

Can Science Communication Take You Places?

written by Saarani Vengadesen | 11/04/2023

If you are a science graduate and have no intention to stay in the lab, or to don the lab coat, safety helmet or boots for your rest of your career life, fret not. An exciting and colourful career might be in the horizon with a STEM degree.

When I started school in late 70s, little did I know I will be a science communicator. That job and the field was non-existent then. Not even, when I completed my Masters in Biotechnology in 1997. So, if anyone tells you that your future in STEM is all gloom with disruptive technologies and you will work in a field that is non-existent, solving a problem that has not risen, just stop worrying. This is not new and it happened during all generations.

I am a science communicator and my job is non-routine and takes me around the globe. I have travelled to every continent except for Antarctica. I have engaged with politicians, policymakers, students, media, teachers, scientists, farmers, religious scholars, investors, industry players, non-governmental organisations, general public, and doctors as my audience.

I still remember how nervous I was during my first presentation. Today, I have even spoken at European Parliament. This is the life of a science communicator. Our job is to speak to and engage non-technical audience to simplify and make them understand science. Why do we do this? We want policymakers and politicians to develop science-based policies and regulations that will support development of new technologies. We want teachers to understand the latest developments in science so their classrooms are not based on just textbooks.

We want farmers to adopt new agricultural practices. We want mass media to write about science with great accuracy and not spread misinformation. We want religious scholars to clear doubts about science. Remember the “halal” issues about vaccines during the pandemic, and the infodemic or misinformation about Covid19. These are just some of the reasons why science must be communicated to various members of the public.

There are many careers one could choose in science communication. Hollywood engages science consultants when making sci-fi movies. Sean Michael Carroll, an American theoretical physicist is one of them. He was the scientific consultant for Avenger: Endgame which features time travel in the pursuit to reverse the action of character that plans to destroy planet Earth.

Carroll had to make sure the movie depicted a more accurate and logical scenario of how time travel would look like and also making sure it is entertaining enough. Imagine advising directors and actors and working with them. What more, your name appears in the movie. National Geography too hires science consultants and reviewers. These jobs will take you places.

Having a clown, stand-up comedian, dancers or any other performers is common at parties, weddings and even corporate events. How about someone who could perform science tricks and then provide an interesting explanation? Creative STEM graduates could start their own event companies and provide this service.

One could also be a science journalist, editor, TV producer and host for science programmes and media. You will be in the limelight, travel to different places and meet new people every time. I am an editor-in-chief for a newspaper that I founded, The Petri Dish.

I am also a trainer where I train scientists, journalists, teachers, industry players, and policymakers on how to communicate science. I have done training in different parts of the world and I enjoy meeting new people. You can start your own consultancy to do this. My PhD supervisor who is a science communication consultant gets invited to speak about science in cruise ships to keep the passengers entertained and he did this in an Antarctic cruise – all paid for on top of his fee. I am waiting for my invitation!

With the rapid advancement of science and technology, there is fear among many people, including politicians. Agencies like NASA has a team of science communicators. International research organisations too have science communicators. All UN agencies related to science hire science communicators. They communicate the research, new products and technologies in their agencies to dispel fear and create public awareness and acceptance. I was a consultant to UN Food and Agriculture Organisation for three years where I worked with Sri Lankan government.

These are just a few examples. The opportunities are limitless. Now, you may have a question. How do I become a science communicator? Have a strong passion and interest in science. Brush up your language skills. It can be any language you wish to communicate science. English language takes you across the globe. There is no basic degree in science communication. With any degree in STEM, you can acquire science communication skills through short courses or by pursuing Masters in this field. One can also be a science communicator with a mass communication or journalism degree.

While my PhD is in science communication, most of my skills were acquired simply through practice, reading journals and articles on science communication. Science communication can also be carried out while having a career as a scientist, working in STEM corporate sector, a teacher or even a technopreneur. So, it is just for anyone who is a great storyteller and fascinated with science. Once you are involved in engaging a greater audience, you will be hooked into this. Try it!