The **R&I Framework** Pilot Project

Growing **Research** & **Innovation** in Schools

IRIS The Institute for Research in Schools

Contents

Introduction

A new way of delivering STEM in schools

Research and innovation (R&I) is the side of STEM that's exciting, dynamic and relevant to our lives. But all too often, it's not part of young people's experience of learning these subjects at school. So it's not surprising that many do not see a future for themselves in STEM.

We want all young people to enjoy the benefits of a research-led approach to STEM education in schools. We created the R&I Framework to help schools transform how they present these subjects, ensuring students understand how knowledge is created and applied to the world around them—and empowering them to one day become change-makers themselves.

IRIS has supported schools and colleges across the country to transform the experiences of young people in STEM. We've seen, first-hand, the benefits for young people of doing real scientific research. They gain skills that are useful not only for STEM careers, but for all kinds of work. They start to see how STEM relates to their own lives and the world around them. Learning STEM in this way empowers young people to become scientists themselves, now and in the future.

We believe every student should reap the benefits of a research-led approach while at school. But we also understand how challenging it can be for schools to change the way they do things, as they balance competing demands like scarce resources, pastoral care and a content-heavy curriculum. It's often only the schools with the most resources that can provide the extracurricular opportunities that shape young people's relationship to STEM. It also tends to be young people from groups that are already well represented in STEM who feel encouraged to pursue these subjects for further education and work. It doesn't have to be this way.

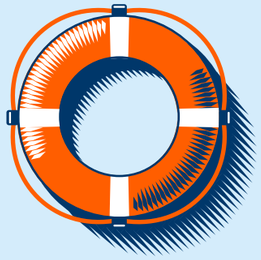
IRIS has always worked with the ambition to make STEM exciting, relevant and inclusive for all young people—not just a few. With the R&I Framework, we have developed a new way of delivering STEM in schools, through the lens of research and innovation (R&I). Our R&I approach reframes what young people learn in these subjects to reflect how they work in the wider world, to demonstrate their societal and economic value and to explore their relevance to real problems and solutions. We've worked with schools that might not feel able or confident to change things on their own, but which have been open to trying new approaches with our support. Our goal has been to foster STEM cultures in school that champion the importance of research and innovation. In doing so, we want all young people from all backgrounds to have a chance to see STEM as a world relevant and open to them. Crucially, the framework has not tried to change students (the deficit model, which puts the onus on young people to gain motivation and aspiration). Rather, we've helped schools to change the way that they frame STEM, so that young people begin to see the relevance of these fields to their own lives—and appreciate just how exciting they can be.

We've piloted the R&I Framework in secondary schools across the country, supporting them to foster a cultural change in young people's experiences of STEM. Students in participating schools completed surveys, and schools used this data to drive the project. With IRIS' guidance, each school then delivered a unique and tailored programme of activities designed to promote R&I among their students, strategically engaging with priority areas and groups based on their data and then seeing the results.

We're delighted to share some of the positive impacts, which show that our R&I approach pays off. We've measured positive changes in students' science capital, their personal confidence in STEM and their increased understanding of how they might contribute to STEM in their careers. Besides these headline impacts, our pilot produced a wealth of data, and we intend to share more findings in the near future.

A year's pilot is only the start of change. We're now looking for partners to help us grow the R&I Framework and reach young people all across the country. Join us on this journey to ensure all young people in every school can experience STEM as exciting, relevant and integral to their future.

Dr Jo Foster
Director



The problem

What's wrong in STEM

We're not growing a STEM workforce strong enough for the future.

We need STEM professionals for our economic prosperity (job growth in STEM fields) and to respond to societal challenges and opportunities (climate change, AI).

We're nudging young people out of STEM throughout their education, as a result of limited resources and opportunities, narrow pathways and stereotypes.

The UK's future depends on a better experience of STEM for young people in school.

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Our solution

An R&I approach

IRIS designed the R&I Framework to help schools deliver STEM in a new way: through the lens of research and innovation (R&I).

R&I means producing knowledge (research) to solve problems (innovation). In schools, it means young people experiencing the real-world processes, applications and impact of STEM. It enables young people to develop more positive relationships to STEM.

In our pilot project, we rolled out the R&I Framework in schools across the UK. With IRIS' support, schools delivered a programme of R&I activities tailored to their students' needs.

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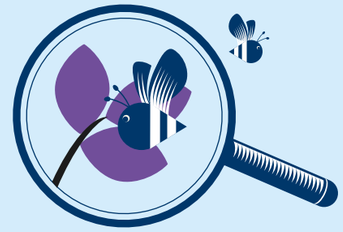

Our findings

Students, teachers & schools

IRIS measured the impact of the R&I Framework before and after the project, through surveys and interviews with students and teachers in participating schools. We found that the R&I approach:

- Prevented the decline of science capital
- Challenged negative stereotypes about who belongs in STEM
- Transformed young people's understanding of STEM careers —particularly among girls
- Empowered teachers to drive positive change across their schools.

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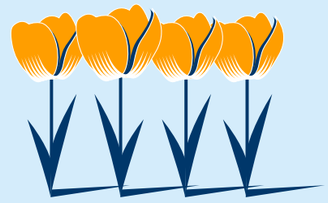

Our future plans

Growing R&I in schools

We've shown our project works. Our next steps are to:

1. Build a movement for change
2. Secure funding to expand the project
3. Transform STEM education in the UK.

Join us in making the case for change, so that every child in every school has access to high-quality STEM education.

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THE PROBLEM

The workforce challenge

In recent years, successive British governments have consistently emphasised the importance of STEM research and innovation for the country.

From the 2020 vision of becoming a 'science superpower' to the government's pledge in 2025 to solidify the UK's position as a science and technology leader, STEM remains a central priority. Most recently, the UK government pledged over £20 billion investment in research and development, with a clear emphasis on science and technology.(1) But these investments depend on a thriving and diverse workforce of STEM professionals, which is still lacking despite many efforts to recruit talent, even as jobs are growing.

There's a lack of diversity

25%

Only a quarter of the STEM workforce are female.(2)

STEM isn't representative of the population, with disparities in gender, race and ethnicity, and socioeconomic backgrounds. Without visible role models, young people from diverse groups are less likely to aspire to STEM careers, narrowing the UK's potential and depriving innovating sectors of diversity of thought.

> Without sufficient basic research capacity, an economy can neither produce the cutting edge knowledge and processes that underpin future economic benefits, nor capitalise on such discoveries made elsewhere.
>
> **Royal Society**
> Science 2040(5)

Demand is outstripping supply

725,000

Potential new jobs by 2030, as part of a growing net zero sector.(4)

Renewable energy, electric cars and other green industries are not only economic concerns—they enable us as a society to respond effectively to climate change. The UK must be preparing young people to take up these crucial roles today.

Employers struggle to find STEM skills

£13billion

Annual investment could be needed for adult upskilling by 2030.(3)

Employers have long struggled to find the workers they need, and existing skills gaps in the workforce risk worsening over time. STEM skills are especially in demand—not only for STEM sectors, like engineering, but more broadly, as technological innovations shape the emerging economy.

The government pledged over £20 billion for research and development in 2025...

but we aren't growing a strong enough STEM workforce for the future.

The education challenge

The UK's STEM investments depend upon young people deciding to pursue education and envisioning a future career for themselves in one of these fields.

STEM streams branch off early

25%

Only 1 in 4 students studies triple science at GCSE.(6)

Students choose or are placed into either double or triple science from Year 9, often long before considering their futures. In some schools, taking triple sciences can make it easier to progress post-16 and open access to other GCSEs, like Computer Science.

