

Why are Science, Maths and English so important?

Many people will tell you that Science, Maths and English are important, but they might not always explain *why* they are important, so that's what I'm going to do! This blog will give you an introduction into how these three topics can help you achieve your goals in education, employment and your everyday life.

I can hear you now...

“But I’m not good at [insert Science/Maths/English!]”

If you feel like this, don't worry! I think everyone feels like this at some point.

I'm going to show you how using a *Growth Mindset* can help you to overcome this worry, because by using this skill, you'll not only understand these topics better, but you'll enjoy them more too. If you want to know more about Growth Mindset then take a look at our workshop under the 'Self-Directed Study Skills Workshops' heading on this web page.

Education

After finishing secondary school, you might go into College or Sixth Form to study for A-levels or Higher National Diplomas (HNDs). For many of these courses, you will need a certain number of GCSEs and some will even specify that these need to include Science, Maths and English.

Maybe you plan to go to University in the future? What you might not know, is that you need certain grades to get in, which are called entry requirements. For example, at the [University of Sheffield](#), if you want to study BA Politics, you need to have GCSEs in Maths and English! [Click here](#) to see for yourself.

Perhaps you want to do a more practical course at University, such as BSc Psychology. At the [University of Essex](#), this course would still need you to have a C/4 in GCSE Maths.

Employment

There are some jobs that you might associate more with Science – a Doctor – Maths – a Maths teacher – or English – a Journalist. However, in many jobs you will need skills from all of these subjects without even realising it.

You might already do part-time work alongside your studies, and if so, you're probably already using Science, Maths and English skills for duties like:

- Counting change and sorting the bills
- Making bookings or sorting orders
- Fixing broken parts of a machine

When you apply for a job, there is usually a description of the role, which is called a *Job Description*. This sets out the skills and qualifications an employer is looking for. These are a little bit like the entry requirements for University and many jobs will ask you to have GCSE English and Maths, and sometimes GCSE Science too.

Everyday life

You might not know what you want to do in education or employment, so maybe you're thinking "what's this got to do with me?"

Well, Science, Maths and English are important for everyday tasks too!

To survive, humans need food. **Science, Maths and English** are all **important** to helping you **to eat**.

To follow a recipe, you need to be able to read.... English!

To work out all the measurements, you need to be able to count.... Maths!

To make the final meal, you need to be able to combine all the ingredients Science!

Cooking is an essential life skill, and these topics can greatly improve your skills (and your meals).

Growth Mindset

As I said earlier, I know that some of you will be reading this and thinking that you're just not good at Science, Maths or English.

To combat these negative thoughts, we can use Growth Mindset.

Growth Mindset is the theory that intelligence can be developed and enhanced. It suggests that people are not simply born 'smart' – instead, being smart can be learnt!

Great news!

Having a Growth Mindset can help you to achieve more in Science, Maths and English, as well as in other areas of your life. It can help in your education and employment, because you will start to see challenges as *opportunities to learn*.

You can self-motivate to change your mindset by being more specific about the part of the topic you want to improve. Here are some examples:

Instead of Saying...	Say...
I am bad at maths	I am not the best at algebra yet but I can learn by practicing everyday
I am bad at speaking French	There's room to improve my ability to speak French
I am bad at English Literature	If I use the right approach to practice analysing a text I will learn better
I don't understand Geography	I am on the right track of increasing my understanding of Geography by expanding my answers

See if you can change your mindset about some of the things you find challenging. Practice makes perfect. Here are some top tips to help you:

- Instead of avoiding challenges, embrace them
- Don't give up just because you don't succeed straight away
- Learn from your mistakes
- Listen to constructive criticism
- Remember ... it is only you that can improve your mindset!

With a Growth Mindset, you will be more optimistic. You will not only improve your skills in these topics, but you will enjoy them more as well.

What I want you to remember...

There are lots of different reasons why Science, Maths and English are important. You could need these qualifications to continue studying after school, or to get your dream job. The skills and knowledge you gain in these topics are even important to everyday tasks, such as cooking.

And don't forget, you can improve your skills and knowledge by adopting a Growth Mindset. Identify the key issue and practice until you improve.

You are in control!

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