

Welcome to Sociology A Level at St Dominic's!

A-Level Sociology Transition Work Summer 2026

This booklet is your preparation work for your first year of Sociology A level. Hopefully it will give you a taster of some the content and skills you will need to apply next year. Please bring it to your first sociology lesson and be prepared to discuss your findings with your class and teacher. You will also be tested on some of the information.

Sociology A Level

Sociology requires students to use social research to examine trends and patterns between different social groups. For example, we want to uncover why more people are choosing to not have children today, why your parent's income is still a good predictor of your educational achievement and why there are disproportionate numbers of people from ethnic minorities in our prisons. It requires students to look at these patterns from a wide variety of perspectives and so our students need to be open minded, inquisitive, and critical. It is a subject that is constantly evolving as society changes and so it is crucial that you keep up with the news and current affairs to show accurate knowledge of the world around you.

We study the AQA specification, and study the following topics:

Year 1	Year 2
Families and Households	Crime and Deviance
Education	Media
Theory and Methods	

These are divided into three papers, which are each 2-hour exams and make up 100% of your final grades.

You can find the specification here: <https://www.aqa.org.uk/subjects/sociology/a-level/sociology-7192/specification/specification-at-a-glance>

Task 1: Research

As stated above, sociology is constantly evolving as the society around us changes. Therefore, it is important that you are keeping up with the news and current affairs. Your task is to find news stories, articles, or documentaries that link to and are relevant to the main topics for the course. For example, you might research the government's latest policy on free childcare for the family topic, or for crime and deviance you might research why our prisons are currently overcrowded.

Pick 2 of the main topics from the list below to research:

1. Education
2. Families and Households
3. Media
4. Crime and deviance



Here are a few suggestions of where to find up to date news stories and articles but please feel free to use your own sources.

[Home - BBC News](#)

[News, sport and opinion from the Guardian's UK edition | The Guardian](#)

[News | The Independent | Today's headlines and latest breaking news](#)

[Magazine - The Sociological Review](#)

[Blog | Sociology | tutor2u](#)

Documentaries:

BBC Panorama

Channel 4 Dispatches

Netflix explained

Podcasts:

BBC Thinking Aloud [BBC Radio 4 - Thinking Allowed - Available now](#)

The Sociology Show [The Sociology Show on Apple Podcasts](#)

Reasons to be Cheerful [Reasons to be Cheerful with Ed Miliband & Geoff Lloyd | Podcast on Spotify](#)

[Podcasts - The Sociological Review](#)

[Social Science Bites - Social Science Space](#)

For each topic below find one relevant piece of research and explain it below:

Research topic 1:

Where did you find the information? What is your source?

Summary/key points:

Personal opinion – what is your personal view on the findings in the article/documentary? Is this good or bad for society? How truthful do you think the information is? Does it apply to all groups in society? Is the research rigorous enough? What do you think the impacts might be?

Research topic 2:
Where did you find the information?

Summary/key points:

Personal opinion – what is your personal view on the findings in the article/documentary? Is this good or bad for society? How truthful do you think the information is? Does it apply to all groups in society? Is the research rigorous enough? What do you think the impacts might be?

Task 2: Theory and Methods

Throughout the course we apply sociological theories to all the issues above. One of the main theories that we apply is Functionalism.

1. Complete the reading and watch the video on Functionalism below
2. Answer the following questions:

[Functionalism – An Introduction - ReviseSociology](#)

[What is Functionalism? Introduction to A-level Sociology | Reference Library | Sociology | tutor2u](#)

1. Why is Functionalism known as a structural theory?
2. Why is Functionalism known as a consensus theory?
3. Give two examples of social institutions and explain what functions they perform for society.
4. What did Durkheim believe about the individual?
5. What did Parsons mean by the organic analogy?
6. Personal opinion: Is anomie (too much freedom) a problem in today's society?
7. Personal opinion: Do all institutions perform a positive function in today's society?
8. Give a criticism of the functionalist perspective of society:

Task 3: Key terms

Find definitions for the key terms below:

Society	
Institutions	
Socialisation	
Culture	
Norms and values	
Social trend	
Social class	
Ethnic group	
Gender	
Discrimination	
Prejudice	
Privilege	

Task 4: Reading task

Complete the reading attached on education, gender and science; 'Why we need more women in STEM'

1. Give an example of how women may be 'invisible' in science.
2. Which types of science do women tend to do and which do they not tend to do?
3. What are some of the reasons that women/girls are less likely to choose science subjects?
4. What percentage of workers in engineering and computing are women?
5. Why do some argue that it is important that more women are employed in STEM areas?

Why we need more young women in STEM subjects

Emma Smith

What image do young people have when we ask them to think about typical scientists? How can sociology impact the traditional gender/science couplet?

EXAM LINKS

- Gender
- Education
- Culture and identity

Below are just some examples of how in design, medicine, computing and engineering, women have been made almost invisible because the default approach is to focus research on the experiences of men:

- Did you know that when a woman is in a car crash, she is much more likely than a man to suffer serious injury and is also more likely to die?
- Did you know that wearable fitness monitors are much less accurate at counting the calories involved in doing housework, or the steps taken when pushing a pram?
- Did you know that while women are more likely than men to suffer from depression, animal studies on brain disorders are mostly carried out on male animals?
- Did you also know that voice recognition software is still more likely to recognise the male, rather than the female, voice?
- Finally, have you ever thought about the size of your smartphone and noticed that it fits more easily in the generally larger hand (and pocket) of a man?

What can we do about this gender imbalance?

Take the first example above: one of the ways that engineers test car safety

The invisibility of women in scientific research leads to, for example, larger phones having to fit into smaller pockets

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is to use a crash test dummy. But crash test dummies tend to be modelled on the average *male* body shape and when, more recently, car designers have been required to perform some safety tests using a female dummy — they use a scaled down male model who sits in the passenger seat.

From the size of our smartphones to the safety of our cars, the invisibility of women has led to large gaps in the crucial data that inform our world. To give one more example, although we know that the female body responds differently than the male body to many drugs, women are more likely to be under-represented in clinical trials. And when these clinical trials *do* include women they rarely, if ever, account for the hormonal changes that take place during the menstrual cycle.

So, what can be done about it? According to Caroline Criado Perez (2019), from whose book *Invisible Women* the above examples are taken, the only way to make sure that women are not forgotten in science is to make sure that they are *represented* in science — that they take part in designing safer cars, in planning medical trials and in developing software that remembers about women too.

But, of course, for women to be employed as engineers, software developers and scientists, they will need to have studied science at school, and increasingly, at university. Then, they may eventually get jobs as scientists, technologists and engineers. And this is the difficult part.

Women studying science

The slightly unpleasant image of a *leaky pipeline* is often conjured up to describe the lack of participation of women and girls in science, technology and engineering (or STEM if you add maths). The image is supposed to show that while most girls, in the UK at least, study science up to the age of 16, fewer go on to study it at university, even fewer get jobs in STEM and fewer still become scientists or engineers working at the highest levels.

So, the flow of girls studying science at school shrinks to just a trickle when it comes to women doing the types of job we mentioned at the start of this article, and

Very few women study computing at university level

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The only way to make sure that women are not forgotten in science is to make sure that they are represented in science

which are needed to ensure that women do not stay invisible to science.

Since the early 1990s, more women than men have been accepted to undergraduate courses at British universities. Women are also more likely than they were 30 years ago to study biology and chemistry at A-level, but not physics. When they get to university, more and more women are choosing to study

STEM subjects which is, of course, great news. But the subjects most of them study are not engineering or computer science, or even maths and physics. They are typically studying subjects such as psychology and medical sciences.

Now these are great subjects which can lead to fabulous jobs. But they are subjects that already tend to attract lots of women anyway, and they are generally not the

subjects that lead to the sort of jobs we discussed at the start of this article.

Figure 1 shows trends in the data on who has studied engineering and computing at university over the last 20 years. Just 1% or 2% of all the women who go to university in Britain study engineering or computing. For some engineering courses, this is equivalent to just a few hundred women across all

In the box below, draw a picture of a scientist at work

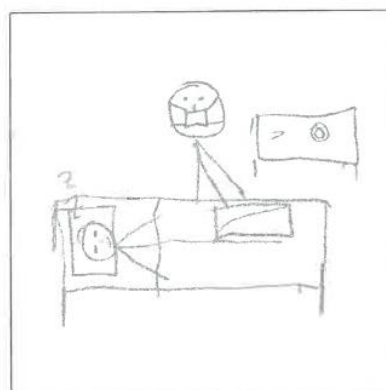


What is the scientist doing in your picture?