Subject choices are limited by lack of teachers and resources

17%

The percentage of its recruitment target for physics teachers that the government met in 2023/24.(7)

Staffing, timetabling, and other school policies dictate STEM subject availability. Schools without specialist teachers are unable to offer young people the full range of STEM subjects, affecting choices and progression.

Gatekeeping restricts who can progress in STEM subjects

7+

The average GCSE grade of students studying some STEM A levels, higher than other subjects.(8)

STEM is often seen as difficult and only for the 'clever' few, which is reinforced by schools only allowing or encouraging the highest achievers to enrol in STEM subjects and other opportunities, such as apprenticeships. Students in A level Maths, Further Maths, Chemistry and Physics have the highest average grades of any subject, suggesting high entry requirements.

Simply put, the UK's prosperity hinges on delivering a positive experience of STEM for those in school. However, deep-rooted barriers, societal stereotypes and school structures combine to keep young people away from STEM—often long before they've taken life-changing decisions about their future.

There is [...] little scope to engage with topics beyond the curriculum or apply learning to real-world issues such as climate change, with pupil engagement suffering as a result.

House of Lords
Education for 11–16 Year Olds Committee(12)

STEM is stereotyped as 'not for girls'

1

The number of references to women in the secondary STEM curriculum.(9)

STEM is stereotyped as male and geeky, with 20 references to individual men in the secondary curriculum for STEM subjects. Girls often do not learn about female STEM trailblazers who could be inspiring role models. Gender norms might also be inadvertently reinforced in the classroom.

Students lack hands-on learning

26%

The percentage of young people who do science practicals in school.(10)

Having opportunities to do practical science is essential for students to make links between what they learn in the curriculum and real-world research and innovation. However, most young people only get to experience real science in the form of video demonstrations.

STEM extracurricular activities in school are limited

43%

Less than half of students take part in any extracurricular science activities in school.(11)

Extracurricular activities can include STEM clubs, competitions and talks from professionals, as well as out-of-school trips to local museums or STEM workplaces. Such opportunities can bring STEM to life, but too few young people experience any of these activities.

We have a huge pool of talent. Each year, over 10 million young people are in school and learning STEM subjects...

but barriers in classrooms and the wider world discourage most from pursuing STEM education and careers.

The problem
What's wrong in STEM

The end result is a small and relatively homogeneous talent pool, with our society losing out on individuals and whole groups of young people who could really contribute to tomorrow's R&I workforce: robotic engineers, data analysts, biomedical engineers, radiologists, CAD technicians, machine learning specialists, environmental engineers... and any other career path that STEM research and innovation opens up in the future.

Young people should not be nudged out of STEM before they've had a chance to make real decisions about their futures...

IRIS is changing the culture in STEM education so this doesn't happen.

OUR SOLUTION

By framing STEM through research and innovation, we can remove barriers, build science capital, inspire careers and ensure the relevance of STEM to all young people, regardless of their pathway in life.

This will change young people's lives, allowing them to use what they learn in STEM to pursue meaningful work for themselves, for their communities and for the wider world in which they live.

Our solution
The R&I Framework

Over nearly a decade of working in schools, we have seen that doing real research transforms young people's relationships to STEM.

The R&I Framework supports a new way of delivering STEM in schools, in which young people experience these subjects through the lens of research and innovation. We've seen the impact of individual student research and wanted to extend the benefits of this approach to whole cohorts of students in schools across the UK. Our ambition has been not just to get more young people doing research but to change the way STEM is framed in the classroom and across the school: making real-world problem-solving, knowledge creation and career pathways part of what young people learn about STEM, whether in the simplest classroom activities or through exciting extracurricular opportunities. We want young people to experience STEM the way real scientists, engineers and programmers do.

Research and innovation (R&I)
is a term widely used to describe the production of new knowledge (research) and how we can use that knowledge to solve problems (innovation). In schools, an R&I approach means that students experience a more vibrant, exciting vision of STEM in terms of its real-world applications and impact. A simple shift in emphasis towards R&I empowers students to discover things and apply what they learn to real problems, thereby engaging them in the true nature of scientific work.

The pilot project
IRIS worked with schools to roll out the R&I Framework with Year 9 cohorts, providing support and guidance while also evaluating the impact of our approach on students, teachers and the whole-school STEM culture. Students in participating schools completed surveys, and teachers used this data, along with self-reflective tools, to identify strategic priorities and drive the project. With tailored training, support and guidance from IRIS, each school delivered a unique programme of activities to promote student engagement in STEM. In addition to closely mentoring schools throughout the project, we provided participating schools with our R&I Framework handbook, which encouraged them to reflect on their existing STEM provision and supported them to develop and embed an R&I approach.

School participation
Schools from across England volunteered to take part in the R&I Framework pilot project. IRIS believed that an R&I approach would be impactful in a range of schools, and for the pilot we worked with schools in some challenging contexts. The pilot included schools with Free School Meals (FSM) eligibility ranging from 21% to 72% (national average: 27.1%) and attainment (grade 5+ in English and Maths) ranging from 22% to 60% (national average: 45%). IRIS provided a small amount of funding to support schools to take part in the pilot project.

Although every effort was made to consistently engage with schools who embarked on the project, some schools were unable to continue because of reasons outside of our control. One intervention school was withdrawn by IRIS due to sustained non-engagement, and two others (one intervention and one comparator school) withdrew themselves as a result of staffing pressures.

We have used pseudonyms for each of the schools throughout this report to maintain their anonymity.

The evaluation of the pilot project

The evaluation of the R&I Framework pilot project aimed to discover the impact that participation had upon students' experiences and perceptions of STEM, as well as on teachers and the overall school STEM culture.

IRIS used a quasi-experimental mixed methods approach, comparing the **nine schools participating in the project (intervention schools)** with a matched group of **ten schools that did not take part in the project (comparator schools).** Schools were matched based on factors like locality, (FSM) eligibility, school size, income, Ofsted rating, and prior attainment.

Student surveys
IRIS asked students to complete a survey measuring their individual perceptions of STEM. Students in intervention schools completed this survey before and after the R&I Framework, and the data provided the main measure for the project's impact (in addition to being an integral driver for the project's activities). Students in comparator schools likewise completed the survey twice, without experiencing the project intervention.

In total, over 1,100 students in intervention schools completed at least one survey; over 1,200 students in comparator schools did at least one survey; and 1,297 student responses were matched across both surveys using a unique identifier. Matched responses were therefore from students who answered both surveys.

The matched dataset provides the most robust evidence and forms the basis of the findings presented in this report. Statistical analysis (ANOVA) was used to compare changes between intervention and comparator schools, with a significance level of 0.05 or lower.

We have used matched student data from seven intervention schools and nine comparator schools as the basis of the findings below. We've anonymised student data throughout the evaluation process.

Interviews and case studies
A sample of students and teachers in intervention schools were interviewed during and at the end of the project, exploring their experiences with STEM and the R&I Framework. These interviews have been used for the student profiles, spotlights and quotes in this report, highlighting personal experiences and impact.

We have drawn on interviews with students in eight intervention schools. We've given pseudonyms to individual students and anonymised teacher quotes throughout the report.

Data collected for the evaluation of the pilot project

Year		2022	2023
Year group		**9**	**10**
No. of schools	Intervention	**9**	**7**
	Comparator	**10**	**9**
No. of surveys completed	Intervention	**1,114**	**1,118**
		78% response rate	80% response rate
	Comparator	**1,238**	**1,270**
		71% response rate	74% response rate
No. of interviews with students		**41**	**79**
No. of interviews with teachers		**6**	**15**

An R&I approach enables students and our country to flourish in STEM today...

and solve the problems of tomorrow.

What schools did

Over the course of the R&I Framework project, IRIS supported schools to undertake an improvement cycle designed to help them make research and innovation a core part of how they delivered STEM for their students. Our approach has been data-driven and strategic, giving young people experiences of STEM research and innovation and helping them understand its relevance to their lives.

