

Creating Shared Experiences for Outreach in a Virtual World.

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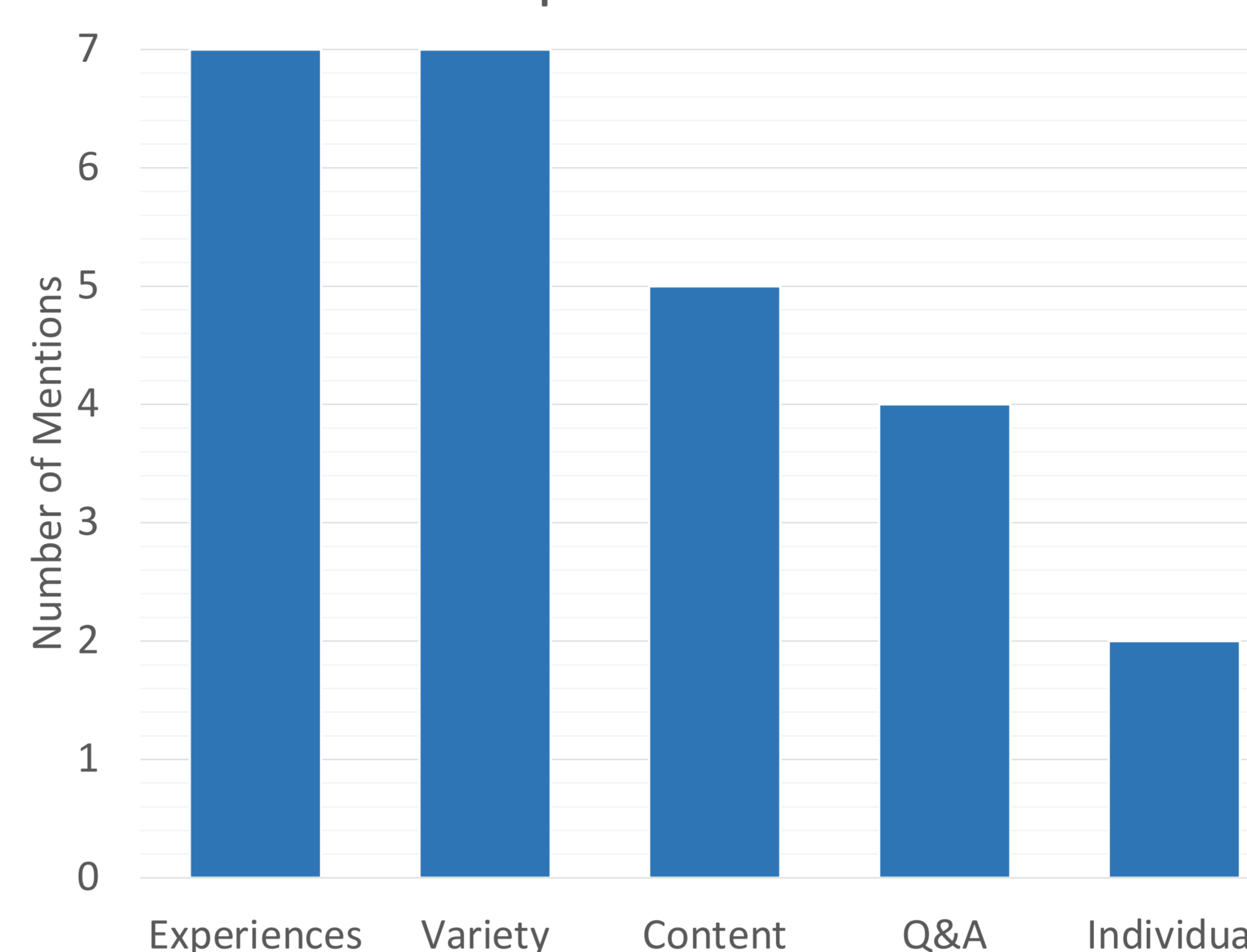
Background

