



Inclusion in Schools: Case Studies

Contents

St Bernard’s Catholic High School: An environmental difference through girls in physics	2
Aim:	2
Rationale:	2
Action:	2
Impact:	4
Oakwood High School: Creating a sense of belonging for everyone	5
Aim:	5
Background	5
Action:	5
Impact	6
Corby Business Academy: Scientifically improving students opportunities	7
Aim:	7
Background	7
Action:	7
Impact:	8
Bedford Academy: Proud to be	10
Aim:	10
Background	10
Action:	10
Impact:	11
Hodge Hill College: Interview with Headteacher Hannah Herrmann	13



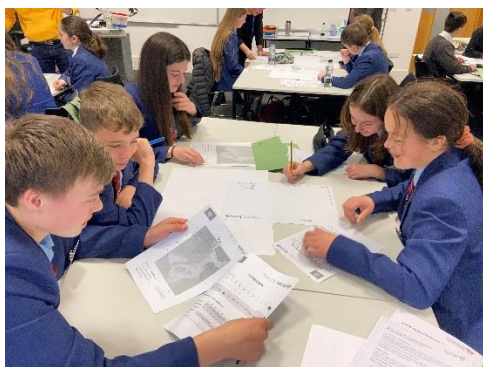
St Bernard's Catholic High School: An environmental difference through girls in physics

Aim:

- Challenge the stereotype that physics is 'a boy's subject' that you can only do if you're good at maths.
- To raise awareness of the career opportunities available through studying physics.

Rationale:

St. Bernard's Catholic High School is a non-selective school for 11-16 year olds, close to the centre of Barrow-in-Furness. The science department's links with local sixth forms have lapsed in recent years and the school didn't have a physics specialist. They already had good links with local industry, helped through their STEM co-ordinator, but wanted to strengthen these links to raise aspirations in all students. A particular focus was girls, who had a negative perception of physics. They saw the stereotype 'physics was for men who are good at maths' – not something open to them, so one focus was to challenge this stereotype and encourage girls into physics.



Action:

Girls in physics...

Thursday lunchtime became 'Girls in Physics: The Carbon researchers. Working alongside the Institute for Research in School, 25 year 9 and 10 girls tackled the global problem of climate change, by taking action in their school. Like true physicists, they constrained the problem (by calculating an unacceptably high carbon footprint for the school) and the set about solving the problem. The girls took ownership of the project, and develop key scientific skills as they research suitable ways of recycling food waste.



To reduce CO₂ emissions the team drew on the expertise of local nursery owners to find low maintenance trees for 'planting day', where they also raised money for humanitarian aid in the Ukraine.

In taking part in the Girls in Physics group they not only developed science skills, but successfully bid for funding, collaborated with the Institute for Research in Schools and the John Muir Group and will present their findings at a conference.

Student gained confidence and valuable skills during this project, but also responded positively to the experience:

"I like working as part of a team to solve a real life problem"

"The best part was problem solving as it made you think outside the box"

Broadening horizons...

St Bernard's made the most of support for STEM from local organisations, taking 15 students to Lancaster University to a STEM challenge day. The aim was to try and broaden the students' horizons and raise awareness of possibilities outside of the local industry in Barrow. Looking to the future



there were challenges on renewable energy. The careers it could lead to and a tour of the university giving them a first look at what going to university is like.

"I learnt a lot about what University is like and what you can study."

Pathways to the future...

A STEM job may seem a long way from a science lesson, and for many students will be too far. St Bernard's is helping students find their way by showing the different routes into different careers, through a display board: so every student can find their way to their STEM job.

Role models gains too...

Alumni are very powerful role models, they truly represent what a student from that school can do. St Bernard's invited an alumni, who is studying for his A levels, back in to mentor year 10 triple science students. Not only do the GCSE class benefit, but that student is now hoping to study Physics at Lancaster University.



Impact:

- Gender stereotypes in physics have been challenged as girls have been able to apply their classroom learning to a project that was important to them and their school.
- Student aspirations have been raised through working with external organisations on their research and presenting it at a conference, and the trips to Lancaster University where students were able to see what University life was like and learn about the opportunities available to them.
- Girls will feel welcomed and valued in the science department as the ‘Girls in physics group’ gives them their own space to explore science, build their confidence and develop many transferrable skills.
- All students are empowered to make informed choices about their futures and how to progress in a science career through the career pathways maps in all laboratories.
- Teachers report feeling positive about the changes they have made and the impact it has, this may have a positive impact on staff retention:
“it’s opened my eyes to what we can do within school to promote physics as a subject and a platform to many careers.”