The process

Appoint an R&I Lead

1
A STEM teacher was chosen as the school's R&I Lead. A member of the school's senior leadership team (SLT) was assigned to oversee the project.

Identify the challenges

Students completed a survey about their STEM attitudes, experiences and plans. The school completed a self-assessment using IRIS' R&I Framework. The R&I Lead and SLT were then asked to review the findings.

2

> The initial survey, some of the statistics, were quite shocking. So it was good to just be aware, and make staff aware. Colleagues came to me afterwards to say, 'wow, I didn't realise it was that bad!'
>
> **Head of science**
> Elm Grove Academy

> It was really actionable... The self-assessment that we did, we shared with the head of maths, head of science, who were in broad agreement: that's where we currently were. And then what the students said sort of matched that and helped me highlight priority areas... We then filtered it down to say, actually these would make the most impact.
>
> **Maths teacher**
> Heritage Grove Academy

Create an action plan

3
The schools used the findings to identify areas of concern and set improvement goals. With the help of IRIS, the school developed a clear and achievable plan to meet those goals.

Grow R&I in school

The R&I Lead implemented the action plan, carrying out activities that met the strategic priorities for growing R&I in the school and transformed their students' experiences of STEM. IRIS provided resources, training and support throughout.

4

Assess the impact

5
Students took a second survey, which allowed the school to measure the impact of their activities. Using this data, IRIS gave schools bespoke guidance on how they could continue their growth.

Step 1

Appoint an R&I Lead

Strong leadership and senior support made STEM research and innovation a reality in schools.

Schools taking part in the R&I Framework needed a dedicated leader to oversee its delivery and champion research and innovation. These were the R&I Leads.

An R&I Lead was appointed in each school—usually a science, maths or computing teacher with a passion for STEM. Some were experienced middle leaders while others were Early Career Teachers taking on their first leadership role.

Each R&I Lead had an SLT link whose role was to support them and ensure that research and innovation was a priority.

Schools that appointed a strong R&I Lead and secured SLT buy-in for the project were able to go beyond small adjustments towards lasting and sustainable impact.

Step 2

Identify the challenges

Survey data and self-assessment allowed schools to understand what students thought about STEM in school and the wider world.

Understanding the barriers to STEM engagement was the first step toward meaningful change. Schools used student survey data and self-assessment by leaders to gain a clear picture of the challenges they faced.

Questionnaire
At the outset, all Year 9 students in participating schools were asked to complete a survey on their attitudes towards STEM, experiences in school and future aspirations. The questionnaire measured key areas such as:

- science capital (based on the validated ASPIRES framework)
- attitudes towards STEM subjects and careers
- experiences of STEM in and beyond the classroom
- knowledge of post-16 pathways.

The results were analysed and broken down by sex and Pupil Premium status. Using evidence to guide change meant schools had a clear picture of their unique challenges and could make informed decisions about how to inspire students in STEM through research and innovation.

Self-assessment
Alongside student survey data, each school's R&I Lead and SLT were asked to complete a self-assessment using IRIS' R&I Framework handbook. This helped them identify gaps in provision and align their priorities with evidence-based improvements, as outlined in the framework, which would then support schools in the next step of creating an action plan.

Step 3

Create an action plan

Schools worked with IRIS to create a roadmap for meaningful change, tailored to their specific needs and strategic priorities.

> It has been good to explore opportunities to embed STEM and have a plan that runs across different STEM subjects... Completing the action plan helped us to focus on STEM across school; it's something we didn't previously have.
>
> **Science teacher**
> Meadowbrook Academy

Having a wealth of data about their students created a powerful impetus for change among teachers and the SLT. While they may have had ideas about where challenges were arising, concrete data was impossible to ignore. The next step was to turn this data into action.

Schools worked with IRIS to create action plans that were strategic, evidence-led and achievable. Starting from their student data, schools identified three or four overarching priorities. These were then converted into specific actions to be carried out across the academic year. The actions included a wide range of activities that were targeted at specific groups of students as well as whole cohorts.

Crucially, action plans were dynamic, collaborative documents: R&I Leads met with IRIS regularly to review priorities and actions and to update each other on potential opportunities. It was also important to align the school's priorities with their existing visions and improvement plans, making the drive for change even stronger.

Step 4

Grow R&I in school

By taking a holistic, strategic and tailored approach to embedding research and innovation, schools transformed how young people engaged with STEM.

> Before the project, every department had a sort of STEM representative, but they didn't really get any time or money to go towards it. There were random events that the kids really enjoyed, but they didn't really have a close link with the curriculum, they weren't linked across departments, and they were kind of just one-offs.
>
> **Science teacher**
> Meadowbrook Academy

Schools didn't just plan for change —they made it happen.
R&I Leads provided students with a range of activities throughout the school year, relevant to their needs. This might mean an assembly on STEM careers for a school where knowledge of career pathways was low, or a coding workshop for girls in a cohort where they just didn't seem interested in technology. Activities emphasised an idea of STEM unfamiliar to many students—as a world driven by exciting, real-world research and innovation that was relevant to their lives.

Given the existing pressures on teachers, IRIS did not want the activities to significantly add to their workloads. To avoid each school reinventing the wheel with each new activity, R&I Leads made the most of opportunities in their local area, working with local employers, universities and science centres. They also engaged with the vibrant STEM education community at the national level, accessing workshops, competitions and conferences. IRIS acted as a mentor for the R&I Leads, providing guidance, resources and professional development, and alerting them to local and national opportunities.

The following pages highlight just some of the activities and strategies that schools used to embed research and innovation. Their approach was tailored to their particular cohort, reflecting student data, priorities and action plans. Crucially, these activities were not one-offs, and they were not one-size-fits-all; they were part of an overarching holistic vision unique to each school—driven by data, removing barriers to participation and aimed at fundamentally changing the school's STEM culture.

> It's just going to improve from here because the culture of the school is changing.
>
> **Head of science**
> Elm Grove Academy

Spotlight

One school's efforts to grow STEM research and innovation

The R&I activities that schools carried out were integrated into a whole-school, strategic approach, outlined in their action plans. Therefore, it was not about the positive impact of any one activity, but the cumulative effect of raising the profile of research and innovation across the school. Here's what around a year of STEM R&I activities looked like for Elm Grove Academy, where teachers aimed to expand students' understanding of STEM, highlight its real-world applications and increase participation, especially among girls. The school designed activities tethered to these specific goals and worked with a wide range of national STEM education providers to achieve them.

Research activities
- STEM Research Club – students carrying out IRIS research projects
- First Lego League Challenge – a coding and engineering competition

STEM careers events and role models
- 'Geography, Maths and Science – Why Bother?' – curriculum-linked videos showing students the real-world relevance of their learning
- IRIS-designed assembly tackling stereotypes for Year 10 cohorts
- Year 10 STEM mentoring for female students
- Talk from a female researcher from the Institute of Physics
- 'Secret STEM Careers' workshop
- STEM ambassador talks

Raising STEM literacy and awareness
- STEM books for the student library
- Weekly STEM reading comprehension activities in form time
- STEM fact of the week on school information boards

School-wide STEM events
- STEM treasure hunt
- STEM poster competition
- Student-led chemistry show for local primary schools
- 'Exploring the Stars' event
- 'Greatest Scientist Through Time' showcase

External events and workshops
- Advanced Mathematics Support Programme (AMSP) workshops
- Institute of Physics: 'British Physics Olympiad' and 'Astrophysics and the Marvel Universe'
- National Space Academy workshops
- 'Science Made Simple' science and engineering workshop
- X-tra Factor showcase – featuring six women in STEM

Parental engagement
- STEM activities promoted in the school newsletter

Step 4

Grow R&I in school

Activity example

Tackling STEM stereotypes during form time

Small but sustained efforts can make a big difference. At Elm Grove Academy, two thirds of students believed that you needed high grades to have a career in STEM, and only around one in 20 had ever met a scientist or STEM employer. As one of its priorities, the school wanted students to understand that STEM careers span different levels and are open to all.