The School of Chemistry at Trinity College Dublin (TCD) has an established chemistry education and public engagement (EPE) programme. Activities hosted on campus include public demonstrations, competitions and career talks among others. Teams of trained PhD students also visit dozens of secondary schools annually to deliver hands on workshops in addition to public demonstrations at science festivals. The majority of these activities, both on campus and external, are organized through the "Chemistry Outreach Module", which forms part of a structured PhD programme. In addition to lectures and assignments, module participants are also required to complete work experience to hone their communication skills, learn from their peers and reflect on their development. The benefit to secondary schools are *tangible role models*, *real-world context* for the curriculum and *hands-on experience*.

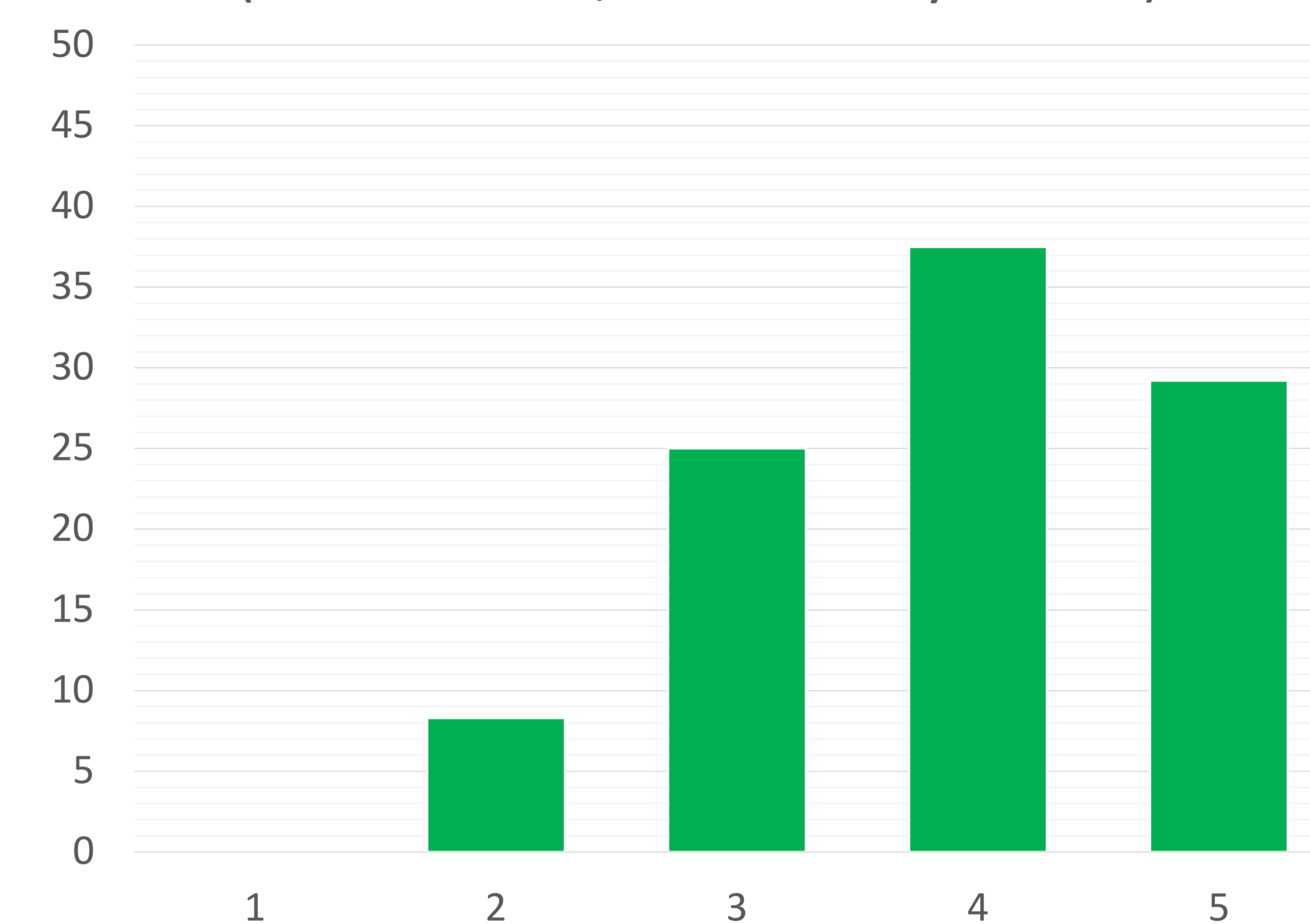
