

Future jobs



Project brief

It is difficult to imagine a career sector which won't be affected by one of the four Industrial Strategy Grand Challenges: Ageing Society, Artificial Intelligence, Clean Growth and Future of Mobility.

In this project you will explore how one career sector might be affected by one or all of these global trends. You'll need to report back and make recommendations about the changes needed in your chosen sector.

Begin by selecting a career sector to focus on. Keep it broad rather than a specific job. For example, you could choose healthcare, agriculture, construction, TV and media – whatever you are most interested in.

Research your chosen sector; find out what its purpose is, how many people are employed in this area, the latest technology being used and the impact of the sector on the environment. You could focus on a few key jobs and use a careers website to help you.

Consider how the Industrial Grand Challenges might impact on jobs. Will some jobs be replaced by machines? What kind of environment will people work in? If people are living longer and there are more older people, what problems and opportunities might there be?

Next, search for evidence to support your ideas. You could start by using scientific magazines such as New Scientist and Wired magazine to search for relevant articles. Ask your teacher to help you contact someone in a relevant job to interview. You will need to prepare a list of questions to find out about their current job and how they think it will change in future.

Reflect on what you have found out from your research and from your interview. What are the new opportunities and the challenges in this sector? How do you think it will look in ten years' time?

Finally, consider the wider impact of your research. What changes do you think need to happen to help prepare for the future in your chosen sector?

Things to think about

- Which of the Grand Challenges will have the most impact?
- How will artificial intelligence and data make jobs easier?
- Will anyone lose out or lose their jobs?
- How does your chosen career sector compare with others?
- What new technology might be needed to overcome the challenges?

Useful resources

Volunteers who can help:

- stem.org.uk/stem-ambassadors
- inspiringthefuture.org

Media sites to research online:

- [wired.com](https://www.wired.com)
- [newscientist.com](https://www.newscientist.com)

Health and safety

To avoid any accidents, make sure you stick to the following health and safety guidelines before getting started:

- find out if any of the materials, equipment or methods are hazardous using science.cleapss.org.uk/Resources/Student-Safety-Sheets/
- assess the risks (think about what could go wrong and how serious it might be);
- decide what you need to do to reduce any risks (such as wearing personal protective equipment, knowing how to deal with emergencies and so on);
- make sure your teacher agrees with your plan and risk assessment.