The school already required students to do comprehension exercises once a week during form time. This existing priority was an opportunity to integrate a focus on STEM and challenge stereotypes. IRIS provided the school with 30 STEM-themed comprehension worksheets to use, introducing students to the real world of STEM through careers, role models and groundbreaking discoveries. They got to learn about lesser-known career paths—like becoming a radiographer or a climate engineer—and encountered trailblazing scientists from underrepresented groups, expanding their ideas about who works in STEM. One Year 10 student shared: "I never knew about half these jobs before—now I can actually imagine myself doing one."

By making use of form time, the activity didn't add to teachers' workload or take time away from delivering the STEM curriculum. But this simple, low-cost initiative made a big impact, transforming a routine activity into a powerful tool for broadening students' understanding of the real world of STEM.

Activity type
- Form time
- Low resources
- Whole-cohort

At Elm Grove Academy our first survey found:

66%
Believed that you needed high grades to have a career in STEM

5%
Had ever met a scientist or STEM employer

Activity example

A coding challenge where girls can flourish

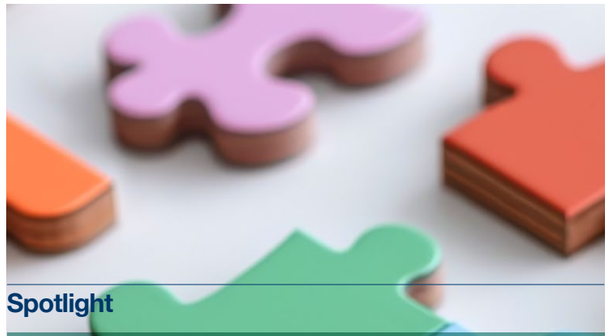
From their survey data, Pinecrest Academy found that less than half of girls felt that their science teacher had explained to them that science is useful for their future, compared to over two thirds of boys. Only 39% of girls thought computer science was useful for their future (the lowest out of any subject). As part of their action plan, the school therefore wanted to support girls' interest in STEM subjects, including computing. They looked for activities that would give their female students opportunities to see themselves in STEM roles in the future.

They sent a group of their Year 10 girls to a 'hackathon' in Cambridge – a competition organised by Stemettes and PA Foundation, which works to inspire disadvantaged young people to become innovators. The event was aimed at girls and non-binary students, and it involved working with engineers and scientists from PA Foundation to design new, sustainable products, including a collapsible flask and packaging for transporting vaccines. As part of the event, students were also given a tour of the manufacturing facilities and laboratories, took part in a Q&A session with female engineers and attended a lecture on Python, the programming language. The school was delighted to find out that one group of girls won a design challenge and shared the good news on the STEM section of their website, further enhancing STEM's profile across the school.

Activity type
- Out-of-school trip
- Meeting professionals
- Targeted cohort (girls)

At Pinecrest Academy our first survey found:

39%
Of girls thought computer science was useful for their future



Spotlight

Rethinking curriculum structures

Some schools had designated STEM streams for selected students, who were normally high prior attainers in these subjects and taking GCSEs in triple science. These students often had access to other STEM subjects, like computing, as well as extracurricular activities. While these streams were set up with the best of intentions, and served STEM students well, staff reflected that they risked alienating the other students—something they saw reflected in their survey data. A maths teacher at Birchwood Academy described the nature of the problem:

"Because that stream exists, there's actually a bigger disconnect with the rest of the school. It's just, are you [STEM stream] or not? If you are, you're going to get exposed to tons and tons of STEM stuff. If you're not, then you won't see almost any of it... it reinforces the stereotype of 'only smart people do STEM'."

Pinecrest Academy found itself in a similar situation. Despite having a well-established STEM culture and cohort, some students seemed left out. Overall, students' science capital scores were lower than national averages, with over half of disadvantaged girls falling into the 'low' category. Students eligible for Pupil Premium were, on the whole, much less likely than others to feel encouraged to pursue STEM by their teachers. The idea that STEM was closed off for many students was a wake-up call for staff, one of whom told us, "it was like, oh wow, this is right in front of our faces."

The school decided to prioritise making STEM accessible and broadening students' understanding of STEM career pathways. Staff opened extracurricular activities up to all students, with some invitations specifically targeted at underrepresented groups. They set up a research club for non-STEM-stream students, brought in STEM professionals and incorporated relevant discussions into form time. As a result, students recognised that STEM was becoming more inclusive, with STEM-stream students inviting their peers to events—helping to shift perceptions so that STEM was seen as an opportunity for everyone.

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Step 4

Grow R&I in school

Activity example

A design challenge brings STEM subjects together

Staff at Meadowbrook Academy already held lots of STEM-related extracurricular events, but they tended to be one-offs without follow up. In their self-assessment, staff recognised that they already had individual targets in relation to improving STEM, but they didn't feed into a more intentional shift in the school-wide STEM culture. This also meant that students tended to see STEM subjects as separate from one another. The school therefore decided to prioritise fostering collective responsibility for STEM, building links across departments and areas of the curriculum, as well as providing opportunities for students to carry out independent projects and research.

The R&I Lead knew that some of the students had a real passion for cars. Therefore, as one of their activities, the staff decided to organise a cross-curricular engineering competition for Year 9 students. The students worked in teams to design, build and market model cars and competed for the best aerodynamic design and sales pitch. The activity ran over several days and brought together maths, science, DT and art departments. By the end, students had applied what they had learnt in STEM, developed soft skills like teamwork and problem-solving. Their ideas about STEM had begun to shift. One student who took part said: "I thought engineering was just for people who are super smart, but this showed me how it works in real life."

Some students took the activity further and created research posters exploring the concepts they had encountered during the engineering challenge in more detail. They were given opportunities to share these research posters at parents' evenings and other community events.

Activity type
- Drop-down day
- Cross-curricular
- Whole-cohort

> What's important is that... it keeps going because every time it gets rolled out, it will be done better and we'll refine it, learn from it. When something's just done once and then not done again, people don't buy in, but now they see that it's always going to be happening, and it's a thing that we do here.
>
> **Assistant Principal**
> Maplewood High

Step 5

Assess the impact

Following a year of R&I activity, schools carried out a second round of surveys to track progress and refine their strategies.

Measuring change was essential to understanding the impact of STEM research and innovation in schools.

After the project, the same cohort of students, now in Year 10, completed the survey again. The results provided schools with fresh insights into how student attitudes and experiences had evolved. The new data allowed schools to compare their progress against the baseline provided by the first survey, highlighting areas of success as well as those that needed further attention.

In tandem with reviewing survey results, R&I Leads and SLT were also encouraged to revisit their self-assessments, evaluate improvements and set new priorities. Reflecting on the progress they had made, some schools were eager to embed research and innovation into their longer-term strategy rather than treating it as a one-off intervention.

> What I've seen in the last four to five months is a different approach to what [students] want out of life. School has become less of a burden and more of an adventure, and that's coming through in their attitude to STEM in particular.
>
> **Head of Science**
> Elm Grove Academy

An R&I approach, driven by evidence, leads to statistically significant positive changes in young people's STEM engagement. As a result of the R&I Framework, schools were able to protect their students' science capital, take them beyond the damaging stereotypes about who belongs in STEM and show them some of the careers open to them.

OUR FINDINGS

When R&I becomes part of a young person's school experience, it transforms their relationship to STEM.