Shared Experiences

Shared (group) experiences and connectedness are an important part of social development in adolescents, reducing feelings of isolation and contributing to a sense of "belonging". Evidence suggests that ordinary experiences shared by a group of people are amplified and retain significant longevity over an exciting experience witnessed individually. The effect is further enhanced when those in the group are familiar with one another, despite great physical distances between them such as sharing an experience online. School classes naturally form social bonds so by targeting these groups with outreach, it is proposed that these activities will retain significant longevity compared to other formats.

Students: What would you highlight as the best part of the session?

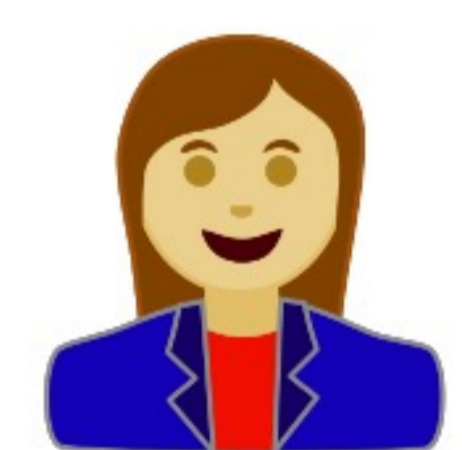


Students: How Useful did you find it? (1 Not Useful, 5 Extremely Useful)

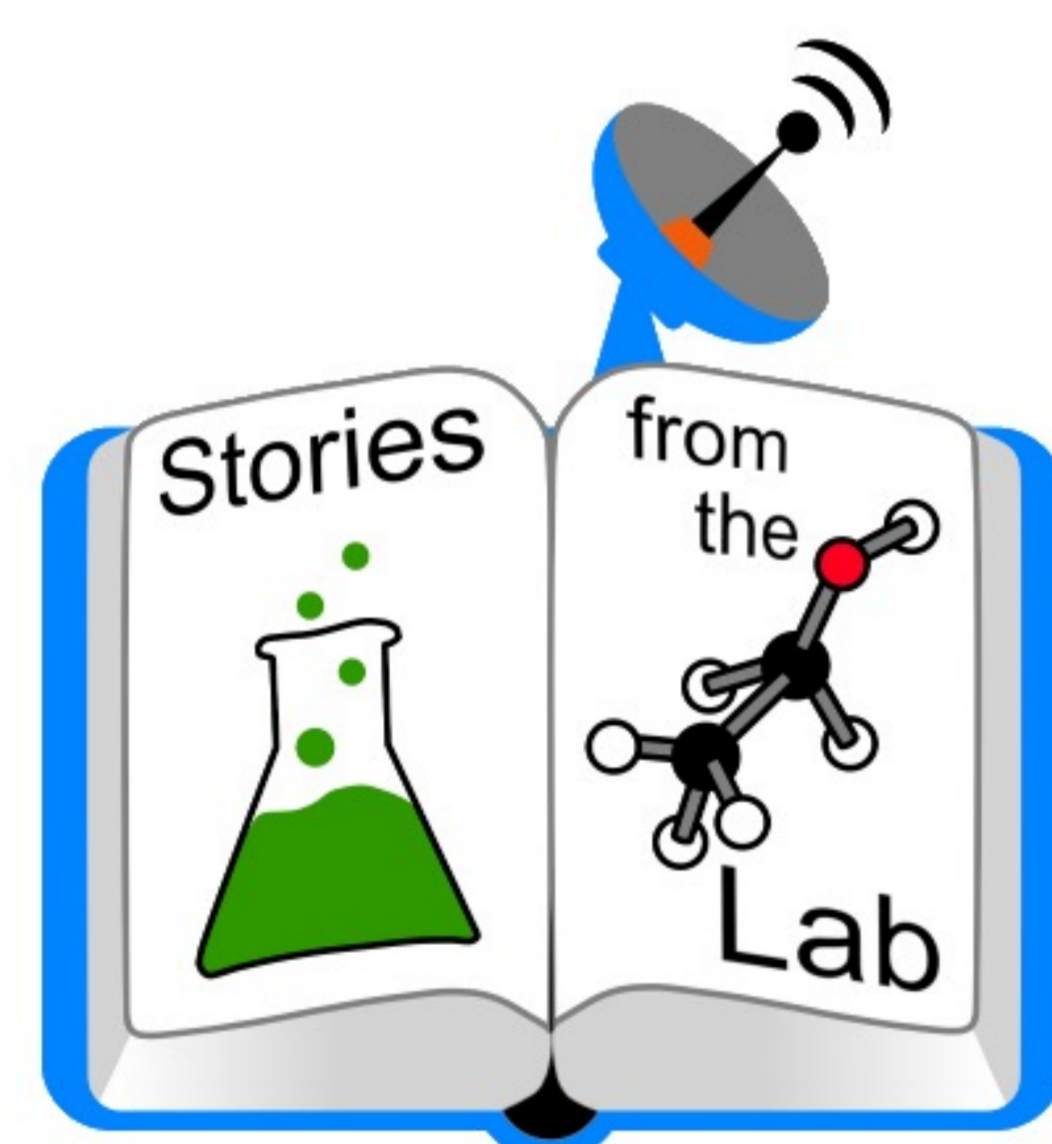


Presenters

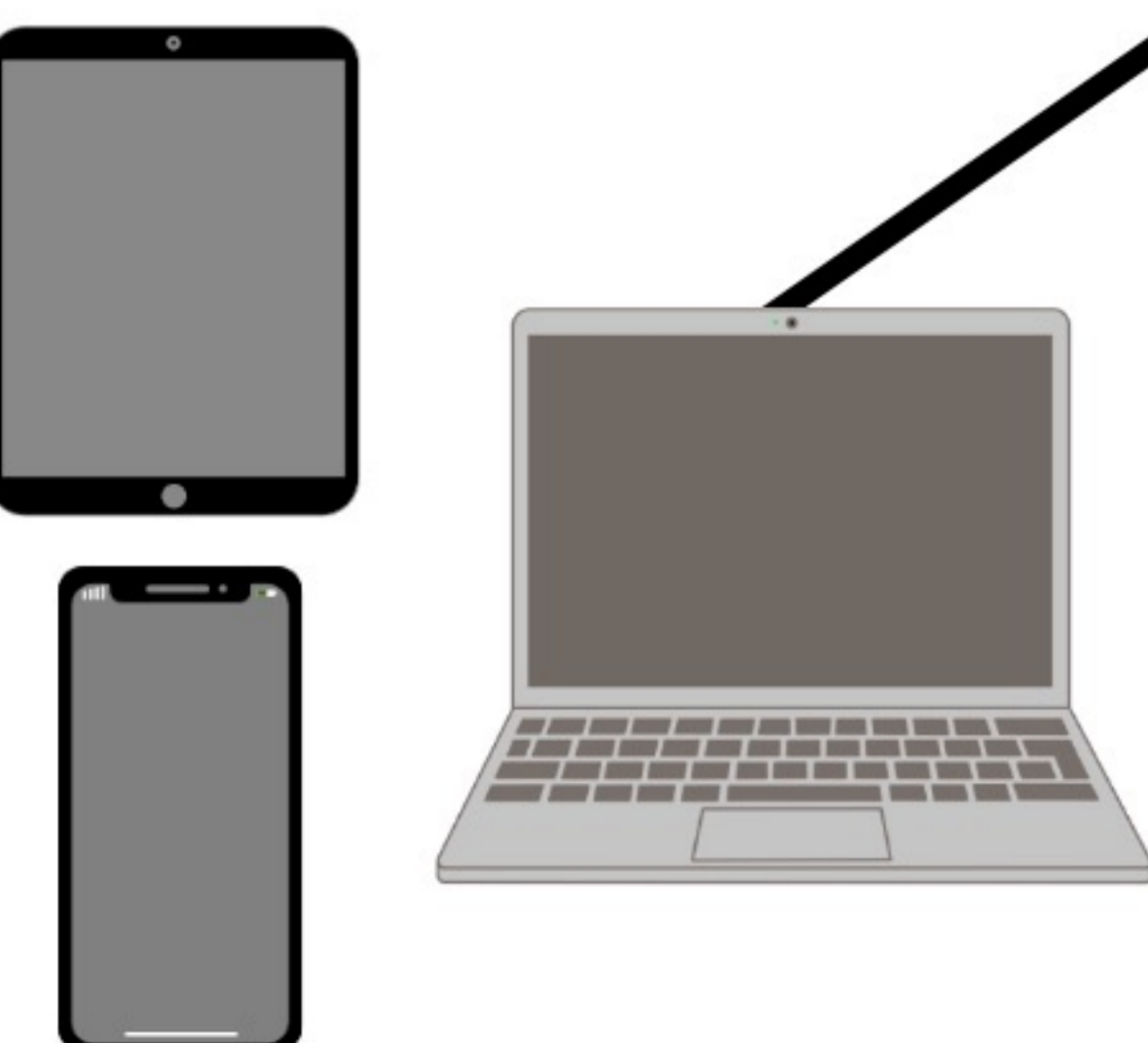
Videos



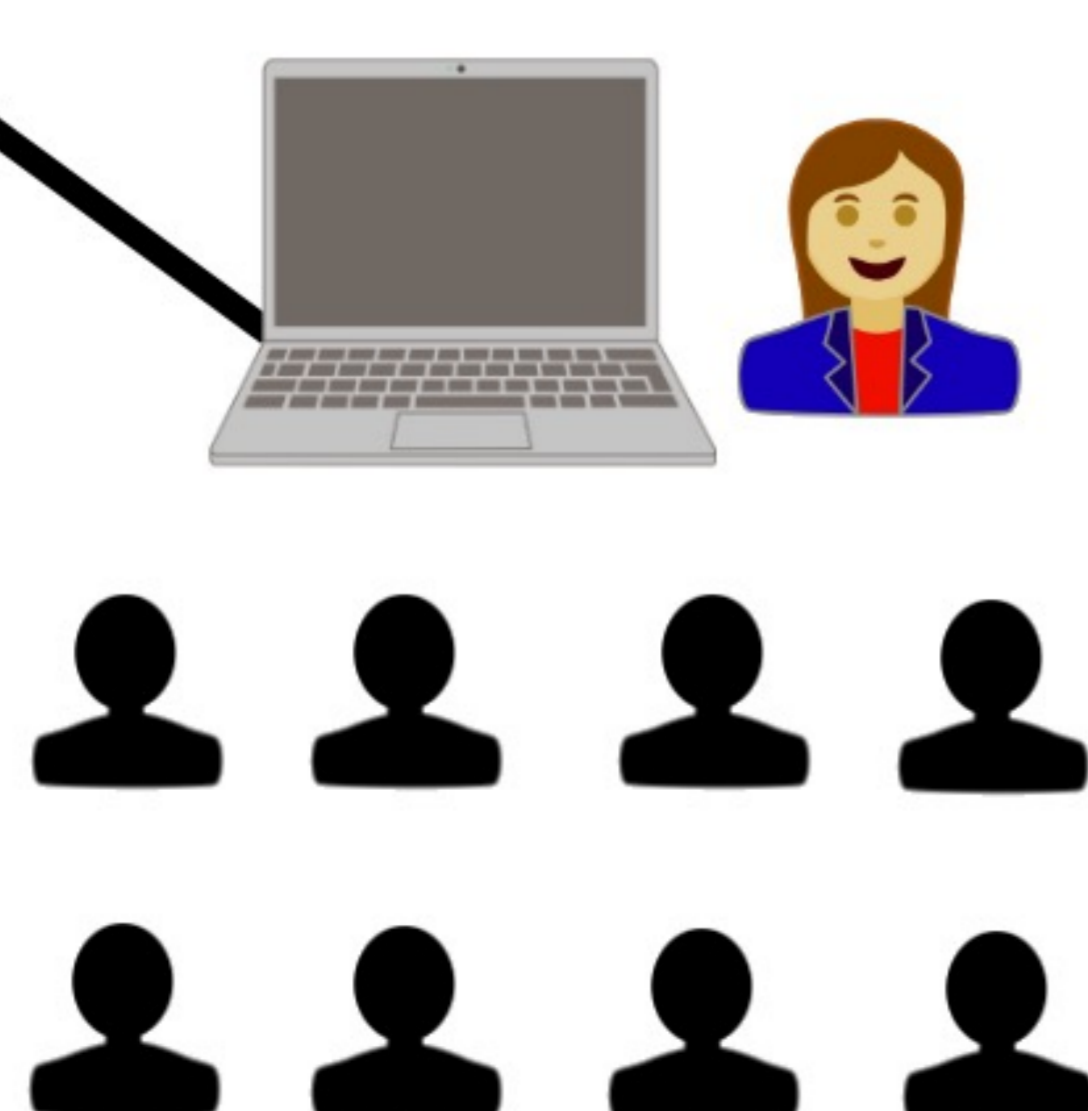
Teacher



Host



At-Home format



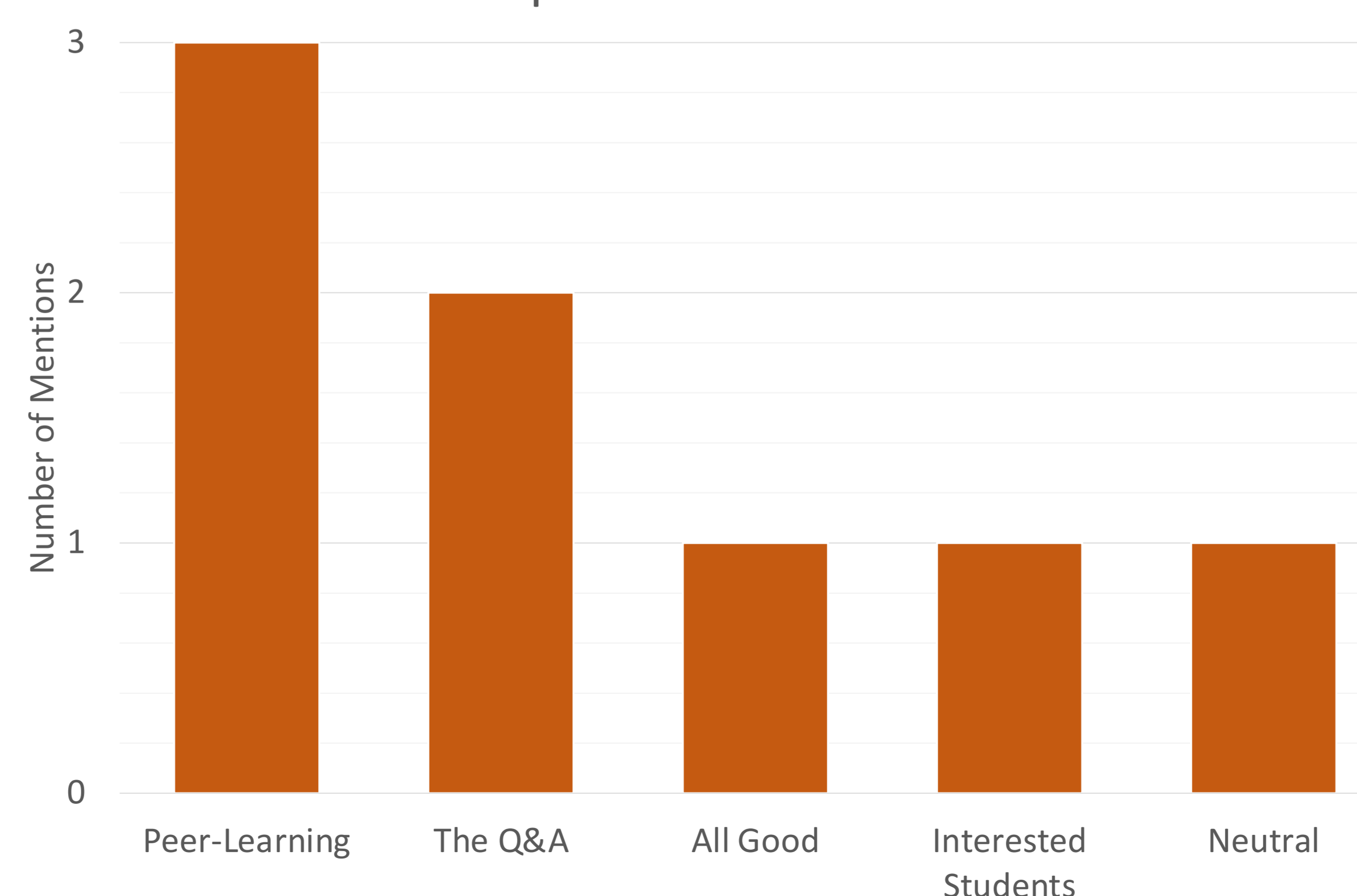
Classroom format

Presenter Feedback

When asked through an open-ended question how the session helped them, the vast majority mentioned simplifying or adapting their research for lay audiences (85%). All presenters found the sessions useful for their own development with half finding it extremely useful. The only negative feedback received was the lack of questions from some student groups.

It was also nice to be put in the spot with questions as it made me think on my feet. Also was nice to see what type of questions they asked so I would know what to include next time.

Presenters: What would you highlight as the best part of the session?



Teacher Feedback

The teachers were asked if they would have their students participate in a similar session again in the future and all chose extremely likely. Similar feedback was also received in relation to their expectations and how useful they found it (90% scored both as 5/5). Suggestions for improvement included linking the talks closer to the Irish curriculum and using captions. The only negative feedback received was in relation to issues around technology and internet.

I learnt a lot from the workshop and I think it will be very beneficial when I'm talking to students and their parents re subject choices/career options.

Discussion and Conclusion

- Some students did not like the original format of the sessions (Q&A after each speaker), so we changed it to a panel discussion instead.
- The panel discussion facilitated a two-way discussion through the chat function (At-Home format) and through the teacher (Classroom Format).
- More questions are asked by students when run in the "At-Home" format, with some directed anonymously through the host privately.
- Stories from the Lab has allowed us to continue to provide 2 of the 3 benefits to schools; *tangible role models* and *real-world context* for the curriculum.
- The flexible format has ensured its continuation throughout all lockdowns.
- These sessions could continue after COVID19 as it would benefit rural schools that previously found it difficult to engage with higher-level institutions.
- A long-term study of the students and a comparison of formats is required to confirm if these shared experiences provided the desired impact longevity.

Thank you to the teachers and presenters for making Stories from the Lab such a huge success, despite all the logistical hurdles needed to make it happen. Thank you also to everyone who responded to the surveys, the feedback has been hugely useful for us to improve the sessions.