Oakwood High School: Creating a sense of belonging for everyone

Aim:

- Work with whole school community to identify areas for improvement.
- Challenge bias and stereotypes through a diverse curriculum.
- Increase staff awareness and confidence around inclusion, inclusive language and challenging non-inclusive language.
- Give students a safe space to discuss issues that are important to them, listen and respond.
- Audit how inclusive the school environment and lessons are by inviting a colleague from within the Trust to do a DEI walk.

Background

Oakwood High School is a diverse secondary school in Rotherham, with over 40 different home languages. It was an industrial area, that is creeping out of the industrial phase, but there is a lot of associated deprivation in the area.

As will be the case in many schools, the school leadership team does not reflect the student community, although the wider staff body is far more representative. Although this is an area that cannot be immediately addressed, Oakwood has recognised this means they need to

“work to see through a different lens to create a sense of belonging for everyone, to make sure everyone feels welcome and part of the community, with the same chances moving forward.”

Oakwood started its journey into Diversity, Equity and Inclusion by investing in staff training, sending a member of staff on a training course. They then carried out a whole school staff DEI survey to identify where their gaps were; and then made addressing these an ongoing priority.

“We’re not going to solve it in a year, it’s a long-term process, a culture shift, not just a series of activities”

Action:


What are students learning...

Diversifying the curriculum is a big task for departments and can appear overwhelming to teachers. To support with this, Oakwood offered training and time to start this process. All departments audited their resources, with a focus on diversity of images. English and History have also assessed their texts for diversity, stereotypes and bias in perspectives.

Raising awareness...

The tutor time and assembly programme provides a structure to recognising, learning about and supporting celebrations of different religious festivals.

Let’s talk (and listen)...



Oakwood has started regular ‘Let’s talk’ student sessions, where they give a safe space for students to discuss, learn about and share their opinions about issues around DEI. The first of these sessions was around the influence of Andrew Tate: the session was so popular there wasn’t space for all the students to attend. This powerfully demonstrated shutting down the conversation isn’t the answer, but instead that students need to be part of the conversation.

Impact

- Stereotypes and bias in students learning is reduced as the school have ensured the curriculum represents people from different backgrounds and presents different viewpoints. This means students are better able to understand peoples diverse backgrounds, and also to see themselves represented in subjects. This can improve their relationships with people throughout their lives, but also broadens their horizons for their future opportunities.
- The school has a clear vision for inclusion, which they have shared with staff and students, making them part of the change. This helps to make everyone in the school community feel valued and welcomed, which can lead to better staff retention and engagement from students.
- Teachers are more confident in inclusive language and in identifying and challenging language that is unacceptable following whole staff training.
- Leadership are embedding a culture of inclusion across the school by allocating staff training time, and also by engaging with ongoing reflection. Although teachers describe the school as inclusive, they have invited external people to view the school through the eyes of different protected characteristics to identify areas for improvement.

“There is always room for improvement and there’s always more we can do.”
- Students recognise the power of the individual and of contributing to group and collective actions by having a voice that is listened to and acted on by the school.



Corby Business Academy: Scientifically improving students opportunities

Aim:

- To raise aspirations and encourage more students to study triple science and A levels in science.
- Improve student outcomes, with a greater uptake in STEM careers and related subject.
- To show that STEM subjects are accessible to all students, regardless of background: to challenge the preconception 'science is hard and I can't do it'.
- To encourage more girls to take Physics A level.

Background

The closure of the steel works, previously a significant employer in the area, resulted in a large percentage of the population moving into jobs in manufacturing and retail. The Social mobility index (which sets out the differences between where children grow up and the chances they have in adult life) rated Corby as the 4th worst region (in 2016). Corby Business Academy sees the effects of this through a significant number of children with low aspirations and very limited science capital.

To start to raise aspirations and improve opportunities for all students, leadership decided to focus on science: challenging stereotypes to encourage more students to see this as an option for them. They started by analysing the data around students studying triple science and sciences at A level. They found the uptake for triple science GCSE significantly decreased from 20/21 to 21/22 and although more students chose to progress to science A levels, there was a significant gender divide in physics and maths.

Action:

Grab their interest young...

All KS3 students are invited to the KS3 STEM club. An informal opportunity to engage with students, where they have more freedom to explore and experiment than in a structured lesson. It's a chance to develop key skills, confidence and can give students a sense that they really are a scientist.

Making choices...

When students are making their GCSE and then A level choices, Corby Business Academy wants students to see where the subjects can lead. They have invested in making the curriculum link to careers throughout their lessons and displaying curriculum road maps in laboratories.