Science capital is a strong indicator of whether people choose science careers.

Science capital declines as young people move through secondary school.

Our project prevented the decline of science capital.

Science capital

Science capital refers to all of the science-related knowledge, attitudes, experiences and resources that a person accumulates throughout their life.[13] It is made up of things like going on trips to museums, meeting people who work in scientific professions and participating in extracurricular science activities.

Science capital is measured through validated surveys that assess an individual's engagement with science, with research showing that it tends to decrease with age.[14] Higher scores imply that people see science as more relevant to their lives and that they are more likely to have a positive attitude towards STEM now and in the future. By protecting science capital, the R&I Framework helps to secure the next generation of researchers and innovators.

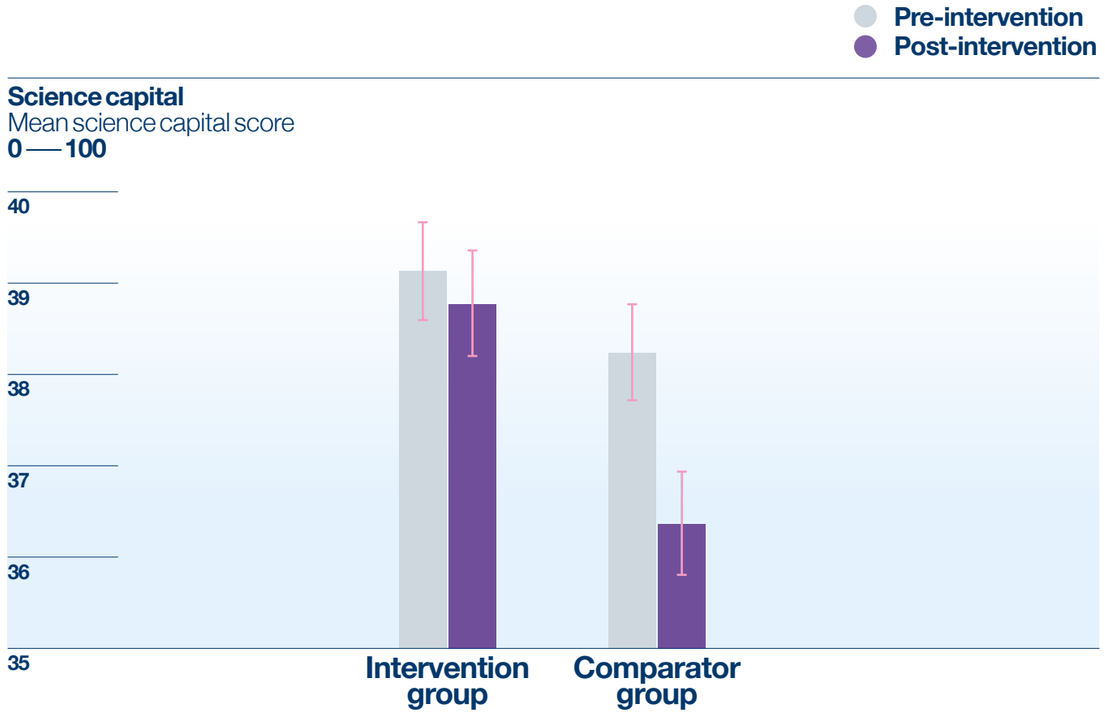


Fig. 1
Science capital is measured on a scale of 0–100. There was a significant decrease over time in the mean science capital score for the comparator group ($M = -1.88$, $p < .001$). However, no significant change was seen in the intervention group ($M = -0.35$, $p = .473$), suggesting that the R&I Framework acted as a protective factor against the decline of science capital.

Error bars here and throughout show standard error of the mean.

> Knowing that this is our data, these are our children, this is the impact of your teaching... it hits home.
>
> **R&I Lead**
> Starling Hill Academy

> It's opened our eyes as staff as well. Being aware of the boundaries we are putting on kids is the first step in breaking them.
>
> **Science teacher**
> Starling Hill Academy

Spotlight

Building science capital at Starling Hill Academy

Starling Hill Academy, on the edge of a thriving town in southwest England, faced challenges in STEM engagement. As the assistant principal noted, students weren't showing an interest in STEM and didn't realise the opportunities available to them locally. After seeing in the first survey that students just weren't that enthusiastic about STEM, the R&I Lead at the school admitted, "Knowing that this is our data, these are our children, this is the impact of your teaching... it hits home."

Students' science capital fell on average in the lower end of the medium category—**with over a third of students falling into the 'low' science capital bracket.** As part of their action plan, Starling Hill decided to build students' science capital, broaden their perceptions of STEM and connect what they learnt in STEM subjects to real-world research and innovation. The school significantly expanded their STEM enrichment activities, including visiting RAF Fairford, attending lectures and workshops at the Oxford University Museum of Natural History as well as at a nearby university, launching a STEM research club and expanding their careers programme.

Statistically, this school protected their students' science capital like others on the project. Starling Hill also saw **the biggest increase in the average score (although not statistically significant) out of any school on the project, reflecting the priority it placed on this measure.** One science teacher reflected on their experience of taking a strategic approach to building science capital: "It's opened our eyes as staff as well. Being aware of the boundaries we are putting on kids is the first step in breaking them."

Starling Hill Academy has taken vital first steps to sustain and grow its students' science capital. Their promising result not only shows the positive impact of the project but also suggests a case for the school sustaining this focus over the longer term.

> Apart from engineering, I didn't know what other jobs I could do.
>
> **Mason**
> Maplewood High

> I really enjoyed the trip to Geneva, it made me think about how science happens all over the world. I've been thinking about what other jobs I can do.
>
> **Mason**
> Maplewood High

> Since the trips, he has been more engaged in lessons as I think he appreciates why we are learning what we are learning in physics more.
>
> **Mason's teacher**
> Maplewood High

Student profile

Mason sees the wider world of STEM

Mason, a student at Maplewood High, was a middle prior attainer, eligible for Pupil Premium and taking GCSEs in Biology, Chemistry, Physics and Engineering. At the start of the project, **he expressed an interest in STEM but had limited knowledge about careers,** reflecting, "apart from engineering, I didn't know what other jobs I could do." His first survey data also indicated that he had low science capital.

During the project, Mason went on a school trip to CERN. He described how **it broadened his horizons:** "I really enjoyed the trip to Geneva, it made me think about how science happens all over the world. I've been thinking about what other jobs I can do." His teacher also observed a positive change in Mason over the course of the project: "Since the trips, he has been more engaged in lessons as I think he appreciates why we are learning what we are learning in physics more."

Mason's responses to the surveys reflect several positive changes, including in his science capital. By the end of the project his score had increased by seven points—bringing him to the cusp of the medium category. His view of STEM had transformed. **He now saw himself as a science person,** strongly agreed that a career in STEM would be interesting and agreed that the project activities had a big impact on his knowledge of how STEM relates to the wider world.

Negative stereotypes strongly influence young people's perceptions of who works in STEM.

These stereotypes often limit young people's confidence and ambitions to pursue STEM in school.

Our project challenged negative stereotypes about who belongs in STEM.

STEM stereotypes

By opening young people's eyes to how STEM really works in the world, the R&I Framework confronted some of the stubborn stereotypes that negatively affect perceptions of these fields. STEM stereotypes create a very limited idea of who belongs in these fields and they become self-perpetuating, forming barriers to engagement.(15)

Challenging them changes how students view STEM, builds their confidence and helps them to take on a science identity. As a result of opportunities through the project, students developed more positive views about STEM's inclusivity and accessibility and felt more confident about pursuing STEM in the future. The R&I Framework helped young people see STEM as a world open to people just like them.

