 female respondents considering STEM subject / careers compared to 256 considering other subjects / careers.

The fieldwork was conducted between May and July 2023, and this snapshot was published in March 2025.

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![](_page_11_Picture_16.jpeg)