

Biology in the Real World: guidance for speakers

Every January, UK science teachers gather at the ASE (Association for Science Education) Annual Conference and a group of biology organisations puts on a day of short talks on contemporary science research, titled 'Biology in the Real World'.

The idea is to inspire science teachers, bring them up to date, and help them bring some of the contemporary research context into their classroom.

The talks are aimed at someone with a science background, but not necessarily that up to date – we usually get a whole range, from some people who have done a PhD in the topic to some people who have an undergraduate degree in a different field of science altogether.

Our ultimate aim is that if a student says, “But why are we learning this, Miss?” the teacher can say, “Because scientists need to know about X in order to achieve Y”, or that the teacher can slip in a few exciting snippets of information about what contemporary research is going on.

Each lecture runs after the next in the same room, so some people will stay for all the lectures, some people just come for one, and some stay for a themed pair of lectures. The number of teachers in the audience varies from around 20 to around 60, which is a good range for such a tightly packed programme. Indeed, after ten years of running these talks, many teachers now say it's one of the highlights of the conference for them.

Teachers come from a wide variety of backgrounds – in a typical audience, you will get some people with PhDs in the exact topic, and some people who now teach biology but have an undergraduate degree as a psychologist, for example. Attendees are usually extremely keen and enthusiastic, but tend not to have the detailed background knowledge. As a baseline, they will probably all have the general background knowledge of first year biology undergraduates.

It's worth remembering that some things which are really commonplace in a research department may be new and interesting to teachers. On the other hand, there will almost certainly be the ex-researchers who went into teaching but still love their research specialism!

Speakers have approx. 30 mins, with 10 mins for questions. You may or may not get many questions, depending on who's in the audience and their background knowledge.

In general, the more 'soundbites' and little informational snippets you can include, the more teachers like it, as it's something they can take straight back to their students.

Photos are also always fascinating to teachers *e.g.* photos of people doing 'real' research in a lab, or SEM images, or simply research teams looking cheery in fields with overseas research partners.