

How do you grab your audience's attention?

Hello and welcome back to the SciComm Toolkit podcast - the show that will give scientists and science communicators all the tools you need to communicate science with confidence and bring science stories to life. And if you are listening to this that probably means you. Right? Welcome, or welcome back. I hope you are having a wonderful day whatever time you are listening to this. For me, it's the evening. I'm sat in my office, well the spare bedroom that has my desk in it. I've been sat here so long that I am now realising that I haven't switched the light on and I'm basically doing this in the dark other than my computer screens lighting everything up. I could get up to turn it on but to be honest I'm lazy and I'm digging the kind of dimly lit, late night writer kind of vibe. So, I'm just gonna go with it.

Anyway, in the episode today I wanted to talk about grabbing the attention of your audience because - spoiler alert - even though you might have the coolest, most epic science story ever, no one has to listen to you.

There are so many distractions around us when we are reading articles online or doom-scrolling on social media. There are so many chores that we could be doing around the house instead of actually listening to what someone is saying on the radio. If you are at an event, there will be activities going on all around your stall, so why is someone going to stop at yours. There are endless things we can all start dreaming about when listening to a talk like did I actually lock the house before leaving, or was there something I was meant to do today before I finished work. It's almost overwhelming the number of distractions there are.

So how are you going to stop the scroll, make someone stop washing the dishes to listen 100% to what you are saying on a podcast or entice visitors in to your activity at a festival. It's all to do with hooks.

When I was preparing for this episode I looked back at some notes I took for a storytelling workshop that I attended back in 2019 now with the wonderful Dr Kat Arney and her company First Create The Media. I will add the link to a company in the show notes so you can learn all about them. But part of that training covered hooks and creating our science stories about our research. And I discovered the story that I wrote during that session, or as much of a story you can write in no more than half an hour. I thought about reading it out now as a bit of fun but I'm not sure it fits right here in the episode so maybe I'll leave it right until the end. Yeah I'll do it at the end. You can then hear the delights of my random science story that I wrote about my PhD research which was looking at how to keep stem cells as stem cells in low oxygen conditions and how their metabolism affected that too.

But for now let's get stuck into the meat of this episode and think about what you need to consider when trying to hook in your audience

What is a hook, and where can they be used?

Generally speaking, a hook is "a device for catching, holding, sustaining, or pulling anything" - and in this case that could be your listener, your reader, your visitor's attention. This is

going to be your opening gambit, your first sentence, your first impression to not only capture your audience's attention but set out what your audience will gain. What their return on their time investment will be.

The most obvious place for hooks to be are in your headlines, blog post titles, opening statement of your talk, your event promo material. Right at the start to grab the attention of the audience. But they can also be used throughout your article, your talk or your podcast episode to maintain their attention. It is that first one though that really needs to do its job.

Now you can probably get a sense of why hooks are so important, so what goes into a good hook. Here are 8 tips or things to possibly incorporate when you are writing the hooks for your science communication.

Starting with - Use your enthusiasm and their interests to your advantage

All the science, technology, engineering and maths that goes on is incredibly fascinating and mind-blowingly exciting. I know that. You know that. And we want our audiences to know that. But there is no point in investing all this time and effort if you end up preaching to a metaphorical empty room.

Your science is interesting. You are studying it so it must be. So use that passion of yours and your enthusiasm, why are you enthusiastic about this. Or a topic you are really interested in and what to write a book about. What is it about the topic that makes you want to do that. That is one example of your hook. Your passion and enthusiasm for a topic will shine through and is contagious. So, if you show that it will creep through to your audience.

But you have got to meet your audience half way. If they had your perspective on the topic, then they would probably be a researcher themselves, or at least engaged in science and looking for information.

You have got to find your hook, and by your hook I mean what makes your science interesting. What is the big picture? How could it affect them? Then you need to unwrap it and wrap it up again in new wrapping paper and with different ribbons so from the outside it is more appealing to someone else, but the message inside, or the gift inside, is still the same.