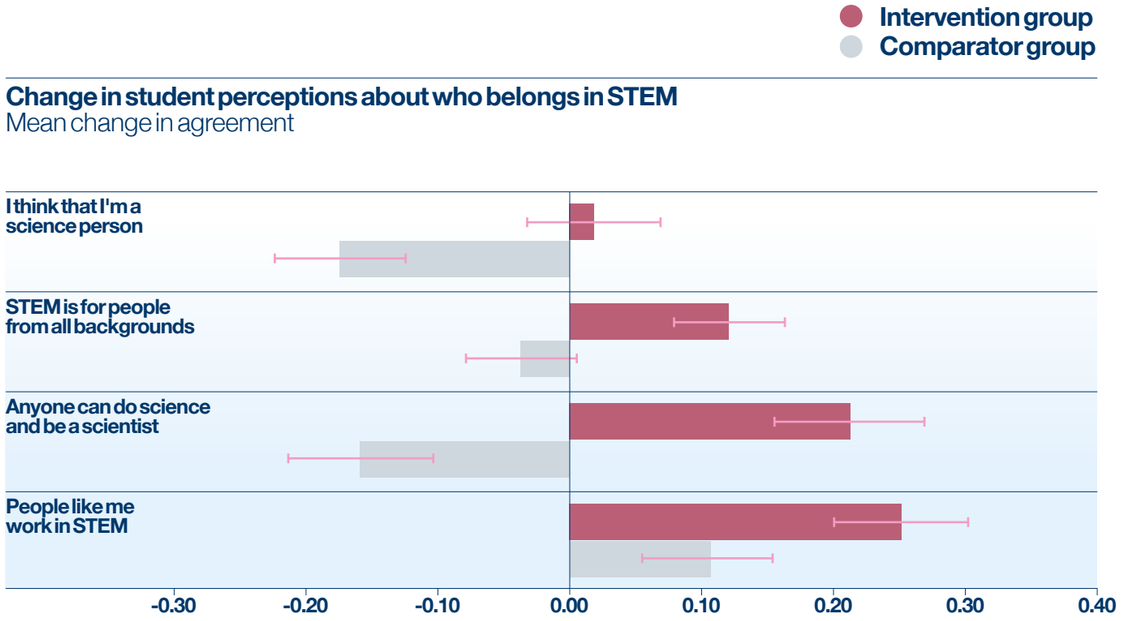


Fig. 2
Students indicated how much they agreed with each statement by using a scale from -2 (strongly disagree) to +2 (strongly agree). The x axis shows the mean change in how much students agreed by the end of the intervention.

"I think that I'm a science person"
The comparator group significantly decreased ($M_{diff.} = -0.17, p < .001$), no significant change for the intervention group ($M_{diff.} = -0.02, p = .719$).

"STEM is for people from all backgrounds"
The intervention group significantly increased ($M_{diff.} = 0.12, p = .005$), no significant change in the comparator group ($M_{diff.} = -0.04, p = .371$).

"Anyone can do science and be a scientist"
The intervention group significantly increased ($M_{diff.} = 0.21, p < .001$), comparator group significantly decreased ($M_{diff.} = -0.16, p = .004$).

"People like me work in STEM"
The intervention ($M_{diff.} = 0.25, p < .001$) and comparator group ($M_{diff.} = 0.11, p = .034$) significantly increased, intervention group increased significantly more than comparator group ($p = .041$).

Student profile

Andrei no longer sees STEM as 'nerdy'

Before taking part in the project, **Andrei seemed to push back against the idea of being a science person,** telling us, "I don't feel like I am the sort of person to do STEM. I'm not nerdy." He wanted to take computer science but was unable to, and he was not part of his school's STEM stream, meaning he did not have access to the same opportunities as STEM stream students. He felt disconnected from these subjects.

As part of the R&I Framework, Andrei took part in a wide range of activities. Especially impactful was an IRIS research project he carried out, examining the impact of desertification in China on carbon emissions. For the first time, **he had a chance to really apply his scientific knowledge to a long-term investigation,** exploring a pressing real-world challenge. "I absolutely loved it," he told us. Andrei's teacher noted that he was very enthusiastic about the research project and demonstrated great initiative.

By the end of the project, Andrei's perspective on STEM had transformed. In the second survey, he strongly agreed that he is a science person, that there could be a job for him in STEM and that it would make for an interesting career. He also held more positive views about STEM's inclusivity and importance.

Student profile

Chloe gains confidence in her abilities

Chloe was studying double science at GCSE with low prior attainment. She had sometimes **thought about a career in STEM but wasn't sure how to get there,** and lacked faith in her abilities. "I wasn't very confident in science and maths as I didn't think they were for me," she admitted.

That changed over the course of the project. Through a range of activities including STEM seminars, **tailored careers guidance and regular tutor-time discussions about STEM opportunities,** Chloe's perspective shifted. She engaged in long-term practical investigations, shared STEM work beyond the classroom and saw how STEM knowledge is applied in the wider world. Science became some of her favourite lessons.

The biggest transformation was in her confidence and aspirations. Once unsure if people like her worked in STEM, Chloe today agrees they do. "I now feel more confident about STEM subjects and know I can go into STEM careers and courses. I really want to do astronomy or physics," she told us. Such feedback has been especially encouraging, given that girls made up less than a quarter of A level Physics entries in 2024.

> I now feel more confident about STEM subjects and know I can go into STEM careers and courses. I really want to do astronomy or physics.
>
> **Chloe**
> Starling Hill Academy

> I want to help students understand what STEM is, as a lot of people dismiss it as just computers and buildings, despite the wide variety of job roles associated with it.
>
> **Shabana**
> Riverside Academy

> As a female, I've had people assume I dislike or am bad at STEM subjects.
>
> **Shabana**
> Riverside Academy

Student profile

Shabana stands up for women in STEM

Before her school took part in the project, Shabana expressed frustration about some of the stereotypes surrounding STEM. She said: "As a female, I've had people assume I dislike or am bad at STEM subjects." Sometimes, she felt STEM opportunities were often directed at 'select students', which embedded 'harmful stereotypes' at her school.

Over the course of the project, Shabana's school arranged **activities that actively challenged gender stereotypes in STEM.** The school developed this strategy by using IRIS' survey results to understand and address student attitudes towards STEM. To celebrate International Women's Day, the school took students to a STEM careers event and to a local food manufacturer, where they learnt about food science and careers. Both settings **showcased the contributions women have made to the STEM world** and highlighted the value of diversity and inclusivity in these fields.

Shabana was encouraged to take part in a research and innovation competition, for which **she developed her own original, scientific solution to a real-world problem,** which was judged by industry professionals. Her teacher noted that she became more confident, had a "desire to have an impact and challenge stereotypes" in her community and now actively seeks out STEM activities. "I want to help students understand what STEM is, as a lot of people dismiss it as just computers and buildings, despite the wide variety of job roles associated with it," said Shabana. She now believes that STEM is for everyone and thinks that by pursuing these subjects, she will be able to make a difference.

Traditional perceptions of STEM careers often fail to reflect the diverse opportunities available.

These misperceptions disproportionately affect girls' interest and engagement in STEM.

Our project transformed young people's understanding of STEM careers — particularly among girls.

Careers in STEM

Being part of R&I activities both in and out of the classroom gave young people a different, more positive view of the STEM careers available to them in the world beyond school. Through the cumulative effect of sustaining science capital while also challenging stereotypes, the R&I Framework helped students to imagine themselves in STEM. Building on this, students had chances to meet professional role models, visit workplaces and increase their knowledge of concrete routes into various STEM careers. This produced a statistically significant positive impact, particularly on female students' perceptions of STEM careers, which was encouraging not only because of prevailing stereotypes of STEM as being male-dominated[16] but also given that it was a priority for several of the schools taking part in the project.