At post-16 options evenings science career opportunities are a focus, not only informing students, but also their parents and carers. This enables students to see if they choose a science A level, these opportunities are open to them. This emphasis, that science leads to good jobs, is reinforced



through displays, not only in the department, but also the main central area. Science isn't restricted to the science department, but is central to the school.

Where can STEM lead...

Hearing from people working in STEM – STEM ambassadors were invited in to share their experiences first hand with year 10 students, giving insight into the diversity of opportunities within STEM.

Finding out how to get into STEM – to try to reengage year 10 boys there was a focused trip organised to a local college so they could see find out about post 16 options. This provided them with the information needed to take the next step.

See what STEM careers can look like – visiting a local STEM company, Festo, gave year 10 students a chance to see an example of a STEM work environment, learn more about what that company did and the jobs available in their local area.


STEM isn't for girls...

Girls have long outperformed boys in science at GCSE, yet they often choose not to progress. This national trend is one that industry and schools are keen to overturn. STEM is important to everyone and open to everyone, regardless of their gender. Corby Business Academy are tackling this head on, using the support of other organisations Year 9 and 10 girls enjoyed a 'Women in STEAM' event at Northampton University – not only engaging with STEAM, but seeing the links between science and arts as well as meeting female role models.

Research by the Institute of Physics shows that parents and carers will recognise that there are good careers with a physics qualification; but are less likely to consider these for their daughters than for their sons. Corby Business Academy responded to this with women in STEM displays at options open evenings, so parents and carers are able to continue informed discussions about post 16 options with their children.

Impact:

- Students are welcomed into a less structured creative environment where they can explore and extend their understanding of science. This engagement with students at KS3 is a valuable opportunity to not only develop important, transferrable, skills; but importantly to build a positive self-perception of themselves as scientists. This can help with their engagement with science as they progress through the school, opening opportunities in scientific careers to them.
- Science teachers have increased confidence in talking to students about how what they are teaching in lessons links to job opportunities. By researching and producing the curriculum road maps they have deepened their personal knowledge and by displaying them in the laboratories they add to the collective knowledge of everyone visiting the science department.
- By introducing careers as a focus at post-16 options evenings, students, parent and carers and science teachers recognise that science gives students a strong foundation for an array of good jobs. Students will feel supported as they work towards their future, and confident



that staff can guide them. Parents and carers will have an increased awareness of the range of opportunities, and the information may challenge some of their preconceptions.

- Opportunities to meet people working in STEM better informs students, whilst challenging stereotypes. Hearing directly from a STEM ambassador tells them what jobs in STEM can involve, the skills needed and that it is open to anyone. This raises student aspirations, encourages them to consider and future in STEM and can lead to increased engagement and outcomes.
- By holding focused events for students identified as less likely to progress in science, these students will feel valued and a greater sense of belonging in science lessons. This will lead to better engagement in lessons and improved outcomes.
- Improving student engagement leads to better behaviour in lessons which can lead to a positive impact on teacher retention.
- At Corby Business Academy following implementing these changes, they saw an increase in the uptake of triple science for September 2022 and more students have provisionally chosen science A levels, with more planning to stay at Corby Business Academy.



Bedford Academy: Proud to be

Aim:

- To engage their diverse student community in learning.
- To promote strong community links, giving students relatable and diverse role models.
- To raise aspirations of students.
- To launch a more diverse curriculum.
- To embrace and learn more about all the cultures within the school community.

Background

Bedford Academy welcomes students from one of the most deprived areas in Bedford with over 40 languages spoken in the schools and a diverse surrounding community. Catherine Ross, Editor, www.blackhistorymonth.org.uk said "Everyone deserves the right to be Proud to Be everything they are and want to be in life." This was the inspiration for Bedford Academy to use October, Black History month, to the be start of a more inclusive school.

Action:

The stories of people they know...

A dynamic black maths teacher, Farida Nelson, drove the months activities, and led with her own personal experience. Sharing her moving story of travelling to the UK as a young child and growing up in East London, she shared with students how she was able to make choices that led her to her current profession.

Broadening their careers horizon....

To enthuse students about careers they may not have considered before, Bedford Academy invited Black professionals, leaders and entrepreneurs from their local community into school to showcase their careers, their career pathways and their individual stories. This was a chance for the young people to see people like themselves in careers they might not previously have considered.

Vicki Horlock, the AHT with responsibility for Inclusion at Bedford Academy, said

"Young people need to see others like themselves in a variety of fields and industries, and they need to know that regardless of their background, family circumstances, socio-economic situation, they still have the hope of becoming whatever they aspire to be. The invited speakers have done it and the journeys that they have taken to get to where they are should serve as an inspiration to students, and promote high aspirations."

