Chapter 5 Reviewing and improving your teaching
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Overview

I was so preoccupied with what students might think of me that I don’t think I’d have noticed if the roof had fallen in.

I don’t think reflection got much of a look in at the beginning. I had to calm down a bit before I noticed what was going on.

Seeing myself on video for the first time was traumatic but also a breakthrough. Although I wasn’t very good, I wasn’t terrible either and I think I started getting a realistic impression of myself as a teacher from that point and began to improve.

The way students see things is so completely different from the way I see them that it has been an eye-opener to get student feedback. I was worried that I was operating at an embarrassingly low level while they all thought I was pitching it about right.

I’d never kept a diary before but keeping a log about my teaching has become quite addictive. I bore my friends silly with all the things I’ve noticed and written down that I find fascinating.

I’ve now seen three of the lecturers in my department teach and they are amazingly different but all quite good in their own distinctive way. I don’t feel I have a style of my own yet, though I suppose my students might disagree!

What distinguishes good teachers from adequate ones is not so much any particular method they use as their ability to adjust to student needs, to different situations and to changes in the context. For example, they might use quite different methods with a first-year class containing students with varied backgrounds from those that they use with a second-year class of a more homogeneous nature. This requires flexibility, a wide repertoire of methods, and a constant commitment to making things work as well as possible.

Good teachers are aware of what is going on and can explain why they do what they are doing. They may not collect masses of student feedback, but they are reflective about their teaching and about the way their students are learning, and can point to a variety of sources of evidence to back up their insights. Elsewhere, you will find plenty of advice about effective teaching methods; this chapter is about being effective whatever your methods. It outlines some of the most effective processes through which you can become more aware of what is going on in your classrooms and on your courses, by reviewing your teaching in a variety of ways. It also provides a collection of resources with which to obtain evidence and insights about your teaching.
Using this chapter

This chapter is not intended to be read from cover to cover, but rather dipped into as and when you want to find out more about your teaching. Reviewing and developing your teaching is an ongoing process, with new challenges and insights at every turn. Most sections of the chapter are designed to be returned to several times: you may wish to photocopy the Appendices and use them repeatedly. (If you are using these materials to support your study for the Postgraduate Certificate programme, you will have access to ‘soft copies’ of many of these resources via the programme website. You will also find other, more detailed accounts of evaluation and review processes in later Packs.)

We give many practical suggestions for collecting evidence about your teaching and how it is received, but you are not expected to try them all! The most important component of the whole process of review is reflection, not collecting data. However, reflection isn’t necessarily easy, especially on your own. If some of the ideas presented here do not lead to the insights and progress that you had hoped for, try others and, in particular, try involving other people.

Activities and reflections

This chapter is not interrupted by the activities that you may have come to expect from your earlier reading. The chapter itself is full of prompts to activity and reflection – advice and practical ideas that will enable you to review and discuss your teaching on the basis of what is sometimes called ‘evidence’ but I would prefer to call examples or support for the claims you might want to make about your teaching expertise. The Appendices to this chapter provide practical activities that can guide and inform your development in relation to structured questions and frameworks. Please adapt and adopt these for your own particular teaching context.

Other materials in this course contain theoretical analyses of various methods which may help you to recognise more of what is going on in your teaching and guide your enquiries. For example, elsewhere in the materials (particularly in Pack 2), you will find accounts of how students learn and develop as learners. These accounts can, for example, help you to make sense of why different students respond differently to your teaching or why third-year and first-year students tend to prefer very different kinds of teaching. But you will already be developing a clear appreciation of how complex learning can be, as you consider your own professional learning as a teacher. Your appreciation of the subtleties and complexities of teaching is central to the reflective processes that underpin the approach of these materials.

5.1 Learning through action and reflection

Learning to teach well, like learning in any profession, is something you largely acquire ‘on the job’. But this does not happen simply by copying other teachers or through practice alone. There are plenty of truly terrible teachers who have had many years of practice – they simply have not learned anything from this practice.
What turns experience into learning is reflection. Kolb (1984) describes learning from experience as taking place through a cycle involving four stages, as shown in Figure 5.1.

![Figure 5.1 Kolb's cycle of learning](image)

Applied to the process of developing your teaching, this cycle is as shown in Figure 5.2.

![Figure 5.2 Applying the learning cycle to your teaching](image)

As you learn about teaching, you go round this cycle many times. And as you go round you not only develop your teaching methods, but you also become more observant. You develop more sophisticated and powerful explanations of what is happening, and this gives you a better basis for the teaching decisions you make. Each cycle is an experiment with your teaching. These experiments are not random, but are based on hunches and generalisations that gradually turn into personal theories about what makes teaching work, about how students learn, and so on.

The formal theories that you will find expounded in this pack and elsewhere may influence your hunches and personal theories, but they are unlikely to be the only basis for your teaching decisions. If you were simply to set yourself the task of reading theory from time to time as you get on with your teaching, your learning cycle might look like Figure 5.3. What is obviously missing here is reflection and action planning. This chapter is about the process of going round the learning cycle, using a variety of mechanisms to make it more likely that reflection and action planning take place frequently in engaging and effective ways.

The keys to making this cyclical process effective are:

- going round the cycle many times – as an integrated part of being professional – rather than on isolated occasions as part of a course;
- doing it thoughtfully rather than mechanically – for example, when you are driven by a desire to find something out;
- having good evidence on which to reflect – for example, from student feedback or observations;
- doing it with others – through discussion and comparison of perceptions and methods.
A theoretical account of 'reflection-in-action' and its role in professional development can be found in Extract 1.3 in Chapter 1, and John Cowan's personal account of the value of reflection forms Extract 3.5 in Chapter 3.

Here is an account of an occasion on which I reflected on my teaching – both while I was teaching and afterwards.

Earlier this year I was giving some seminars for academics at Stanford University. I'd over-prepared, out of anxiety about seeming sophisticated enough for Stanford, and had too much material for the time available. By two-thirds of the way through, I was aware that I had far more material than I had time for, and I started skipping transparencies and speeding up. I still ran out of time and finished without a summary, which felt very unsatisfactory. I know both from the literature and from my own experience that a good summary at the end is vital.

During the seminar, I was aware that I was rushing and knew this was a repeated pattern for me. In the middle of a presentation, I tend to be too wound up to be able to make good decisions about what to do. I had no idea if the audience would rather that I rushed or that I summarised and I made the decision for them.

In retrospect, I think I got it wrong. My learning point from this incident is that I get anxious when I don't know if I have made the right decision. What I ought to do is share the decision by saying something like: 'We do not have sufficient time for my remaining material. I can greatly speed up, skip about half the remaining material, or stop and summarise, leaving some time for discussion. What would you rather I do?'

I also need to cut down the content and give more thought to time-management within the session.

Keeping a reflective log

A reflective log is a little like a personal diary about your teaching. It can help you to reflect upon your teaching by helping you to: notice more about what works and what does not; notice patterns; analyse the way students respond; and so on.

People often use an A4 hardback notebook, which they keep with them all the time, making notes as thoughts occur to them and sitting down for longer reflective sessions from time to time. It can be helpful to write at least something every working day and to date entries and identify the session or incident being commented upon; for example:

Nov 23rd. 10.00–12.00 studio session. Urban Design 204. Some students very late and unprepared but Dr Bryant doesn't seem bothered. Find this annoying. Should I raise it with students?

and a few pages later ...

Nov 30th. 10.00–12.00 studio UD 204. Students late again. Had a quiet word with three saying I found it disruptive and that I wanted them to turn up on time and prepared. Heart in mouth, but I was right. Another student
commented loudly 'Too right, lazy sods!' I THINK MOST STUDENTS WANT THE TEACHER TO BE FAIRLY STRICT.

You may find it helpful to note down:

- descriptive accounts of sessions that you have just taught;
- comments on what students do well and badly in their assignments;
- observations about a thought-provoking encounter with a student;
- advice from a colleague;
- thoughts that occur to you about your teaching, for example, some insight that is prompted by your reading;
- your responses to activities in your study of these materials;
- questions about teaching that you would like answers to;
- teaching ideas that you would like to try out for yourself.

