

Gathering Student Feedback on Laboratory Classes



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About this Guide

Who is this guide for?

All Maynooth University staff who teach/support teaching in subjects with laboratory-based classes



Time to read guide

5 mins

Purpose of this Guide

This guide highlights matters that you may wish to consider when seeking feedback from students on their experiences of teaching and learning in laboratory-based classes.

Why Should you Think Specifically about Seeking Feedback on Laboratory Classes?

Generic feedback methods are rarely designed with laboratory-based teaching in mind and may need to be adapted before they can be used successfully in a laboratory environment.

Laboratory classes often operate in a different way to other forms of teaching. For example, classes sometimes run for many hours and students will often be too tired to participate in long post-class feedback exercises. Safety issues may mean the laboratory itself is not a suitable space for feedback activities. A large laboratory class divided into small groups each assigned a demonstrator may provide different opportunities for feedback, than other kinds of classes.

The practical nature of laboratory work may make some students more relaxed than they would be in other academic environments and some students more anxious. This may impact on students' interaction with feedback processes.

Tips for Seeking Feedback on Laboratory Classes

Ensure questions are relevant to the laboratory environment. Using a generic survey instrument that asks students about teaching methods that they do not experience can lead to survey fatigue and frustration.

Qualitative and discussion-based feedback can greatly enhance teaching, but it is often only feasible with small groups of students. If the laboratory class is very big try to find ways of dividing it into small groups. Demonstrator-led small groups might be used for this purpose if they already exist. Consider using in-class response technologies to get some qualitative feedback if it is not possible to break the class into smaller groups.

Students more familiar with quantitative methods may appreciate training on qualitative feedback approaches before participating in them (Chilvers *et al.*, 2019).

The nominal group may be a useful method for gaining feedback in laboratory-based subjects. The nominal group is a small group method that produces a numbered list of priorities which makes it more feasible for larger classes and for more quantitative subjects, than the focus group (see Varga-Aktins *et al.*, 2017 and 'Resources' below).

Specific Considerations for Teaching Delivered Online

Laboratory-based classes were particularly affected by moves to remote or blended learning as a result of Covid-19. Replacing laboratory classes with virtual experiments or similar kinds of teaching can affect students' understanding of the scientific concepts that the experiment is designed to demonstrate (Hensen *et al.*, 2020). Seeking feedback on online teaching provides an opportunity to assess this impact and make adjustments in response. Ask students for suggestions about how their learning of the relevant concepts could be improved in a remote environment.

Resources

University of Edinburgh Teaching Matters Blogs: Chris Sheridan

Distant Voices: Hearing online students loud and clear and Ross Galloway **Making large groups like small groups**

Nominal Group Resources: University of Liverpool, Varga-Atkins, Tünde *et al.* available [here](#) and University of Leicester, Varga-Atkins, Tünde *et al.* available [here](#)

University of Auckland:

Student Centred Learning Teaching in Labs

References

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