When I did my Soapbox Science talk a few years ago, I was talking about my stem cell research. I loved doing it because I was fascinated by how all the molecules in the cells interacted and came together. But my audience who were taking a stroll on the beach were not going to stop and listen because of that. So, I packaged my talk up by talking about Marvel comics and superheroes who could regenerate, and told them about how what I was doing would help us to understand the basic biology of stem cells better. And if we knew that, it could open up many different avenues to support regenerative medicine. Something that they could relate to more. By packaging it up that way they could see why I was doing that, and then proceeded to ask me more questions to learn more. If I had started by saying I add a drug to my cells and measure the changes in a particular molecule - how long do you think they would have stuck around for?

So, don't start off by telling people what you have done or what you have discovered, give them the big picture. What could this ultimately help achieve in the world.

Well that ended up being about 3 tips all merged into one. So to clarify quickly - give them the big picture first, package it up in a way that is interesting and relevant to them and use your enthusiasm to showcase the science.

The next consideration is to make your audience feel something.

What if I opened a talk by saying "We make enough food on this planet to feed everyone. Yet a third of all food we create ends up in the bin". How does that make you feel? Maybe its guilt, maybe its empathy, maybe its anger or disgust. There are a whole spectrums of emotions that you can tap into, but no matter what your science story, when you are crafting your hook, keep in mind what you want your audience to feel. It could be awe, curious, surprise, contempt and so on. I will link an emotion wheel in the show notes so you have a handy list to work from.

Another idea for creating your hook is to use the curiosity gap.

The curiosity gap refers to a psychological effect created when someone is aware of a gap in information and is motivated to resolve it. Curiosity is a hugely important component of self-motivated learning and it is going to help you with your hook. So, how can you create a curiosity gap.

Tease an idea that your audience will be compelled to want to fill the gap. You could start by asking a big picture question? A question you go on to solve throughout your scicomm project and by the end the audience will get the answer to their question. It could be something like - oo I don't know - 'do you know what would happen if all the bees disappeared off the planet with the click of my fingers?'. You could then take your audience through all the incredible things that bees do for us, and layer by layer reveal the devastation that would be left behind after a week, a month, a year.

Or you could capture your audience's attention by sharing an unbelievable stat or fact. It might be that there are more cells in your brain alone than grains of sand on this planet. Then take them on a journey of how all those different cells are created. Or it might be another fact that pulls on the heartstrings to combine it with that emotional aspect I mentioned before.

You could use components of storytelling - something we will cover A LOT in future episodes - like characters, heroes and villains, or conflict or scene setting to draw in your audience. You could use personal stories, or your characters could be your proteins, your molecules, the asteroids in space, the quarks or fish in the sea. Flesh out those characters and give them personalities. I once wrote an article about CRISPr-Cas9 technology, but the Cas9 protein wasn't just a protein, in the context of the story it was promiscuous - which already gives you more of an indication of the science story I was telling. Think about your favourite story books or films. What about them draws you in? What captures your attention? Use that to inspire your science story hook.

The final tip is to be prepared.

You need to have those facts, stats, those emotion evoking statements and those personal stories ready before you start. Working out what your hooks are in advance, especially for talks and science festivals and so on, is really going to help you have more success with capturing your audience's attention. You need to specifically engineer those moments so your audience can use their imagination to fill in the details. Have the same mindset when crafting your science story.

So, that was quite a lot, so let me do a very quick recap of the things to think about when creating your hook. Think about what would make your science interesting to your audience and use that. Use your enthusiasm for the topic to your advantage. Give them the big picture over the details. Create a curiosity gap and make your audience feel something. It doesn't matter what emotion, just an emotion so they are invested. Share a mind-blowing fact or stat. Take advantage of story components, and finally be prepared.

And talking of being prepared, it's time to head to the DIY section of the podcast.

Welcome to the self-assembly arena. The DIY section of the podcast where I give you something that you can take action on today to add another tool to your scicomm toolkit.

We have all watched a movie trailer right? Most of the time, you decide whether you are going to watch the film based on what you see in that preview. That is exactly what your hook for your science communication is, it is the trailer for your science story.

And it is that hook that is the next crucial tool you need in your toolkit. This is what you need to offer your audience before they will invest their time and energy listening to you.

By the end of this section, you will have created the movie trailer for your science story.

You can go and grab the worksheet that goes with this episode right now from my website. That is sophtalksscience.com/scicommtoolkit. Just scroll down to the episodes and show notes section and click on the resource next to episode 4. But let me talk you through it quickly.