The scientist is experimenting ~~weather~~ that, which fluid reacts with O₂ the best (most explosive)

Figure 2 Stereotypical depiction of male scientist in lab (male pupil)

In the box below, draw a picture of a scientist at work



What is the scientist doing in your picture?

He is finding what is happening in his knee and what type of disease

Figure 4 An atypical drawing of scientist not in a chemistry lab (female pupil)

In the box below, draw a picture of a scientist at work

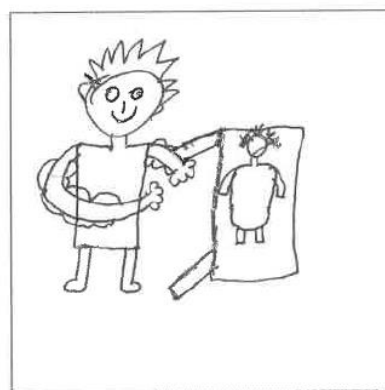


What is the scientist doing in your picture?

The scientist in the picture is mixing chemicals (acids and alkalis) and recording her findings in a lab science book

Figure 3 Drawing showing some stereotypical elements (female pupil)

In the box below, draw a picture of a scientist at work



What is the scientist doing in your picture?

The scientist is creating a monster like Frankenstein did.

Figure 5 Drawing conforming to mythic stereotype of scientist (male pupil)

Just 1% or 2% of all the women who go to university in Britain study engineering or computing

universities. Notice, too, how little the data have changed since the early 2000s.

What do we think scientists do in their jobs?

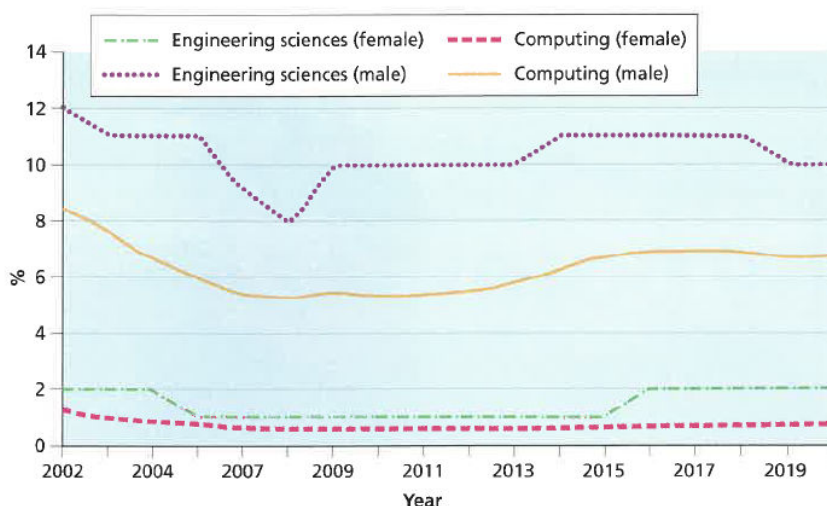
One reason why science subjects can be unattractive for girls and women is due to the, often unhelpful, stereotypes about the type of people who work in the field. The idea that 'science is not for me' is a view that is widely held among many girls and women.

For almost 70 years now, researchers interested in exploring stereotypes of scientists at work have asked people — mostly those still at school — to do a simple task: draw a picture of a scientist. The 'draw a scientist test' (DAST) is a straightforward way of trying to understand the stereotypes that people hold about scientists at work. The DAST isn't perfect, and one can find lots of sociological shortcomings in research that asks young people to draw individuals — or anything else. More seriously, for example, young people's drawings often do not readily distinguish between different cultural or ethnic groups.

In our research we asked almost 4,000 year 8 and year 9 pupils to draw a picture of a scientist at work. Just under half of the pupils drew, or described, a figure with (conventionally) male characteristics (see Figure 2) compared to under 20% whose drawing resembled a (conventionally) female scientist (Figure 3).