BlacktoFront Day...



Diversifying the curriculum may seem overwhelming to schools, Bedford Academy used a day in Black History Month to put Black history and culture into the curriculum for an entire day. This is a starting point, a chance for teachers to explore how best to move this forward and to raise their awareness of the need for more diversity in their subject areas.

Rep our country (cultural) Day...

The aim of black history month was to highlight and celebrate the achievements and contributions of Black people, until it was so integrated into life, learning and history, that there was no need to celebrate separately anymore. Bedford Academy chose to embrace all the cultures in their school by inviting students to wear cultural dress, carry a flag or wear the colours of their flag. If they had no national costume, national football shirts could be worn: everyone was included. This positive work has been continued in a display by students and staff visually representing the diversity of the school.



Impact:

- All students and staff have increased awareness of the different cultures within their school which increases their understanding of people they meet from different backgrounds.
- Welcoming students' cultures into the school and giving them a chance to share and celebrate them will help them feel valued and welcomed in the school community. This increases the sense of inclusion in the school which, combined with local community links, can strengthen connections with students' families. This can then help to support and engage students in their education.



- All students are empowered about their future choices: having seen and spoken to a diverse range of role models they have seen that people from a diverse range of backgrounds have made choices about their futures. Not only does this broaden their ambitions, but it also raises their aspirations.
- Linking directly with employers increases teachers' awareness of jobs available and the variety of career pathways. The diversity amongst the career links will challenge teachers' and students' biases.
- The foundation for diversifying the curriculum has been laid, and resources are being developed to challenge stereotypes, provide diverse perspectives and link to careers. As teachers start to interrogate and change their curriculum, they will develop further awareness of where they can expand their students' learning to encompass a wider range of perspectives. This will reduce the bias in students' learning and broaden their understanding of the world and their potential within it.



Hodge Hill College: Interview with Headteacher Hannah Herrmann

Why did your school join the inclusion in schools project and how did you get started?

Hodge Hill college is a large inner city secondary school in Birmingham, with a 70:30 boy girls split. Our student population is largely Pakistani and Bangladeshi, and we are one of the most deprived areas of the country. Our staff body are representative of our student populations, but we wanted to make sure our curriculum and teaching were inclusive of and represented our community

The Senior Leadership Team undertook some training on equality and diversity, but we hadn't extended this to all our staff. Because our staff represented our student population, we hadn't initially been aware of inclusion as a focus, but following our training we have made a conscious decision to take this further with the staff body.

What did you want to address?

Teaching and learning and the school environment. We are looking at representation, becoming more conscious around things like imagery and displays. Do they reflect the broad diversity of people? When we started looking into it, we could see our curriculum choices don't always represent our students experiences, so we'd like to work to improve this.

What does your school hope to achieve?

See T&L and curriculum more diverse, when students look around the school environment we want them to see themselves represented. We're working for the whole school, staff and students, to have a better awareness around protected characteristics to improve school life for these students. We have already done this for SEN students, so we're extending this.

What have you done so far?

We used a training day in December to provide CPD around inclusion for our staff. We held a number of workshops, run by external Equality, Diversity and Inclusion providers, around things like auditing displays and considering the books in the library. We are now changing the way we deliver reading to KS3 by bringing in a greater variety of texts.

What have been the most useful aspect of the project so far?

Access to CPD resources, we can send links to staff for specific CPD. Our consultant signposted us to relevant resources, which we used as prompts for team discussion around inclusion in curriculum areas. It really made people think about it and raised their awareness, for example science recognised all biological diagrams are on white people.

We will be using the International Women's Day resources and are also holding a series of workshops that staff are organising, to highlight learning strategies to engage our girls.



Have you noticed any impact resulting from the project so far?

There has been increased awareness, which is really important. Staff are starting to recognise things like gendered language in classroom. We've also noticed lots of sexist and sexual language and have realised staff need more training in this area. We know we need even more awareness; there is a long way to go.

Next steps

We will continue our curriculum reviews and make sure we keep talking about it. In the longer term we will look at positions in school structure, and look at bringing in a role with specific responsibility for EDI.

How personally do you feel about the programme in your school?

I think it's really good, really useful. The action planning has been useful and framework is a valuable tool to use for discussions.

How much time have you needed to dedicate to the project so far?

Difficult to quantify as it sits alongside things I would be doing anyway.

What would you say to a school who is unsure whether to join the project?

It's really worth doing it. You will get as much out of it as you put into it. So, you could choose to have narrow focus to start, and if it works broaden it out.