The first section is for you to jot down some great stats or facts about your science story. That can also include facts that link to your big picture. From there, the next section is to jot down the emotions that you want your audience to feel - and of course it can change throughout your story. Then there is a section for you to write down why you find this area of research interesting - just so it is there in front of you and with the other components. In another section you can note down any key characters or scenes and jot down some ideas about how to describe them or give them a bit of personality in context of your story, and also to add what conflicts they face.

Then the final section is a space for you to start constructing your hooks for your science story. You could print out one of these for each science story you have to tell. But when each

is complete, you have your hooks ready and prepared for your next scicomm project. Even turn it into a short elevator pitch of a few sentences, and well-ah you have your science story movie trailer.

I really love creating quote unquote movie trailers for your science story. It is a really fun way to start tipping your toe into science communication, or help you get that big picture clear in your mind for your new research project. So please go ahead and experiment with that. Try them out on your family and friends and see which ones they like.

Once you have grabbed their attention, you obviously want to keep it for as long as possible. That is where storytelling and so many other factors come into play. All of which we are going to look at in future episodes.

As promised, I'm going to leave you with the openings of a science story I started writing in that workshop a few years ago, which I discovered again when I cleared out my desk and moved jobs a few months ago. For context, I was joining in with a group of active researchers and they were converting their current projects into stories. We also wrote trailers for these stories too. But I have always had this dream of writing a children's story book about stem cells. So, this was the very first draft of something I put to paper, and so if I ever manage to publish anything like that, then you can come back to this episode, and see how far writing goes from first draft to final publication too. Anyway, here is the start of my stem cell story, and I will catch you in the next episode to introduce you to the next tool for your scicomm toolkit.

Once Upon a Time there was a young Stem Cell called stemmy he worked as a GP in his hometown of Bod City helping all the other cells of Bod City with their day-to-day wound healing family cell deaths general repair and all in between but then he had always been an ambitious sell his work allowed him to see the real problems of Bod City the untreatable blindness of retina Avenue the paralysis of nerve Central and the crippling insulin shortage of pancreatic Drive just to name a few the day-to-day issues of the cells of Bod City were nothing compared to these plagues of stemmys beloved hometown while no two days on the job for stemmy were the same he had never made any progress on his big and visions His purpose if you will that was until today

on this day when our story begins stemmy encounters a cell that helps him to unlock his inner potential to treat Bod City of all its ills and that cell's name was Tina. Tina the skin cell. She had just lost her two daughter cells and her husband now too stemmy couldn't believe how cruel this world could be that something so horrible could happen to one single cell stemmy had read many great stories about stem-cell myths and legends helping create miracles in Bod City and he knew he had the potential to do the same but never believed he could but today you wanted to make these myths or reality so he could set out on a quest to stem cell up and achieve his dreams he was going to become the most powerful stem cell that Bod City had ever known and help treat all the diseases and disorders of his hometown in order to become the most powerful stem cell of Bod City stemmy knew he had to reach the magical Chocolate Factory on top of the biggest mountain in the rail from his research he knew that to become the ultimate stem cell he needed to train at high altitudes and low oxygen conditions but also he needed to taste the miracle glucose of the Magical Chocolate Factory

but he knew his journey to the top would not be without its challenges its Temptations and its hurdles but right now stemmy didn't give that a second thought. he set out on his quest with the cheers and support of all the cells of Bod City behind him to uncover the challenges what lay ahead

3 days have passed already and he had just made it to the base of the Mountain he looked up and couldn't even see the peak through the clouds up until now his journey had been quite straightforward but he could sense that was about to change, for out of the darkness appeared a strange looking fellow. As they crept closer Stemmy recognised this temptress from his research it was GATA and she was here to be Stemmy's first real test. Will he stick to his path to fulfil his potential or would he be led astray and differentiate?

Don't forget to rate, review and subscribe to the podcast. Share the episode with your friends if you enjoyed it. I would love to see and hear your hooks when you have constructed them. Share them on Insta and tag me @soph.talks.science and the pod @scicommtoolkit and we will share them. I'm looking forward to sharing more science communication tips with you in the next episode. I hope you will join me. See you soon.