

The innovation challenge



Why innovation?

Innovation is one of our three business priorities at GSK, along with Performance and Trust; it's something we think about every day. Nesta, a UK-based innovation foundation, define innovation as turning bold ideas into reality, changing lives for the better. GSK is a science-led global healthcare company with a special purpose: to help people do more, feel better, live longer. So, we invest in scientific and technical excellence to develop and launch new products that meet the needs of patients and consumers.

Bringing the real world into the classroom

Different areas of our business, from marketing and human resources to research and development and engineering, all work together to make one business run well. Our GSK STEM Education modules are therefore also created to work together, helping you create cross-curricula links that mimic how the areas of business work together, both at GSK and beyond. We want to help you power future innovators and grow STEM capital, opening young people's eyes to the impact they can have on the world around them.

About this activity

Here we are helping you create these links across the curriculum by laying out how you can use our modules to run an innovation challenge. These challenges will encourage creative thinking, cementing links between classroom learning and the real world. They will also help students gain understanding of a range of STEM careers, as well as show them how their skills and interests relate to real life careers.

We encourage you to make these challenges an exercise in teamwork; collaborating helps people to be truly innovative and working with others is also a daily reality for many professionals.

How it works

This might be completed during an enrichment day, or across a few sessions of your school's STEM club. We hope that this will also be a chance to collaborate with colleagues in other departments to bring your students' learning to life across classroom lessons in a range of subjects.

On the next page are just a couple of ways you can run an innovation challenge using our resources. Simply run through the three different modules listed with each group, before setting your students the challenge to complete.

The innovation challenge



Innovation challenge one: Digital skills intensive

At the end of this challenge, students will have designed an inclusive smart healthcare solution, learnt more about digital skills, improved their understanding of public and community health, and thought about the many ways technology is revolutionising healthcare, be it for the individual or at a larger population level.

1. Apps to the rescue: Parts 1 and 2

Time required: 90 minutes

Students learn about smart healthcare and how technology is changing the way the health sector delivers medicine to patients and monitors them.

2. Inclusive design

Time required: 60 minutes

Good design is for everyone. Explore the seven key principles of inclusive design and get your students thinking creatively.

3. You and your community

Time required: 2 hours (flexible)

More than just developing their digital skills, this project will encourage young people to think about a digital solution to a public health problem in their local community. It's also an opportunity for them to practise transferable skills like communication, creativity and problem-solving.

The challenge: Run the **You and your community** project as a competition, ensuring students present their ideas as part of a judging process. You could even engage members of your school community as judges, providing prizes in a range of categories from Most Innovative and Best Presentation, to Most Inclusive Design.



Innovation challenge two: Vaccination 101

This combination of modules focuses on showing students the links between science, geography, maths, disease and innovation, culminating in a debating challenge which will put students' understanding of what they've learnt to the test.

1. What is a vaccine?

Time required: 30 minutes

Find out how vaccines help our body fight disease better and play a round of the vaccination game.

2. Fighting malaria

Time required: 45 minutes

Learn more about the global effort to fight one of the world's biggest killers, as well as how the disease is transmitted, managed and treated.

3. Probability and immunity

Time required: 60 minutes

Teach your students about probability and the spread of disease, and experiment with how herd immunity works to protect a population.

The challenge: Groups should conduct research into another disease other than malaria and look at how innovation is helping fight it. Run debates on topics such as the following:

- Technological innovation is key to improving global health
- Our reliance on technology is making us less creative
- Innovation is always expensive
- Can we innovate through maths?