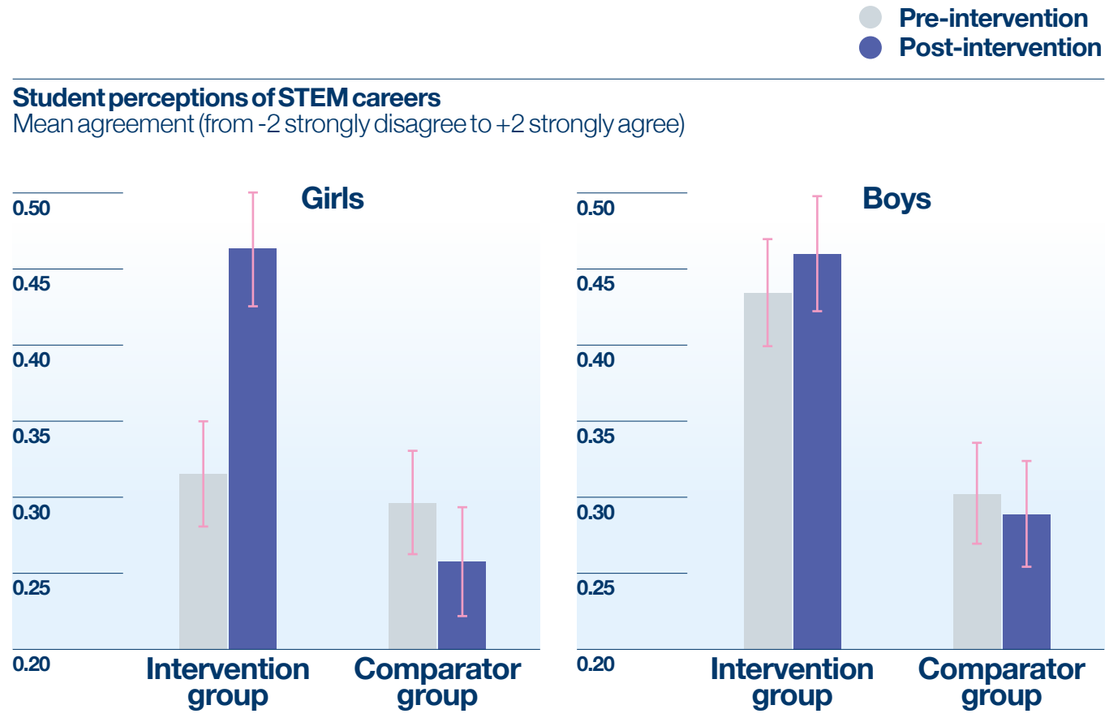


Fig. 3
The 'perceptions of STEM careers' measure has been generated from the aggregated average of six questions from the student survey; (i) doing well in STEM subjects is important for my future education and career, (ii) careers in STEM require high grades (reverse coded), (iii) working in STEM would be an interesting career, (iv) there are job opportunities in STEM for people with different qualifications and skills, (v) having good STEM skills is important for a wide range of careers, and (vi) I know about the different routes into a STEM career.

For males, no significant difference was found in either the intervention group ($M = 0.03$, $p = .501$) or the comparator group ($M = -0.01$, $p = .694$). For females, there was a significant increase over time for the intervention group ($M = 0.15$, $p < .001$), but no significant change in the comparator group ($M = -0.04$, $p = .268$).

> Seeing a woman working in engineering made me think, I could do that too.
>
> **Ellie**
> Starling Hill Academy

> The project has made me feel more confident, as I now know how many different opportunities within STEM there are. It has made me think differently... I can pursue a career in STEM.
>
> **Sophia**
> Heritage Grove Academy

Spotlight

An environment where girls can flourish

Given that the initial student surveys often revealed discrepancies between how female and male students related to STEM, **many schools chose to work on female students' access to STEM opportunities** as part of their action plans.

STEM leaders at Elm Grove Academy, where over 60% of students are eligible for free school meals, placed real-world exposure at the heart of change. Girls were given hands-on experiences, such as STEM clubs, the Institute of Physics' British Physics Olympiad, a National Space Academy workshop and targeted mentorship—all of which reshaped their ideas about STEM. One female student told us, "I used to think you had to be a genius to do science, but now I know there are so many options."

Starling Hill Academy decided to focus specifically on **breaking down stereotypes around women in STEM.** They held assemblies targeting misconceptions about STEM, STEM Ambassador talks, and careers workshops highlighting female professionals in STEM fields. Students had the opportunity to visit RAF Fairford and the University of Reading, seeing first-hand the variety of roles open to them. One female student shared, "Seeing a woman working in engineering made me think, 'I could do that too.'"

At Heritage Grove Academy, **the focus was on STEM mentoring and subject-specific challenges.** Girls carried out an IRIS research project, took part in maths competitions and attended STEM careers fairs, where they met professionals from diverse backgrounds. One female student reflected that, although she enjoyed science and maths, she didn't know the kinds of jobs available to her. She told us, "[the project] has made me feel more confident, as I now know how many different opportunities within STEM there are. It has made me think differently... I can pursue a career in STEM."

Some activities were simple but no less impactful. Schools used literacy and career awareness activities to normalise STEM pathways. Weekly reading comprehension exercises, career posters in classrooms, and newsletters featuring real professionals helped reinforce the message that STEM careers are achievable for all students.

Girls who initially felt STEM wasn't for them started to see new possibilities. Survey data showed a statistically significant increase for girls taking part in the R&I Framework agreeing that they know about the different routes into a STEM career (Mdiff. = 0.44, $p < .001$). A female student from Elm Grove summed it up: "Before, I never considered a STEM career. Now I know there are so many jobs I could do."

Rather than placing the burden on students to adapt, schools created environments in which girls could see themselves in STEM. Through **real-world exposure, positive representation and practical experiences,** the project encouraged female students to imagine what a future in a STEM career could hold for them.

> I've learnt about lots of different careers in STEM and different routes to get into those different topics and we learnt about all different women in STEM.
>
> **Amira**
> Elm Grove Academy

> Her aspirations and confidence were very low, and even though this does still need building upon, it is something that is improving week on week.
>
> **Amira's science teacher**
> Elm Grove Academy

Student profile

Amira becomes more curious about her options

Amira is a female student who speaks Arabic as her first language at home. She is a low prior attainer and is eligible for Pupil Premium. She is currently studying GCSEs in double science and Design and Technology at Elm Grove Academy.

Before taking part in the project, **Amira had a tenuous grasp of STEM and lacked confidence in her abilities** in these subjects. She confessed, "I didn't know what STEM was at all. I like science when it's about the body, but I don't like chemistry and physics. I don't think I am good at science." Throughout the project, Amira engaged in various activities aimed at enhancing her STEM knowledge and interest.

Since the project, Amira's perspective on STEM has improved and **she feels more knowledgeable and informed,** telling us, "I think I know a lot more now." She has developed a better understanding of careers and opportunities, having "learnt about lots of different careers in STEM and different routes to get into those different topics and we learnt about all different women in STEM."

Amira still struggles with confidence in STEM, telling us "I don't feel more confident because I still don't think I'm good at it." Nonetheless, she has developed an interest in nursing, is "thinking about doing textiles or nursing at college" and is better informed about "T levels and other ways into nursing". A science teacher has been mentoring Amira to build her confidence and aspirations in STEM, noting, "I am trying to encourage her to go into this field. Her aspirations and confidence were very low, and even though this does still need building upon, it is something that is improving week on week." Amira's teacher has observed that **she has become more vocal in class, asking more questions about STEM career pathways,** which indicates a growing engagement and curiosity about how STEM could form part of her future.

As a result of the R&I Framework, Amira now holds more positive ideas about STEM and **the various ways she could pursue a STEM career.** She now believes that there might be opportunities in STEM for her beyond school.

Sustainable improvements in students' STEM experiences rely on engaging and supporting teachers.

Traditional approaches often overlook the critical role teachers play in shaping school-wide STEM culture.

Our project empowered teachers to drive positive change across their schools.

Data impossible to ignore

Many schools delivered a variety of STEM enrichment activities prior to the project, but they did not always take a strategic approach to enhancing their students' experiences. Ambitious approaches like providing students with opportunities to conduct their own research can be seen as 'nice to haves', which can't always happen. With schools facing pressures from many directions, efforts to change their STEM cultures can seem like wishful thinking.

Student data breathed new life into these efforts. By giving precise insights into how whole cohorts felt, the surveys made it easier for R&I Leads to target and prioritise changes to their school's STEM delivery. Teachers suggested that having this data made it easier to build a case for change with their colleagues, showing that R&I opportunities were not just 'nice to haves' but could address real dynamics in their student cohorts.

Teachers lead the way

The R&I Leads in charge of delivering the project were at all career stages and from various STEM departments, and their enthusiasm and motivation was key to the project's success. The most successful leads felt like their efforts were valued and had backing from their SLT and other colleagues. They were empowered to be creative, ambitious and to try new things.

Teachers found that their roles evolved as a result of the project. R&I Leads were supported with CPD from IRIS. In some cases, they were encouraged to use the project as part of their own leadership career development. Students also began to see their STEM teachers differently. A computer science teacher at Pinecrest Academy described how students were approaching her for advice: "Now I'm more than just a computer science teacher. They're looking up to me for something different... and that's really nice."

> Before, let's be honest, Maths just wanted to beat English and Science. But now we want to be part of a team... We're not individuals, we're not departments, we are a whole school—and the whole school is on a journey.
>
> **Maths lead practitioner**
> Elm Grove Academy

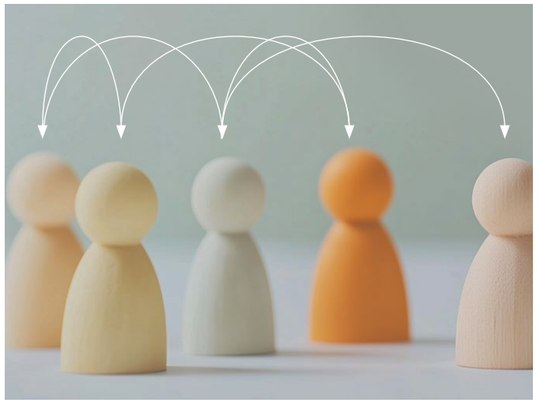
> It has made me enjoy science and teaching more... It's been really refreshing to take time to look at how STEM is going to affect students... and why they're learning it. Because we don't [usually] put any time aside to tell them why it's relevant. It's nice to have the opportunity to take the time to look at the more exciting parts of teaching STEM and see the kids enjoying it.
>
> **Science teacher**
> Meadowbrook Academy

Fostering communities of practice

The R&I Framework built networks that went beyond school. The CPD activities provided by IRIS facilitated discussions between R&I Leads as well as the sharing of resources and experiences. In one positive outcome of this networking, two R&I Leads told us they were planning to run a joint trip in the next academic year, taking students from their two schools to CERN in Geneva.

However, many opportunities were much closer to home. IRIS encouraged R&I Leads to reach out to local universities, STEM employers and museums and science centres. Students in some schools did small projects or engagement days at these local institutions. They got a better sense of what STEM degrees and careers might involve, and universities and employers were able to directly engage the upcoming talent in their region.

IRIS is familiar with the opportunities already out there, provided by our peers in the vibrant STEM education community. So, we tracked and alerted teachers to activities connected to their action-plan priorities, ensuring these opportunities could be taken up by schools and reach the young people they were designed for. We hope that, in some small measure, this approach helps strengthen our shared mission as STEM educators.



> It's made a difference beyond just teaching, to my professional development and the way I interact with students, because I've seen them in these different scenarios, doing these different events. And because I've seen them show an interest, I've encouraged them in directions that I wouldn't have necessarily known to encourage them had we not been doing this.
>
> **Maths teacher**
> Birchwood Academy

Collaboration and consolidation

By focusing on STEM rather than any one individual subject, the R&I Framework encouraged R&I Leads to foster collaboration across school departments. In some schools, activities were designed with a specific goal of integrating different disciplines, reinforcing the cross-cutting, interdisciplinary nature of research and innovation. More generally, teachers were able to reinforce and consolidate each other's work to champion STEM research and innovation. They found that the R&I approach wasn't another add-on to the curriculum; it encouraged them to draw subjects together, reinforce learning, build collegiality and thus embed a sustainable shift in their schools' STEM cultures.

OUR FUTURE PLANS

"Of all the projects that we've come across that are trying to have impact in this particular area, what IRIS is doing is the closest that anyone's got to doing it right. It's the right way to go about it."

Maths teacher
Birchwood Academy

Growing R&I in schools

IRIS has shown that an R&I approach to delivering STEM works. By changing the way we frame STEM in schools, we've demonstrated that we can transform how young people relate to these subjects and ensure they feel a future in STEM research and innovation is open to them. Now, we want to ensure these experiences are available to young people in secondary schools across the country. Over the coming years, we plan to grow our R&I Framework and the benefits of an R&I approach more broadly by focusing on three ambitions.

1. Build a movement for change

We want to share the success story of the R&I Framework. We've already begun convening discussions with likeminded supporters in the STEM education world, sharing ideas about what works best and building networks of support. Armed with our findings, we want to talk to stakeholders—whether teaching professionals, industry leaders or policymakers—about the impact of an R&I approach. Join us in building momentum towards the impactful changes we all want to see.

2. Secure funding to expand the project

We're seeking funding to run a second phase of the R&I Framework in the coming years. We want to expand the positive impacts of the pilot to up to one hundred schools across the UK. A second phase of the project will provide resourced support to schools that want to implement an R&I approach to STEM, serving as a launchpad for further growth. Partner with us to expand the R&I Framework to schools across the UK, providing opportunities to students who need them the most.

3. Transform STEM education in the UK

We want all young people to have experiences of research and innovation while in school. This means calling for systemic change, so that real research opportunities become part of a refreshed curriculum. The R&I Framework supports schools moving in this direction, empowering them to grow an R&I approach, not just as an add-on for a few students but as a core part of their culture. Help us build the case for change, so that every child in every school has access to high-quality STEM education.

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About IRIS

The Institute for Research in Schools (IRIS) is a national charity which aims to change the culture in UK schools so that authentic research and innovation is part of every young person's experience.

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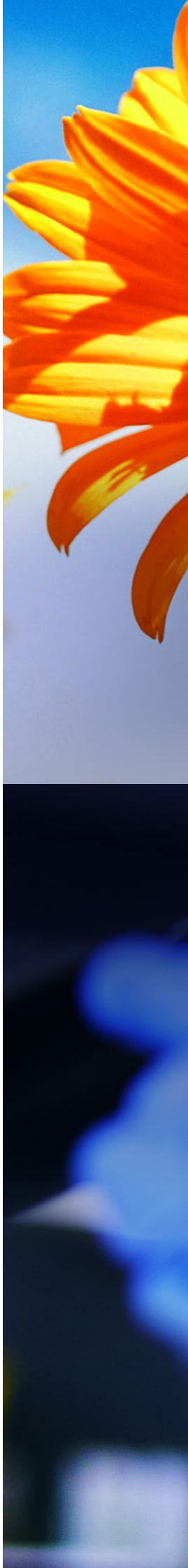

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