Apart from the gender of the scientists depicted, another interesting finding from the study was that most drawings placed the scientist in a laboratory, where they were usually mixing chemicals together. It was very unusual for the scientist to be working outside a lab, or in a hospital, or even in an office. Figure 4 was a rare example of a scientist who was *not* working in a laboratory — although notice that the female pupil identifies the scientist as male in her description.

Finally, some of the drawings showed the stereotypical mythical scientist working alone in their lab (Figure 5). Rather than these scientists being somehow 'magical'



Source: UCAS

Figure 1 Percentage of entries to undergraduate engineering and computer science courses according to gender

or fictional, the drawings instead tended to show rather eccentric inventors, sometimes working with an element of danger.

Although many of the pupils who took part in our study produced stereotypical images of a scientist at work, these images were not necessarily negative — notice that the scientists in the drawings are often smiling!

What do scientists even do?

As well as asking participants to draw a picture of a scientist, we also asked the pupils to explain what their scientist was doing. When we analysed the terms that pupils used to describe their scientist, we noticed that the most commonly used words were 'chemicals', 'experiment' and 'mixing'.

While some pupils told us that their scientists were curing diseases, including

cancer, there was no mention, for example, of scientists being involved in solving important *environmental* problems, such as climate change and plastic pollution. Instead, their scientists were typically depicted as being in a chemistry lab, busy mixing things, rather than doing other jobs that many real scientists do to help solve some of the key challenges that we all face today and in the future.

What does all this tell us?

- Well, it seems that young people have a rather gendered view of science and scientists.
- They can have a surprisingly narrow view about what a scientific job looks like.
- They seem to have a rather old-fashioned and outmoded view of science and scientists.
- This includes a limited understanding of the types of, what researchers call,

The Draw a Scientist results often show scientists mixing things in a lab



None of the drawings showed scientists tackling environmental issues



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Some male-dominated STEM industries can behave in subtle (or sometimes less subtle) ways that exclude women

'morally meaningful' jobs that a scientist might do today.

Women working in science

Inequalities in school lead to inequalities in the labour market, and although women make up about half of the British workforce, in the STEM sector only about one-quarter of workers are female. In some engineering and computing jobs only about 15% are women. These inequalities are not new; they also are similar in countries such as the USA and they are experienced even more acutely by women of colour and women with other intersectional characteristics.

For a long time, researchers in education and sociology have been trying to understand why so few women want to work in STEM, and as engineers and computer scientists, in particular. One reason they have found is that some male-dominated STEM industries can behave in subtle (or sometimes less subtle) ways that exclude women.

Examples of these barriers might include gender bias in terms of who gets hired or rewarded for their work (although,

of course, any discrimination based on sex has been illegal in the UK since 1975), as well as there being an elevated risk of women experiencing micro-aggressions and unwanted sexual attention in male-dominated science workplaces. Much of the research into this area comes from the USA and it can paint a picture of working environments that are not welcoming for women.

Other researchers argue that there are also barriers which make male-dominated professions much less flexible and accommodating for women who may want to have families and who, often, end up being the main carer for children or other family members.

Conclusions

While a lot of research into this area can paint a very negative picture of what it is like to be a woman in some STEM areas, there are increasing numbers of organisations and initiatives that focus on supporting women who want to work in this field and who engage in encouraging employers to make their workplaces more welcoming for women.

Slowly, the world of employment and attitudes in science is changing. UK-based organisations and initiatives such as Women into Science and Engineering (WISE), the Institute of Physics' 'Limit Less' campaign, as well as 'Girls Who Code' are

all focused on providing advice, positive role models, mentorship and — for 'Girls Who Code' — bravery and sisterhood for women and girls who want to become the programmers, car designers and environmental engineers of the future.

Hopefully, this short article has shown you some of the many ways in which women in the past — and today — have been made invisible in science and technology, and some of the consequences that has for all aspects of society.

Sociology can contribute a lot here, to show how social, medical and technological advancements all suffer when female perspectives and expertise are absent, side-lined or ignored in science.

REFERENCES

Criado Perez, C. (2019), *Invisible Women: data bias in a world designed for men*, Abrams.

Girls Who Code:
www.tinyurl.com/2n9wc9fr

Institute of Physics 'Limit Less' campaign:
www.tinyurl.com/2a23xtpr

Women into Science and Engineering 'WISE' campaign: www.tinyurl.com/fb522rde

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