# STEM Ambassador Profile

*Corporal Amy*

## 1. What is your current role and how do STEM subjects fit within it?

I am a survival equipment technician. We work on the equipment the aircrew have to wear to be able to fly safely, such as an oxygen mask or an anti-G-force suit, as well as the equipment they would need to survive if they were to eject or crash land, such as a parachute or life raft.

Although we are classed as technicians, we also have to have an understanding of science and maths. For example, we have to understand the effects of G-force on someone's body and then make calculated adjustments to the equipment to help counteract the G-force.

## 2. What educational path did you take to get to where you are today?

I went to my local comprehensive and then my local college. I studied A-levels in Fine Art, Dance, History and Communication and Culture… absolutely nothing to do with my current career! Over the last four years I have been studying for a part-time degree in Design and Innovation.

## 3. Who is your STEM role model and why?

One of my favourite people in history is a woman called Mary Anning. Mary was born in 1799, at a time when women were not allowed to attend school. Despite this, by the age of 6 she could identify fossils and had taught herself geology and anatomy. When Mary was 12, she found a 5.2-metre-long skeleton of an Ichthyosaurus (fish lizard). At 24 she was the first person to discover a Plesiosaurus (meaning near to reptile). Sadly, at this time in history, because she was a woman, she was not allowed to be a scientist and so her scientific discoveries were not accredited.

However, today, the Natural History Museum in London display several of her amazing finds and the coastal area where she made her discoveries - the Jurassic Coast - is now a UNESCO World Heritage Site.

So why is Mary a good STEM role model? Mary didn't let somebody tell her 'no' or stop her from making scientific discoveries. She had a passion for palaeontology and because of this, she made huge discoveries in her field. People come from all over the world to see her work now.

## 4. Why is being a STEM Ambassador important to you?

Things we do every day can be related back to STEM. We use the mineral fluoride in our toothpaste because a scientist discovered that it prevents tooth decay. When we cook, we use maths to measure out our ingredients. Our homes require engineers to build them safely, and mobile phones are designed by a team of technicians.

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STEM is important because it is literally everywhere. Being a STEM ambassador means that we get to share our knowledge with young people and help them see opportunities, especially to those who may have not considered STEM or a career in STEM before.

## 5. What do you enjoy the most about your role and the RAF?

Since being in the RAF I have been able to travel to many different places around the world. This also means that I get to immerse myself in different cultures and speak to interesting people. This is also where I have been lucky enough to learn new things. In Sweden I learnt how to 'read the river', to identify poisonous plants and to follow animal tracks. In Oman I learnt some traditional puzzles and how to solve (some) of them.

In the USA, I was able to work alongside their Air Force and Naval Survival Equipment Technicians. They showed us their new technology and we were able to study their different symbology systems. I love any opportunity to continue learning and the RAF has enabled me to do this.

## 6. What is the most challenging obstacle you have faced and how did you overcome it?

One of my biggest challenges, and still is a challenge, is keeping up with the volume of work I put on myself. I work for several charity groups as well as my job in the RAF. I am a STEM ambassador and an ambassador for two mental health organisations. On top of this I am also studying a degree and additional courses when I can. It's a lot.

Sometimes I can get really overwhelmed, but when I do, I take a deep breath and write down some organisation and time management skills I can put in place to help me. Things like a daily tracker that divides my time up ensuring I cover everything, but I also give myself time to relax and rest.

This structured schedule allows me to focus on the task at hand. If this doesn't work, I simply reach out and ask for help. Everything I learn I try to use the next time things get on top of me.

## 7. What advice would you give to someone who wanted to study STEM subjects or follow a STEM career path?

STEM based subjects can give you a lot of important transferable skills like problem solving or critical thinking. COVID-19 has highlighted the need for new science and technology. Studying STEM means you could make a meaningful change, developing ways of accessing clean water or improving the human immune system.

If you want to study STEM then go for it, there is a whole wealth of opportunities waiting.

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