Keeping such a log can be enormously helpful for a variety of reasons.

- The act of writing the log will capture observations before they are forgotten, and this will sharpen up your powers of observation so that you notice more next time.
- Being able to read your own observations will make it easier to think about and analyse what is going on, especially as you compare notes on different sessions.
- Reading back through your log, you may notice patterns: problems that recur, or changes that take place over time, for instance in how you prepare or how students tackle your assignments.
- Notes about specific sessions can guide how you plan for or handle that specific session or topic next time.
- You can record messages to yourself about what to do differently in the future, or even write out the revised plan there and then.
- If you are collating evidence for a portfolio, your log will provide invaluable source material.

Analysis of teaching sessions

After a session you have taught that struck you as particularly successful or perhaps problematic in a puzzling way, you can use the opportunity to reflect upon it to capture learning points. A simple framework for such an entry in your log could be as follows.

- What happened?
- What went well, and why?
- What went less well, and why?
- What would you do differently next time you run this particular session, and why?
- What insights have you gained from this experience?
More detailed prompts for reflection can work well, too.

- If you asked students what was the best or worst feature of the session, what would they say, and why?
- If an experienced colleague had observed the session, what would they have said was its best or worst feature, and why?
- What element of your planning might have influenced the way the session went?
- What did you do differently from normal, and what impact did that have?
- What aspect of the session is likely to have had most impact on how students study the topic afterwards?
- What ideas from the literature (for example, from this pack or related reading) might help explain some of what happened?

**Discussing the log with others**

Your log will probably be personal and private, informal and best read only by yourself, so you can write it for yourself. However, you may find it both interesting and rewarding to discuss particular entries with another teacher.

- Explaining to another person incidents that you have experienced and thought about can make you more rigorous.
- Hearing another person’s reflections will give you ideas both about teaching and about keeping a log, and give you a better perspective on your own teaching.

Try keeping a log for one week, writing at least one entry every day. Look back through it, and think about whether the kinds of things you have noted down are interesting or helpful. Suggest to yourself some changes in how you are using your log.

- Make more descriptive observations, without judgements, whether or not they seem important at the time.
- Note three good things and two bad things after every class.
- Keep notes on bits of your reading in the log, instead of separately.

Then try keeping the log for a second week, using your new approach. Finally, sit down with a colleague or mentor (in person or online) and pull out two or three interesting things that emerge from having kept the log for the two weeks.

**Stages of development**

What are you expected to reflect upon and note down in your log? What new teachers reflect upon tends to be different from what experienced teachers reflect upon. Teachers often appear to go through stages as they develop, and two similar ways of explaining this development are summarised here. While the two models have a different number of stages, they overlap and focus on the same aspect of development.

<table>
<thead>
<tr>
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<tbody>
<tr>
<td>Stage 1: Focus on self, including own knowledge of subject</td>
<td>Stage 1: Focus on self: will I survive and be accepted?</td>
</tr>
<tr>
<td>Transition from focus on content to focus on process</td>
<td>Stage 2: Focus on subject: do I know my stuff and have I covered everything?</td>
</tr>
<tr>
<td>Stage 2: Focus on methods: how should I teach?</td>
<td>Stage 3: Focus on students as <em>Receptive</em>: how do I get it into their heads?</td>
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<tr>
<td>Transition from focus on teaching to focus on learning</td>
<td>Stage 4: Focus on students as <em>Active</em>: how can I get them to learn it?</td>
</tr>
<tr>
<td>Stage 3: Focus on outcomes: what have students learned? Am I effective?</td>
<td>Stage 5: Focus on students as <em>Independent</em>: how can I support them as independent thinkers and learners?</td>
</tr>
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Adapted from Nyquist and Wulff, 1996, and Kugel, 1993

These developmental models help to clarify what teachers focus their attention on, what they are preoccupied by, and what will dominate their reflection. You may well be unable to short-circuit these stages. For example, until you feel sufficiently on top of your subject, you may not feel confident enough to start experimenting with methods. And until you feel quite comfortable and familiar with your methods, you may not be able to notice how your students are going about their learning or what it is that they have actually learned. This is only to be expected. Being able to move on so that you are able to reflect on other things is as much about how secure you feel as about sophistication.

Extract 1.1 in Chapter 1 of this pack elaborates on Nyquist and Wulff’s account of how teachers develop. Where do you currently stand in relation to each of the aspects of development that they describe? What are the implications of this for what you are currently paying attention to in your teaching? Make a note of your answers to these questions, and come back to them later to see what has changed, and how.

**5.2 Creating a reflective portfolio**

**Collating reflection and evidence**

Teaching portfolios, often consisting of a collection of evidence about teaching, are now commonly used by teachers in higher education and other professions. A portfolio can take a number of forms: from the drawer (or carrier bag, at worst!) full of unstructured and disorganised evidence of your teaching, through the extended curriculum vitae (discussed in Chapter 2 and, briefly, below) that can be used for application and promotion purposes, to a highly reflective resource or space that encourages personal and professional development and evidences your professionalism at a range of levels. The underlying rationale for teaching portfolios of any sort – evidence bases or developmental spaces – is simply that there may be no public evidence of your developing abilities as a teacher unless you maintain it for yourself.
Teaching database

This is simply a section of your filing cabinet where you keep any and all evidence about your teaching that you might need to use at a later date: student feedback, exam results, a copy of teaching materials you have created, comments from external examiners, accounts of innovations you have introduced, and so on. The evidence is not much use to anyone other than you in this undigested form, but if you build it up as you go along, right from the start, then you will be able to adapt it and re-use it as the basis for many different kinds of portfolio – of the sorts described below – as and when you need them. If you don’t establish something like this at the outset, it will be very difficult to start later on.

You will probably generate a lot of material as you teach. Your database or ‘dump file’ for your portfolio may include any of the following examples:

- lesson plans;
- notes of tutorials;
- course documents and handbooks;
- visual aids;
- handouts and other teaching materials;
- worked examples;
- reading lists;
- assessment schemes, questions, tasks and assignments;
- praise from an external examiner;
- notes you have made before, during and after a class;
- a teaching diary or log;
- feedback that you have received from students, peers or your mentor on your teaching, and indications that you have evaluated this feedback and used it for improvement;
- a letter of appreciation from a student who has made a successful career move.

Whether or not you are required to do so, we recommended that you include some narrative as well as evidence alongside your material. Raw evidence is difficult to interpret. You should certainly contextualise the evidence, saying when and where and for what educational purpose it was produced.

Teaching CV

Extending your current CV into something more akin to a teaching portfolio involves making the best case you could honestly make to others about the quality of your teaching, for example for use in probation, promotion or job seeking. Amongst other things it can:

- provide information about the range and level of courses you have taught;
- give the number of students whose PhDs you have supervised;
- collate your student feedback ratings;
- describe the innovations you have led or been involved in;
- list any publications about teaching you have produced.
There may be formal requirements for the form, contents or maximum length of such a teaching portfolio, or you may have to make these judgements for yourself. Most institutions now include teaching excellence in promotion criteria, and recommend the use of a teaching portfolio as the way to claim excellence. (Further advice on constructing and using a standard CV can be found in Chapter 2.)

Teaching portfolio — for your own learning

This is more of a process than a product, and undertaken for intrinsic rather than extrinsic reasons. Putting together a teaching portfolio in the way described by Peter Seldin (1997) (see ‘Further Reading’) involves a personal, retrospective review of your own teaching, for your own purposes, and is itself a learning experience. It may involve developing a personal philosophy of teaching: explaining to yourself why you teach in the way you do and why you think it works, and interpreting what evidence you have that it works. It is often carried out in co-operation with others doing the same thing so that you can have productive and sympathetic discussions about your teaching.

Teaching portfolio — for assessment

A formal course, such as one for the Postgraduate Certificate in Teaching and Learning in Higher Education, may use a portfolio as the main means of assessment. The portfolio may be required to:

- record active involvement in the course and in coursework assignments;
- include case studies of changes that you have made in your teaching;
- contain reports by observers of your classes;
- include other evidence about your teaching.

Teaching portfolio — for accreditation

The materials that you are currently working with have been produced to support teachers in higher education to obtain accreditation. At the time of writing, this accreditation is overseen by the Institute for Learning and Teaching in Higher Education (ILTHE) and the Staff and Educational Development Association (SEDA). It is clear that the formal arrangements for supporting professionalisation are about to change, but the arrangements will almost certainly continue to require some version of a portfolio.

If you are using these study materials as part of an accredited course, you will be appropriately guided in the formal assessment processes and procedures. It is worth familiarising yourself with the formal requirements, since this will help you to look out for appropriate forms of evidence as you teach, to put it in your teaching database for later analysis, and to present the appropriate material in the form required.

Making action plans and experimenting

Experimenting means more than thinking ‘Let’s try something and see if it works’. As with formal science, you may have a hypothesis about what is going on which has emerged from your observation and reflection, for example the following.
I think the reason students are not joining in my sessions is because they haven't read the material they are supposed to have and they don't want to show their ignorance or laziness.

You could test such a hypothesis by asking students why they are not joining in.

A hypothesis could also lead to action plans.

If I am right then if I manage to get them to read even a little then they are more likely to join in. So, what I'll do is provide them with short extracts of each of the chapters they are supposed to have read. I predict that most will go on and read the complete chapters, because the extracts are interesting but incomplete, but all of them will at least read the extracts, because they have a copy of their own and they are short.

The test of this might be to make a note of how many students join in during the first 10 minutes of the next session where this strategy is adopted. You could also ask the students, perhaps at the end of the session, how many read the extracts and how many read the complete chapters.

Teaching situations are seldom as one-dimensional as this – there are probably a range of reasons why students are not participating and a range of interrelated actions that might address the problem. However, this simplified example helps to explain the logic of the process involved. Figure 5.4 shows how the sequence can be summarised in an action learning cycle. This is the cycle of action and reflection introduced in Section 5.1 of this chapter.

The important points to notice here are:

- that evidence is collected to check out particular hunches rather than as a routine process;
- that reflection is focused on particular questions, informed by the evidence that has been collected.

Developing a personal rationale for teaching

The purpose of reflecting on evidence about your teaching is not simply to make pragmatic decisions about how to teach – it is also to develop a

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Figure 5.4 The action learning cycle
personal understanding of teaching and a rationale for choosing one method rather than another. Reflection should go beyond description of what you do to analysis of why you do it.

As you notice consistent patterns in your teaching, so you will develop explanations that make sense to you and stand up to tests when you try out new methods. Over time, you will be able to start articulating your personal rationale explicitly. In Peter Seldin’s book *The Teaching Portfolio* (1997) there are a series of extracts from experienced teachers’ portfolios, and each starts with a statement of their ‘teaching philosophy’. This example is taken from a much more extended statement.

Students learn better when courses are experiential in nature and in structure ... I am able to make my classes more meaningful for my students because they become active participants in events and activities. Their participation leads to the development of knowledge as well as skill.

Seldin, 1997, p. 116

One of the important things about the ‘teaching philosophies’ that Seldin cites is that, as well as being clearly heartfelt and based on years of thoughtful practice, they are all very different from each other. Each teacher develops his or her own unique personal philosophy. Some could be couched in the language of related literature, but all are actually expressed personally in terms of beliefs.

The teacher in the example above has her own understanding of what ‘experiential’ means and of what ‘active participation in events and activities’ really consists of. These ‘teaching philosophies’ encompass values and beliefs as well as scholarly knowledge and practices.

As your reflections throw up insights, try to capture them by writing about them in your teaching log. As you collect insights, try to work them up into a consistent rationale for what you do that could inform much of your teaching practice. Such a rationale will feed back into what you look out for and notice in your classes so that your enquiries and teaching experiments become increasingly more purposeful and your interpretations more insightful.

5.3 Using feedback for reflection and review

There are numerous sources and techniques that you can use to strengthen your claim to developing your reflective skills as a teacher: we shall be looking at the following in this section:

- colleagues and mentors,
- observation,
- students,
- video and audio recordings,
- student learning, performance and behaviour,
- educational development staff,
- literature.
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Colleagues and mentors

Teachers go about their business in ‘communities of practice’ where approaches to teaching and understanding of teaching and learning are to some extent developed communally and shared, at least implicitly. If they were not shared, you might see more variation in practice! Having a mentor who is already part of this community of practice can help you to become a member more quickly.

Using a mentor

Mentors can perform various functions: providing practical advice; monitoring your teaching through observation, student feedback and formal review; inducting you into the culture and social life of the department; acting as a supporter and guide as you learn how to teach. Sometimes mentors are genuine peers, using a model of ‘co-enquiry’ and learning alongside the person they are mentoring.

If you have a choice of mentor, you may want someone who:

- knows the ropes and can gain access to resources, such as secretaries and photocopierners;
- is supportive and a good listener;
- has sufficiently recent experience of becoming a teacher as to be able to empathise with your difficulties;
- is an experienced teacher of the same subject (though this may be incompatible with the previous criterion!);
- has juggled the same commitments as you – for example, finishing a PhD, looking after children or teaching in more than one institution at a time.

If your department has a formal mentor scheme with its own procedures, you may not have a choice either of mentor or of their function, but you can still try to make sure that you get from the scheme what you need.

There is no standard pattern that determines the frequency of meetings, their structure or their content. This needs to be worked out individually and agreed so that there is no misunderstanding. You might wish, for instance, to:

- meet weekly for the first month, monthly for the next term, and then play it by ear;
- structure each meeting by reviewing your recent teaching and discussing plans for your forthcoming teaching activities;
- leave space to discuss particular incidents or problems that have arisen, or things you have read about teaching;
- make it somewhat reciprocal so that your mentor also reviews aspects of their teaching, plans and incidents.

Looking at other people’s teaching plans and materials

Ask colleagues if you can look at the documents associated with their teaching: their lectures notes, handouts, reading lists, student records, web design plans, and so on. It may not matter what the subject matter is: ask them why they do things in the way they do. If you also sit in on their
classes, you will see how their planning relates to their practice and how, as they teach, they use the ‘props’ they have prepared.

Seeking comments on your teaching plans and materials

You can also ask colleagues to have a look at your syllabus, your draft assignments or a detailed plan for a lecture. Teachers differ in how they plan and organise their teaching, and their views on your preparation will also differ – but they will help you to get a perspective on your teaching. They may spot some things quite quickly – such as more content than you can get through in the time, or assignments that are too demanding.

Sitting in on other people’s classes

Although, having been a student yourself, you will have seen many teachers at work, you may not have observed a class from the perspective of the teacher before. Now you may be watching for how the session is started, the pace it goes at and how difficult students are handled. Try and arrange to sit in on the classes of some ‘good’ teachers in the department and then to have a chat with them afterwards.

In watching several of your colleagues, you will notice that there is a variety of ways of teaching well, and you will get a sense of the options available to you. Seeing clear models of teaching – which you might want to emulate or steer clear of – can be enormously useful.

The observation checklists in the Appendices will help you to identify crucial features of your colleagues’ classes.

Asking colleagues to sit in on your classes

A colleague can help you to get a balanced perspective on your own teaching. If you are fairly new to teaching, your early lectures (or teaching sessions of any description) may be relatively fraught affairs, and having someone observing you would probably only add to your anxiety. Inviting colleagues to observe may take even more courage for an experienced teacher who has never received the benefits of feedback. It is important to establish in advance that the colleague you invite to observe will not be over-critical afterwards.

If you invite a colleague to sit in, what will you want them to pay attention to: your mastery of the content, your methods or what students had got out of your session? ‘Stages of development’ in Section 5.1 of this chapter distinguished between these areas of focus.

Interpreting student feedback

Most departments have student feedback systems; you and your colleagues will probably have received and interpreted such feedback before. You may not have a good feel for whether particular ratings are above or below average, or whether or not you should respond to individual comments. Your colleagues will be able to help you to make sense of such data and get a balanced view of student comments.

Reviewing your overall teaching performance

Your overall teaching performance is likely to be reviewed formally a number of times in your career – for probation, during appraisal, for accreditation, for promotion, and if you apply for a job that involves teaching. Your skill as a teacher is increasingly called into question, as the
student learning experience and teaching effectiveness become more important measures of the quality of any higher education institution.

One way to prepare for any review of your teaching is to have a 'dry run' with a colleague or mentor, who can:

- help you to identify your overall strengths;
- help to make judgements about the quality of your claims about your teaching and how you have supported these;
- help to identify where you might need more teaching experience or evidence to be able to present a convincing case.

Your colleague or mentor may have seen a number of such overall reviews of teaching before, and so be in a better position to give a balanced judgement of the relative strength of your teaching.

Observation

It can be very valuable to get the perspective and judgement of another person on your teaching through inviting them to observe you in action. The focus of attention of a colleague who teaches the same subject will be very different from that of a teacher of a different subject or from that of an educational expert, so you need to be clear about what you want from observation.

Planning and meeting beforehand

Before you allow anyone to see your teaching, make sure that you are clear about:

- why you want them to observe, for example to spot things that you cannot spot for yourself, to make a judgement that you feel you are not in a position to make, or to suggest solutions to a problem that you do not know how to tackle;
- what you want them to observe, for example how you use a new method or what students get up to while you are teaching;
- how you want them to observe it, for example by making a detailed descriptive record or by using one of the observation checklists in the Appendices;
- how you will de-brief afterwards (see below).

Meet briefly before the session and make sure that the observer understands the context: what the course is about, what the students have already done, how this session relates to others, and so on. You might also want to provide your teaching plan for the session and any handouts that the students will have. As far as possible, stay in charge of the process and get out of it what you want not what the observer wants.

Using an observation checklist and keeping a written record

Observation without any kind of structure or focus leaves it open to subjective bias and often focuses on content rather than process. The simplest and often the most useful way to observe is simply to keep a detailed record of what was observed, such as the following example.

10.27: three students ask questions on the same point (meaning of 'validity').
10.28: oral explanation of 'validity' – thorough and detailed with many examples. No visual aids or interaction. Students not taking notes.
10.56: explanation of 'validity' stops.
Lecture ends.
No summary or conclusion.
Points 4–8 on the handout not covered.

The Appendices contain several examples of observation checklists that are fairly structured so as to focus on specific issues. You can draw up your own checklists based on these ideas, focused on aspects of your teaching that you would like feedback about. You will gain most by guiding your observer rather than leaving them with a completely free hand.

De-briefing and giving feedback
Both giving and receiving feedback can be very difficult because it is outside normal social conventions. It can feel uncomfortable to tell someone what you think of them. The person giving feedback may also feel uncomfortable and may resort to being unhelpfully bland, while the person receiving feedback may be defensive. We sometimes tend to focus on personal inadequacies rather than personal strengths.

It is possible to overcome many of these problems by adopting, and agreeing with your observer, simple 'ground rules' for de-briefing after an observation.

Ground rules
- You should speak first, commenting on your own teaching. Self-assessment and reflection is what the process is aiming for. The observer may need to prompt you by saying 'So what were you pleased about in that session?'.
- Positive observations should be made before negative ones. The observer can always find something positive to say first, however awful the session!
- Balance positive and negative comments in both their number and the amount of time spent on them, to avoid undermining confidence. Confirming good practice is as important as eliminating bad points, and builds confidence.
- Observations should, as far as possible, be specific rather than general, and based on descriptions of events rather than subjective judgements. For example,

  I noticed that in the first 30 minutes three students spoke and five did not rather than

  You were hopeless at involving students.

  Similarly,

  I was confused when you switched to the second example rather than

  You were confusing.
• Any negative observations should be turned into action points rather than left as criticisms. For example,

So, let’s think what else you might do if confronted with that situation again ...

rather than

You handled that situation badly.

• The observer should restrict feedback to behaviour that the teacher can control – for example, it would be inappropriate to comment on a teacher’s stutter.

• The teacher should listen to feedback without comment, reflecting rather than interrupting or challenging.

• Summarise at the end, so as not to finish up with thoughts dominated by the last negative comment made or the last problem not solved. Try to build a balanced overview.

• If you are collecting evidence for a portfolio, make a written record of the observation and get the observer to sign and date it.

Students

Students are an obvious choice as a source of feedback on all aspects of your teaching. Students can be reliable and valid judges of teaching, and they are likely to provide a perspective quite different from that of colleagues. However, some caution needs to be exercised in using student feedback.

• Students sometimes prefer methods which make life easier for them or which are less challenging, but what they like is not always what is best for their learning.

• Students are sometimes conservative, preferring what they are familiar with to change or innovation.

• Students are not in a strong position to propose alternatives to what you do.

• Vociferous students are not always representative.

• What is appropriate for some students may be inappropriate for others, and you may have subgroups of students with distinctive patterns of feedback which are not evident if you look only at average feedback ratings.

So while student feedback is enormously valuable, it needs to be interpreted and responded to with care. Students cannot tell you what to do, but they can tell you things to take into account when you decide what to do. Students should not be considered simply as providers of evidence. Teaching and learning is a joint enterprise between teachers and students, and improving teaching and learning is also a joint enterprise.

As well as being able to tell you what is working and what they have learned, students can help you to diagnose problems, and to decide on appropriate changes and, most importantly, help to make these changes work. Change is not something you can simply impose on students. You can involve students in a number of ways.
- Explain why you are requesting feedback and what you intend to do with it.

  I'd like to check out how these sessions are going, to help me to plan sessions later in the course. If you complete these short questionnaires, I'll bring a summary to our next session when we'll decide what to do about it.

- Involve students in finding out what is going on.

  I'd like to have a feedback discussion over coffee with one student representing each seminar group, once a fortnight, immediately after the lecture on Wednesdays, to discuss how the course is going.

- Show students what you have found out, asking if your summary is fair and representative.

  This is the summary of the feedback you gave me last week. It suggests that I'm assuming too much background knowledge and going a bit fast. Is that a fair summary, and is that what I should be paying attention to?

- Ask students to suggest the possible causes of problems.

  The marks on the lab reports from the experiment in week 4 were rather low – averaging about 5 out of 10. Why do you think this happened?

- Ask students what could be done to change a situation, or whether your ideas for change are sensible.

  What could I do to help you to write better lab reports, and what could you do? Would it help if I produced a model lab report?

- Present the solutions to problems as a joint exercise.

  I've produced this checklist that I'd like you to use to go over your lab reports before you submit them, to make sure you have done everything that you should have done. After the next round of lab sessions let's have a chat about whether it's working for us.

You might consider a number of the specific techniques outlined below, for getting feedback from students.

**Questionnaires**

Students themselves can generate questions to ask in questionnaires, and even conduct a complete survey for you. What a survey designed and conducted by a student might lack in rigour it will gain in the relevance of their perspective.

**'Consensus' groups**

You can ask students, within a single lecture, lab or studio session, to discuss features of your teaching that they like and want retained, and features that they would like to see you change. However, unstructured discussion groups can be dominated by a few individuals with idiosyncratic views, and you may get a very unrepresentative picture. If
you divide students into groups of four to six and ask each group to list three positive features and two things to change, and stipulate that they reach a consensus before anything is written down, you will be more likely to get a fuller and more balanced view.

‘Coffee’ groups

Instead of one-off feedback sessions you can keep track throughout your course without much effort by setting up a group of students you meet for coffee, perhaps once a fortnight, to give you feedback on how things are going – something with the feeling of a ‘focus’ group. Forming such a group from one student in each seminar group or from each row in a lecture room helps to keep it representative. Providing coffee may be sufficient incentive to get them along, and students like to feel consulted.

Online feedback

You can provide an e-mail address to which students can post feedback messages at any time, or set up a computer conference so that students can see the things others have contributed. You can reply to such messages, informing students electronically about what you intend to do in response, and this will encourage thoughtful, constructive feedback.

Video and audio recordings

Seeing and hearing yourself can be an enormously powerful tool for reflection and change, and very challenging. Most initial training courses for teachers use video feedback because it works so well. For detailed analysis of what is going on in a teaching situation, an audio recording is often nearly as useful, but lacks the power of visual images.

Technical matters

For the purpose of getting feedback from a video, you do not need a very high quality picture. The visual images act as a prompt to reflection rather than providing detailed information. It is usually fruitless trying to capture what is on a blackboard or screen. A modest camcorder on a tripod at the side or back of the room with a fixed wide view may be perfectly adequate. Getting some students in the picture so that you can see how they respond, and your being able to move around without disappearing from shot, is more important than trying to get close-ups. It is better not to have a technician in the room to operate the camera. You will need a decent sound track, so use a radio microphone that clips to your clothes (and leaves you free to move around) rather than relying on the camera’s own microphone or a fixed microphone on the lectern. Your audio-visual centre or staff development unit will probably be pleased to help you set up such equipment.

Viewing a video on your own

It can be traumatic seeing yourself for the first time on video. Your voice will sound flatter and you will look less animated than it feels live. So view it on your own first. If you hate it, then simply wipe it so that no one else can see it!

Viewing a video alone, even one of yourself, can be dull if you don’t have a particular purpose. You can use an observation checklist (see the Appendices) or write out a timed description of what is taking place in order to make yourself react actively to what you see.
Make notes in your reflective log (see Section 5.1) and discuss these with someone later.

**Viewing a video with a colleague**

A 50-minute video can take two hours or more to look through with someone else, and much of it may be unvaried in its process and not particularly productive. So it can be best to adopt a method which selects short segments to look at in detail. You might try one of the following ideas.

- View only the first five minutes, when much of the pattern of the session is set up, and the last three minutes, when you pull the session together.

- View the video on your own first, and select three or four incidents that you think are particularly interesting or puzzling to explore with your colleague: perhaps an incident when no one answered your questions, or when you were panicking because you had lost your train of thought. Ask your colleague ‘What was going on, and why?’ and ‘What else could I have done?’.

- Use the person with you to explore critical incidents rather than to provide feedback. The person with you can restrict their role to that of enquiring, with questions such as the following.

  - What was going on for you at that point?
  - Has that happened before, and have you felt like that before?
  - What did you think might happen next?
  - What would you have liked to do at that point?
  - What would have happened if you had done that?

The point is that the observer should support you in exploring the situation for yourself rather than impose interpretations or give advice. This is a surprisingly effective and engaging method, known as ‘interpersonal process recall’.

**Viewing a video with students**

Some teaching situations cannot be changed by you alone. The students need to play their part as well, and this is particularly true of group work.

A video of a group session, or of part of a session, can be viewed together with some or even all of the students involved. Anyone can be allowed to say: ‘Stop it here – there’s something important going on that I’d like to comment on.’ This will highlight the students’ perspective and also raise students’ awareness of the role they have in making teaching sessions function effectively.

When using video, the same kinds of ground rules about giving and receiving feedback should be adopted as with observation (see earlier in this section).

**Student learning, performance and behaviour**

While it is important to review and reflect on your teaching behaviour and what goes on in class, in the end it is what students learn that matters. It
may also matter more what students do out of class as a consequence of your teaching and assessment than what you do in class.

The following suggestions offer some additional ways of finding out about what and how students are learning.

Looking at student notes

Ask a small sample of students to lend you their lecture notes, and check their content carefully for the points you would hope they had noted.

I'd like to see if the way I am lecturing is giving you what I think you need in your notes. Could I please borrow half a dozen sets – perhaps the middle row there. If you leave them in the box by the door as you go out, I'll photocopy them and leave the box in the departmental office before lunch today. All completely anonymous! I'm checking on me, not on you! Thanks.

Three-minute paper

Use the last three minutes of a lecture or other session to get students to write a short paper on the content of the session, or on 'the three most important things ...', from memory, without referring to their notes. Collect what they write. Students will find this challenging but very helpful, and you will find it very revealing.

In the last three minutes I'd like you to try to summarise the main points of the lecture in your own words, as if you were explaining it to a friend. You'll find it helpful to pull everything together, and I'll find it helpful to see what you've understood and what I still need to put more time into. Please hand this in as you leave. Don't put your name on it if you don't want to.

Tests

Give a short test either at the end of a session or at the start of the next session: four short questions which students mark for each other there and then need take only a few minutes. Try to make any public identification of scores anonymous.

To enable you to check that you have got what you need from this lecture, there are four questions displayed on the screen. Can you please make a quick attempt to answer them. You have just four minutes ...

Now please swap your answers with the person next to you. Here on the screen are my answers.

Can you please 'mark' what is in front of you as 2 = mainly right, 1 = partly right, 0 = mainly wrong, giving a total possible score of 8 ...

Can I please see how many people have answers in front of them that scored 8, 6 or more, 4 or more, 2 or more ...

Thanks.

Please pass the answers back to their authors.
Such short tests are fairly crude, of course, and can provide information about only a limited range of learning outcomes, but they may still be useful in deciding what to include in your next session.

**Reviewing student marks**

Student marks can be revealing, but interpreting marks is not easy. A high average mark may mean that you have taught very well, or that the test was of a low standard, or that the material is unchallenging, or that the test questions were very predictable, or that students already knew what they needed to know before you taught them.

The distribution of marks can also be revealing. A few very good marks and a large number of low marks may mean that you have pitched your teaching (and the assessment) at too high a level for most students, but again there could be many other interpretations.

Student marks on other courses can be illuminating – particularly in relation to courses that are a prerequisite for your course, or to the courses that your students go on to study. For example, you may find that while your students pass your exams satisfactorily, they fail on the next course where they apply what they have learned from your course. Such discrepancies need exploring, and you are likely to need to talk to other teachers to make sense of what is going on.

The content of students’ assignments and test answers may be more revealing than the marks themselves. You may identify common misconceptions or gaps in knowledge that you can readily rectify. When you have finished marking a pile of scripts, it can be worthwhile to make a note in your reflective log of what the students’ work tells you about what they have learned and, from this information, ideas about what you should pay attention to in your teaching.

What are the most common comments that you write on students’ work? Which questions do students do least well on or avoid? It is worth bearing in mind that assessment can help your understanding of students’ learning, as well as evaluating the learning itself.

**Reviewing student progress**

One hopes that students will get better, over a semester, at tackling any regular task such as writing weekly lab reports or working on problem sheets. As you mark such work, you may not get much of a sense of progression.

It can be illuminating to collect a few assignments tackled at the beginning and some by the same students tackled at the end, and to compare them. What has changed? What do they understand and what skills do they have at the end that they did not have at the beginning? Are there things that have still not changed or improved, despite all your feedback and advice?

**Examiners’ reports**

External examiners will check that the marking standards you are using are broadly in line with what would be expected, and that they are being applied consistently. They may also comment on your exam questions.

You can ask external examiners to pay particular attention to some aspect of student performance, or to your marking, and they usually appreciate this kind of consultation. They will produce written reports, which will
also identify issues about student performance on other people’s courses and perhaps on a degree programme overall, and this can provide a valuable context for you in interpreting the effectiveness of your own teaching. For example, students may be weak in the same areas on everybody’s courses, not just your own.

*Attendance, study hours and commitment*

Student attendance at your classes can be very revealing. Low attendance may mean that you are considered a dull teacher, or a very challenging teacher, or that your assignments are so demanding that they need all the hours they can find to tackle them, or that your reading list is so good that they don’t need classes, or that other courses they are taking are excessively demanding, or even that students cannot get a cheap-day-return bus fare to get to such an early class. You need to find out which of these possible explanations is most likely to be true.

If you have full-time students who are taking four courses at once, then, assuming a study week of 40 hours, you are probably entitled to use about 10 hours a week of their time, including time both in and out of class. Are your students actually spending this time on your course? Whether they do or not may be more important than what goes on in class, and it is crucial that you find out. If you simply ask students, they will either not know or exaggerate – you may need to ask some to keep a diary or log book for a week or two. Although students may idealise in their logs somewhat, they can still be very revealing, and this usually has the effect of dramatically changing how they spend their time! It is also revealing to find out the extent to which students actually do the reading you set, complete all the problems you give them, or undertake all the other activities which you encourage or require students to engage in.

On some occasions the effectiveness of your teaching will depend as much on how well your students have prepared for the session as on how well you have prepared.

*Educational development staff*

Most institutions have professional staff whose job it is to help improve teaching and learning. They can be a valuable resource as you review and improve your own teaching. For example, they may be able to:

- observe your teaching and discuss it with you afterwards;
- help you to interpret student feedback – there is solid evidence that reviewing such feedback with a consultant has a much greater impact on improving teaching than doing it on your own;
- review and comment on your teaching plans, assignments or handouts;
- help you to locate sources of advice, in the form of literature, experienced teachers, national projects or centres with specialist expertise;
- undertake an evaluation on your behalf, for example designing a questionnaire or meeting your students;
- provide examples of how others tackle the teaching problems you face – they often have resource libraries for this purpose;
- put you in touch with others who use the teaching methods you wish to use.
It is probably worth visiting such staff, introducing yourself and finding out what teaching support services are available.

**Literature**

There is a substantial and rapidly growing literature on teaching and learning in higher education. It varies from providing useful tips to providing a well researched theoretical analysis.

While you will have to work out your own methods of teaching and develop your own personal understanding of what is going on, it makes no sense to re-invent the wheel, in terms of either methods or explanations. Not all the literature is useful or insightful, but it would be unscholarly and anti-intellectual to ignore this literature and to rely exclusively on common sense and personal experience.

The chapters in this pack, and the related materials, provide an introduction to some theoretical and empirical underpinnings for your practice as a teacher in higher education. As the literature is so diverse, and sometimes difficult and technical, we recommend that you start with our ‘digest’ of theory and pursue interesting lines of enquiry from there.

The practical and theoretical chapters of this pack provide reference lists and short annotated lists of further reading of a practical nature.

**Journals**

There are four main categories of journals which contain articles of potential interest and value to teachers. A full listing of all these journals can be found on the Deliberations website, details of which can be found below.

- Generic journals dealing with teaching, learning, assessment and related issues, such as the *Journal of Further and Higher Education*.
- Journals on specialist topics such as *Assessment and Evaluation in Higher Education*.
- Journals concerned with the teaching of a specific discipline, such as the *Journal of Geography in Higher Education*.
- In-house journals about developments in teaching within a particular university, which may also contain articles and case studies from elsewhere.

**Websites**

There is an increasing number of useful websites concerned with teaching and learning, many of which have good links to other useful sites. Some of these websites are focused on particular functions – teaching, undertaking research, or staff development – while others are project- or discipline-based. Many universities also have their own teaching and learning websites that you can explore.

**Learning and Teaching Subject Networks** – http://www.ltsn.ac.uk

These provide discipline-specific resources and conversations as well as a ‘generic centre’ that takes a broader view of teaching and learning issues in higher education.
The National Coordination Team (NCT) – http://www.ncteam.ac.uk
This team works on behalf of the Higher Education Funding Council for England (HEFCE) and the Department for Employment and Learning in Northern Ireland (DEL) to support and advise on three strands of the Teaching Quality Enhancement Fund (TQEF) programme:

- the Subject Strand – coordination and support of FDTL and liaison with LTSN;
- the Individual Strand – support for National Teaching Fellowship holders;
- the Institutional Strand – helping to disseminate best practice from institutional learning and teaching strategy work.

Joint Information Systems Committee (JISC) – http://www.jisc.ac.uk
With funding from the UK further and higher education funding councils, JISC provides a centralised and coordinated direction for the development of the infrastructure and activities, in line with its 5-year strategy. JISC provides:

- new environments for learning, teaching and research;
- access to electronic resources;
- a world-class network – JANET;
- guidance on institutional change;
- advisory and consultancy services;
- regional support for further education colleges.

The Deliberations website – http://www.lgu.ac.uk/deliberations
This is designed to act as:

- a resource for academic and all other staff supporting learning and teaching in higher education around the world – material is arranged under the headings of ‘generic’ and ‘subject-specific’ learning and teaching issues, and ‘other’ educational matters;
- an interactive forum for participants to discuss and develop ideas, and identify resources that will develop their practice.
Further reading


This American manual focuses on ways to find out what students have learned, in relation to course objectives, and contains a cornucopia of methods and evaluation instruments.


This manual focuses specifically on observing teaching in higher education. It contains 23 different observation and self-review schedules, and advice on conducting debriefing sessions after observation.


This collection of practical methods includes a large number of different types of questionnaires and evaluation techniques, and also explains how to put evidence together in preparation for individual appraisal of teaching.


This comprehensive manual is set in the context of Edinburgh University's approach to reviewing courses and teaching, and relates evidence to quality assessment criteria and other evaluation perspectives.


This Australian manual focuses on the diagnosis of problems, and describes evaluation as an exploratory process rather than providing a large number of questionnaires or examples.


This is the latest edition of a much-used American guide to creating a teaching portfolio. It focuses on the use of a portfolio as a developmental tool rather than as a 'CV for teaching'. It contains excellent examples of 'teaching philosophies' developed through reflection and experience.

References


Appendices – Resources for reviewing and developing your teaching

This section contains resources that can be used to collect the kind of data that will help you to review and develop your teaching. They are deliberately varied in their design so as to provide models for you to build on in developing your own observation checklists and questionnaires.

Appendix 5.1 Self-review checklist
Appendix 5.2 Observation checklist for lectures
Appendix 5.3 Student feedback questionnaire for lectures
Appendix 5.4 Observation checklist for group teaching
Appendix 5.5 Student feedback questionnaire for group teaching
Appendix 5.6 Observation checklist for demonstrating
Appendix 5.7 Student feedback questionnaire for demonstrating
Appendix 5.8 Student feedback questionnaire for marking
Appendix 5.9 Designing and using your own questionnaires
Appendix 5.10 Interview questions

As we suggested in Section 5.3, when you are asking other people to carry out observations for you, do ensure that you explain beforehand what it is that you want them to do, and go through the sheet(s) with them so that they are clear about the process.

If you have a chance to sit in on other people’s sessions, as was also suggested in Section 5.3, you might try out some of the listed observation techniques so that you know what it is you are asking of colleagues, and what you can reasonably expect them to do for you.
Appendix 5.1 Self-review checklist

The observation checklists and questionnaires in Appendices 5.2 to 5.10 are all designed to obtain evidence about your teaching from others – observers or students.

But it is you who will judge the meaning and relevance of this evidence, and you will decide for yourself what is an accurate and a typical picture of your teaching and what is not. You already have some kind of a picture of yourself as a teacher – based on first-hand experience rather than any observer’s judgements. The views and observations of others will presumably influence your view of yourself, but it is your self-perceptions which, in the end, determine the teaching decisions you make.

The self-review checklist below is designed to help you to capture and summarise your self-perceptions. You may wish to use it several times as you develop, to plot changes in how you see yourself as a teacher. It can also provide an interesting basis for a discussion with a colleague or mentor: you may want to check if others see you the way you see yourself!

<table>
<thead>
<tr>
<th>How do you rate your own:</th>
<th>Yourself compared with other teachers</th>
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<tbody>
<tr>
<td></td>
<td>Complete novice</td>
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<tr>
<td>1 Knowledge of the subject you teach</td>
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<tr>
<td>2 Understanding of students’ knowledge base</td>
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<tr>
<td>3 Ability to select appropriate content</td>
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<tr>
<td>4 Ability to structure and sequence content</td>
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<tr>
<td>5 Ability to explain key ideas</td>
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<tr>
<td>6 Ability to give and use examples throughout</td>
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<tr>
<td>7 Ability to ask and answer questions helpfully</td>
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<tr>
<td>8 Ability to summarise and give the ‘big picture’</td>
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<tr>
<td>9 Ability to convey enthusiasm for the subject</td>
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<tr>
<td>10 Use of voice and gesture</td>
<td></td>
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<tr>
<td>11 Design and use of audio-visual aids</td>
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<td>12 Handouts and other learning support materials</td>
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<tr>
<td>13 Ability to use IT appropriately</td>
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<tr>
<td>14 Ability to use scientific/technical equipment</td>
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<td>15 Ability to create a suitable atmosphere in groups</td>
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<td>16</td>
<td>Ability to include all students in discussion</td>
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<td>17</td>
<td>Ability to keep the discussion on topic</td>
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<tr>
<td>18</td>
<td>Ability to keep discussion lively and engaging</td>
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<td>19</td>
<td>Ability to brief students for assignments</td>
</tr>
<tr>
<td>20</td>
<td>Ability to mark to the department's standards</td>
</tr>
<tr>
<td>21</td>
<td>Consistency and reliability in marking standards</td>
</tr>
<tr>
<td>22</td>
<td>Written feedback on assignments</td>
</tr>
<tr>
<td>23</td>
<td>Awareness of individual and special needs</td>
</tr>
<tr>
<td>24</td>
<td>Steps taken to improve your teaching</td>
</tr>
<tr>
<td>25</td>
<td>Organisation and record keeping</td>
</tr>
<tr>
<td>26</td>
<td>Collaboration with teaching colleagues</td>
</tr>
</tbody>
</table>

After completing this self-review, consider the following questions.

What are your main strengths, that you should feel proud about?

What areas should be your priorities for improvement?

What specific steps could you take that would be likely to make most difference in these areas?
### Appendix 5.2 Observation checklist for lectures

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<thead>
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<th>Lecture title:</th>
<th>Date:</th>
<th>Topic:</th>
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<tbody>
<tr>
<td>Course:</td>
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#### Voice

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<tr>
<td>1</td>
<td>Clearly audible</td>
<td>Inaudible</td>
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<tr>
<td>2</td>
<td>Varied inflection</td>
<td>Monotone</td>
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#### Pace

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<tbody>
<tr>
<td>3</td>
<td>Fast delivery</td>
<td>Slow delivery</td>
</tr>
<tr>
<td>4</td>
<td>High density of ideas</td>
<td>Low density of ideas</td>
</tr>
<tr>
<td>5</td>
<td>Regular pauses or breaks</td>
<td>Uninterrupted</td>
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#### Structure

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<tr>
<td>6</td>
<td>Clear introduction</td>
<td>Confused, or no introduction</td>
</tr>
<tr>
<td>7</td>
<td>Clear sections</td>
<td>Undifferentiated content</td>
</tr>
<tr>
<td>8</td>
<td>Clear links and signposts</td>
<td>Unclear links and signposts</td>
</tr>
<tr>
<td>9</td>
<td>Clear conclusion</td>
<td>Unclear or no conclusion</td>
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</tbody>
</table>

#### Use of visual aids

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<tbody>
<tr>
<td>10</td>
<td>Frequent visual display</td>
<td>Rare visual display</td>
</tr>
<tr>
<td>11</td>
<td>Effective and appropriate use</td>
<td>Ineffective or inappropriate use</td>
</tr>
<tr>
<td>12</td>
<td>Legible and clear</td>
<td>Illegible or confusing</td>
</tr>
</tbody>
</table>

#### Content

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<tbody>
<tr>
<td>13</td>
<td>Too advanced/difficult</td>
<td>Too low-level/unchallenging</td>
</tr>
<tr>
<td>14</td>
<td>Good use of examples</td>
<td>Little/no use of examples</td>
</tr>
<tr>
<td>15</td>
<td>Well linked to rest of course</td>
<td>Not linked to rest of course</td>
</tr>
</tbody>
</table>

#### Interaction

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<tbody>
<tr>
<td>16</td>
<td>Frequent questions or answers</td>
<td>No questions or answers</td>
</tr>
<tr>
<td>17</td>
<td>Frequent student discussion</td>
<td>No student discussion</td>
</tr>
<tr>
<td>18</td>
<td>Effective features</td>
<td></td>
</tr>
<tr>
<td>19</td>
<td>Problem incidents</td>
<td></td>
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<td>20</td>
<td>Discussion points</td>
<td></td>
</tr>
</tbody>
</table>
Appendix 5.3  Student feedback questionnaire for lectures

<table>
<thead>
<tr>
<th>How well did the lecturer do the following?</th>
<th>Superbly</th>
<th>Well</th>
<th>Satisfactorily</th>
<th>Poorly</th>
<th>Not applicable</th>
</tr>
</thead>
<tbody>
<tr>
<td>1  Explained the outline and structure of the lecture</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2  Linked the lecture to other lectures</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3  Linked the lecture to what you study afterwards</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4  Made it clear when each section started and stopped</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5  Made key points stand out</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6  Explained the ideas and concepts</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7  Concluded the lecture with a clear summary</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8  Pitched the lecture at the right level for you</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9  Coped with the range of ability of students</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10 Progressed at the right pace for you</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11 Captured your interest at the start</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>12 Held your attention throughout</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>13 Answered student questions</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>14 Checked that students understood</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>15 Engendered debate and interaction</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>16 Used visual aids effectively</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>17 Made herself or himself clearly audible</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>18 Made it easy for you to take good notes</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>19 Provided handouts to support the lecture</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>20 Inspired you to learn more about this topic</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Content/topics from the lecture that you now understand include:

Best features of the lecture:

A suggested improvement to this lecture:

A suggested improvement to lecturing in general:

This lecture compared with others you have experienced (please explain your reasons):
Top 10% [ ] About average [ ] Average [ ] Below average [ ] Bottom 10% [ ]
Appendix 5.4 Observation checklist for group teaching

Here are two possible recording techniques.

- In order to identify who speaks, and how much, and also to identify patterns of interaction that emerge, it is useful to draw a plan of the seating.

- Keep a time record of what happens. Be descriptive and detailed. Identify key incidents, using exact quotes if this helps. For example:
  00.03 14 students arrive and move chairs from circle into rows. No talking.
  00.05 Session starts with question: ‘Who has read the chapter I asked you to read?’
  Silence.
  00.06 Two students arrive late, noisily, and sit in corner. Explanation of what they should have read.
  00.08 First student speaks.

<table>
<thead>
<tr>
<th>A method of formulating feedback</th>
</tr>
</thead>
<tbody>
<tr>
<td>Session title:</td>
</tr>
<tr>
<td><strong>Which of the following took place?</strong></td>
</tr>
<tr>
<td>1 Introductions – who is present and what they have to offer</td>
</tr>
<tr>
<td>2 Scene-setting – what the session is for and how it will be conducted</td>
</tr>
<tr>
<td>3 Silence of more than a few seconds</td>
</tr>
<tr>
<td>4 Mini-lectures of more than two minutes</td>
</tr>
<tr>
<td>5 Discussion between students</td>
</tr>
<tr>
<td>6 Questions from students</td>
</tr>
<tr>
<td>7 Answers from students</td>
</tr>
<tr>
<td>8 Changes of direction initiated by students</td>
</tr>
<tr>
<td>9 Structuring of content: reviews, summaries, and so on</td>
</tr>
<tr>
<td>10 Structuring of process: subgroups, rounds, and so on</td>
</tr>
</tbody>
</table>

How would you describe the session?
Circle as many as you need of the appropriate words.

BUSINESS-LIKE LIVELY QUIET FAST SLOW CONFUSED PURPOSEFUL AIMLESS ENGAGING ALIENATING INTIMIDATING SAFE CLEAR CONFUSING WARM COLD CONSISTENT PATCHY CHALLENGING BORING

Other descriptors you want to use:

Describe two key incidents during the session.
Be detailed and specific, using quotes if this is helpful.

1
2
Appendix 5.5  Student feedback questionnaire for group teaching

<table>
<thead>
<tr>
<th>Session title:</th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Date:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Strongly agree</th>
<th>Agree</th>
<th>Unsure</th>
<th>Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>A relaxed interactive tone was set at the start</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>The purpose of the session was made clear</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>The plan of the session was made clear</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>I had done enough preparation for the session</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>I was able to join in when I wanted to</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>I felt comfortable enough to answer questions</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>I felt comfortable enough to ask questions</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>Some students were allowed to dominate</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>Some students hardly joined in at all</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>The teacher spoke too much</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11</td>
<td>The teacher did not intervene enough</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>12</td>
<td>The teacher structured the discussion well</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>13</td>
<td>I had all my queries answered</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>14</td>
<td>There was a clear review and summary at the end</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>15</td>
<td>I enjoyed the session</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>16</td>
<td>I can complete the work on this topic on my own</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>17</td>
<td>Overall it was a successful group session</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The best feature of the session was:

The worst feature of the session was:

One way in which the teacher could improve these sessions is:
Appendix 5.6 Observation checklist for demonstrating

Purpose of session:

Purpose of demonstrating in this session:

<table>
<thead>
<tr>
<th>Tally sheet for interactions with students</th>
</tr>
</thead>
<tbody>
<tr>
<td>With individuals</td>
</tr>
<tr>
<td>-------------------</td>
</tr>
<tr>
<td>Number of interactions</td>
</tr>
<tr>
<td>Teacher</td>
</tr>
<tr>
<td>Interactions at request of</td>
</tr>
<tr>
<td>Technical/equipment</td>
</tr>
<tr>
<td>Focus of interaction</td>
</tr>
<tr>
<td>&lt; 1 minute</td>
</tr>
<tr>
<td>Length of interaction</td>
</tr>
</tbody>
</table>

Account of a clear explanation/demonstration ... and why it was clear

- Proportion of time demonstrator spoke ...
- Proportion of time student(s) spoke ...
- Checked nature of problem?
- Demonstrator ‘took over’?
- Checked for understanding?
- Student able to do it alone next time?

Account of an inconclusive interaction ... and why it was unsatisfactory

- Proportion of time demonstrator spoke ...
- Proportion of time student(s) spoke ...
- Checked nature of problem?
- Demonstrator ‘took over’?
- Checked for understanding?
- Student able to do it alone next time?

Other observations:
### Appendix 5.7 Student feedback questionnaire for demonstrating

**Lab/practical session title:**

**Date:**

<table>
<thead>
<tr>
<th>The session</th>
<th>Strongly agree</th>
<th>Agree</th>
<th>Unsure</th>
<th>Disagree</th>
<th>Strongly disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. The purpose of the session was clear</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. I was well prepared for the session</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. I understood what I was supposed to do</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. I knew how to use the equipment</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. The handouts or instructions were clear and sufficiently detailed</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. There was enough time to complete the tasks</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. I understood the results or findings</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8. I shall be able to write up the session without further help</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Demonstrating**

| 9. The demonstrator understood the session and what needed to be done       |                |       |        |          |                  |
| 10. The demonstrator knew how to set up and use the equipment               |                |       |        |          |                  |
| 11. The demonstrator understood the theory and principles underlying the session |          |       |        |          |                  |
| 12. I was able to get help when I needed it                                 |                |       |        |          |                  |
| 13. The demonstrator was good at understanding my difficulty                |                |       |        |          |                  |
| 14. The demonstrator was good at explaining                                 |                |       |        |          |                  |
| 15. The demonstrator was good at demonstrating equipment                    |                |       |        |          |                  |
| 16. The demonstrator was good at solving problems                           |                |       |        |          |                  |
| 17. The demonstrator was patient and supportive                            |                |       |        |          |                  |
| 18. The demonstrator helped me to do the work myself rather than taking over|                |       |        |          |                  |

What would you have liked help with?

What would you like the demonstrator to do more of?

What would you like the demonstrator to do less of?
Appendix 5.8 Student feedback questionnaire for marking

Assignment:
Your grade:

<table>
<thead>
<tr>
<th>The assignment</th>
<th>Strongly agree</th>
<th>Agree</th>
<th>Unsure</th>
<th>Disagree</th>
<th>Strongly disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 I understood what I was supposed to do in this assignment</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2 I had adequate resources (from lecture notes, handouts, the library, and so on) to tackle this assignment</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3 The assignment was unreasonably demanding</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4 The assignment was unreasonably time-consuming</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5 I learned a good deal through tackling this assignment</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6 I enjoyed this assignment</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Marking and feedback

| 7 I received the feedback soon enough for it to be useful to me                 |                |       |        |          |                   |
| 8 I understand from the feedback why I got this grade                          |                |       |        |          |                   |
| 9 I understand from the feedback how to tackle this kind of assignment in future |                |       |        |          |                   |
| 10 I have learned more about the topic from the feedback                        |                |       |        |          |                   |
| 11 I found the feedback supportive and encouraging                             |                |       |        |          |                   |

Advice I'd like to give on assignments for this course ...

Further feedback I would like on this assignment ...

A request I'd like to make on giving me feedback in future ...

Any other comment on the assignment or feedback ...
Appendix 5.9 Designing and using your own questionnaires

Standard student feedback questionnaires of the kind your department may use, and the kinds of questionnaires and observation checklists listed in this section, can be very useful when you start teaching. But after a while you will find that you have specific concerns that these standard instruments do not address, and you will want to create your own questionnaires so that you can follow up your own lines of enquiry. Reviewing your teaching should be an active process of enquiry, so inventing your own questionnaire is strongly recommended. The following advice may help you to devise useful questionnaires.

- Keep questionnaires short, simple and specific, and do not try to find out too much at once. It is probably better to ask little and often: one page may be all that students have time for.

- Be guided by strong hunches about what is going on rather than collecting information without a purpose in mind. For example, you can simply list your hunches and ask students if they agree with you: state 'I lecture too quickly' or 'Students who didn't understand the previous module are likely to struggle on this one however well it is taught', and use the rating scale strongly agree/agree/unsure/disagree/strongly disagree.

- Ask about student learning, not just about your teaching.

- When writing questionnaire items, avoid mixing different questions ('I lecture too quickly and at too high a level') because you will not be able to interpret students' responses.

- Allow at least one opportunity for open-ended responses: 'Any other comments?' Such questions often elicit the most revealing responses.

- If you are unsure what to ask about, use entirely open-ended questions to help set the agenda. 'What was the best feature?' 'What would make most difference if I changed it?'

- Ask one or two students to fill in a draft to make sure the questionnaire makes sense – they are likely to spot any problems of wording or layout and suggest sensible additional questions.

- Administer questionnaires in class and collect them immediately. Almost any other method produces a low response rate. Anything over a 50% response rate is good but may leave doubt about how representative the feedback might be.

- Sampling is a perfectly acceptable way of cutting down on the effort involved in collating data. For example, you could ask everyone on row three or only those sitting next to the aisle in each row to complete a questionnaire. Using your own questionnaires will not provide you with rigorous data, so take short cuts to obtain indicative data economically.

- Allow student feedback to be anonymous, in order to encourage a high feedback rate and frankness, unless you have a very good reason to want to know who provided what feedback.

- Administer questionnaires mid-term so that your findings can affect your teaching that term. Research evidence suggests that end-of-term feedback has less impact on future teaching – and students are certainly less interested in improving the lot of the next cohort than they are in improving their own lot.

- Let your students know what you find out, and discuss the results and your interpretation with them – or they will soon tire of giving you feedback.
Appendix 5.10 Interview questions

Short informal interviews with students can be invaluable for getting a quick feel for how your teaching is perceived and how your course is working. Interviews are much more flexible than using questionnaires and, provided that you don’t expect to interview many students, need not take any more time. Interviews are more likely to identify what students think are the important features, and to lead to insights that quantitative data may not throw up. Students, of course, are not always reflective or observant, and they are not always representative; the advice below addresses these issues. But students are seldom vindictive or mischievous. If you show a genuine interest in finding out how things are going, students usually show a genuine willingness to help.

Practicalities
- Keep it short and interview several students briefly rather than exhausting one source.
- Interviewing small groups, rather than individuals, helps to prompt reactions, widen perspectives and identify the central issues.
- It does matter who you choose to interview – or who volunteers. Are they really representative? Or are you prepared to sacrifice representativeness for the benefits of a perceptive and cooperative student?

Questions
- Don’t expect students to give honest or open judgements about you as a person or as a teacher. Try to make questions impersonal: not ‘Do I teach well?’ but ‘What do you like most and dislike most about the labs?’
- Ask open questions that get students talking to you: not ‘do you ...?’ but ‘what do you ...?’ or ