

Demo or Class Practical?

This checklist has been heavily influenced by ideas from [Getting Practical](#) (including but not limited to [material from Score Education](#)) and a talk given by David Sang and Alom Shaha during the 2012 ASE Conference. The idea is *not* to replace these, but to serve as a quick reference for busy teachers.

Reasons to Do a Demonstration

It is **unsafe** for 'unsupervised' students to carry out this practical themselves.

It will be easier for the students to **see the effect** despite being in a larger group.

The practical technique is **beyond their level of expertise** (and it is not an appropriate time to gain those skills).

By causing a **surprising or unexpected** result the demonstrator can improve attention and recall by inducing 'Awe and wonder'.

Students will learn more from a teacher's **commentary and questions** than they would from attempting the practical without these prompts.

The practical **takes too long** for the students to do, or it needs to be set up in advance.

Providing, setting up or clearing away a class practical will take up too much **technician time**.

The equipment is **scarce, expensive or fragile** and the consequences of breakage outweigh the benefits of handling it.

Reasons To Do A Class Practical

Students will learn or practise **planning** skills while designing the method for their investigation or experiment.

They need to learn the **technique(s)** involved for the future, or to become familiar with a piece of apparatus.

Students will gain transferrable skills from **working in a team**, including communication and responsibility.

There will be valuable opportunities to **check and promote understanding** while speaking to individual students when working in a small group.

The data gained will be used for analysis in some way and by collecting it themselves students will gain a better appreciation for the **'messiness' of real-world data**.

Students will **discover phenomena** or perhaps **recognize patterns**, feeling a sense of achievement by doing it themselves.

They will experience phenomena out of their normal experience and **enjoy the practical**, and by implication our subject.

The balance between the two lists will always vary depending on your situation. These ideas are intended as prompts for change, not unchangeable rules. Being able to justify a demonstration or class practical **in terms of learning** should be the objective; avoid following tradition because "it's the way we've always done it."