How to demonstrate well

Demonstrating

Don't touch the keyboard

In general, you shouldn't need to take control of a student's terminal. Doing so means the student is no longer doing things themselves.

Actively approach students

Don't just stand around. Some students won't ask for help and will suffer in silence. Amble around the room occasionally, ask random students how they are doing.

Look out for students holding their heads in their hands, twiddling their thumbs.

Terminals full of error messages are always a good excuse to approach.

Let them try to figure things out for themselves

Your students are here to learn, you need not answer every question. Don't be afraid to give them a small task that moves them closer to their goal, and come back later. In particular they are capable of finding materials on Blackboard without you having to find it for them. Don't concern yourself with trivial problems.

You don't need to know everything

By virtue of being selected as a demonstrator, you're likely to be equipped with enough knowledge to tackle most student questions. Some exceptional students may pose difficult questions: don't be afraid to admit you don't know, and ask them to find out.

• Get them to adequately describe their own problem

"It's broken", or "my code doesn't work" are not helpful diagnoses.

Ask "What should it be doing?", and "What happens instead?".

You want to lead the student to actually discover the bug, and fix it themselves instead of just swooping in and doing it for them. The best demonstrators don't give answers away.

Remind students of advisory

Advisory is a seldom used service. Extra help and support is available outside of timetabled sessions for students who need more time or just like to ask questions. Currently, in B59 2-4 every week day except Wednesdays.

Share your demonstrating time equally

You must try to make yourself equally available to help all students present. Some students may be in significant difficulty, but you cannot allow them to absorb your demonstrating time to be taught concepts from scratch. In these circumstances, suggest they review lecture materials, try and come up with small definable tasks and check in on them later. You may need to report their progress to the relevant module co-ordinator.

Try not to take yourself too seriously

Have fun. Don't be afraid to talk to students about non-work related activities (but don't be a distraction to those who want to work). Don't be overly harsh or critical of student work. Try not to patronise or condescend students who are struggling. Don't be afraid to show some personality, make yourself as approachable as possible to students.

Student work must be their own

Don't edit their code. Take care not to incrementally do someone's entire assignment. Again, obviously this shouldn't happen at all this year.

Sign-Off

Ask them about their code

Whether a student is stuck, or looking to be signed off, actually ask them what bits of the code does. Make sure a student can explain some of their work before signing them off. Be on the lookout for code they have sourced from a friend or online and cannot explain. Don't be accusatory, but explain that re-using other people's code (with attribution) is not necessarily bad, but it might mean they don't get many marks.

They don't need to do it YOUR way

Their work need not be perfect, don't be overly negative or picky about their approach. If it works, great. If it is not particularly efficient, or does not follow best practice, tell them about it in a constructive way: "...you could consider...", "...in future you could try...". Don't force them to change their code to meet your standards if they have completed the task and never change their code for them just to make it work better - now they won't have examples they understand to come back to.

Don't leave registers and sign-off sheets unattended

These documents have personal information on. Please don't leave them behind, it looks unprofessional and has the potential to expose student information.

• Be capable of signing-off before your session

It's your job as a demonstrator to be aware of the work that has been set. You must be capable of determining whether a student has completed the tasks to a good standard. You should be aware of what the applicable "correct output" of any tests should be. This may require a short amount of work **in your own time** to get up to speed.

Manage your sign-off time effectively

If it's busy, you may need to sign students off more quickly, but at a minimum you should ensure that the tasks they have been set are completed (to a reasonable standard) and that the code looks legitimate. Make them compile and execute their work in front of you. If applicable, have some test data for them to enter. Check their outputs, ask them a question or two. Most sessions are worth marks, we must make sure this is their work.

Consider using a queuing system

If the session is busy, consider getting students to form a queue by writing their usernames on a whiteboard, or by some other means. You might want to select one demonstrator to focus on sign-offs, while others continue to answer questions.

It's up to you as a group of demonstrators to get a feel for how the room is doing and you have authority for your session: use your initiative.

• Feedback problems to module co-ordinators

It is likely that you will be interacting with the students more than the lecturer and as such you should be able to recognise when the group as a whole is struggling, needs a few extra sessions, or needs more demonstrators. Don't be afraid to bring these things up, we want the students to get the help they need so that they can finish the set work.

Online signoff system

If your module uses an online signoff system (such as signoff.dcs.aber.ac.uk), learn how it works before the practical you are demonstrating for.

Emergencies

• In the event of an emergency...

Don't panic. Dial 222 (internally) or 01970 623111 to get a first aider, ambulance, police etc. If necessary shout for help, there are lots of trained people around the university. Send someone to alert staff at reception and the staff coffee room (or call 4404).

Serious Employee Stuff

Contracts

You should have one. Talk to Alan Macmillan or other members of the admin team (anm@aber.ac.uk or fbrstaff@aber.ac.uk) at the Computer Science reception.

• You are an employee: be on time, turn up and act professionally

Demonstrating is a job and you should behave appropriately. Make sure to be on time, some practicals might require setting up. This is, unless you're told otherwise, your job. If you can't make a session, for example due to illness, make sure you inform whoever runs the module and **the admin team** so that they can organise cover.

Don't take advantage of your position

You are a contracted member of staff. Be aware of this as a responsibility, do not abuse or take advantage of this position of authority even if in a light-hearted way.

Conflicts of interest

Do not sign off worksheets for close friends, enemies, or students you are involved with.

Be acutely aware of personal space

Your role as a demonstrator requires you to be in close contact with students. Try to keep a physical distance from students, both for reasons of personal space and also infectious disease.

Be clear about what you are doing or about to do. Do not lean into a student's personal space to access their computer without asking – in fact, do not touch their computer at all. Be aware of the potential offense that could be caused; our students come from a variety of backgrounds and cultures which all have different societal norms on this sort of thing.

Any problems?

- o Talk to other demonstrators...
- Talk to senior demonstrators...
- Talk to Jim Finnis (<u>jcf12@aber.ac.uk</u>), Alan Macmillan (<u>anm@aber.ac.uk</u>) or other members of the admin team (<u>fbrstaff@aber.ac.uk</u>)

Once again – please turn up to your session!

- If you miss a session, that increases the workload on other demonstrators and on the lecturer. Often, it can double it.
- Some students might not have their problem dealt with and will get very frustrated.
- This can cause them to "disengage" from the module which is a disaster for them.
- o If you cannot attend let us know as soon as you can.

Jim Finnis (jcf12@aber.ac.uk)

v1.0.9 October 2022. Distance, importance of attendance, personnel changes

Chris Loftus (cwl@aber.ac.uk)

v1.0.8. September 2019. Minor tweaks.

v1.0.7. January 2019. Minor tweaks. Sam (msn@) and Tom (ttb7@) v1.0.6. October 2017.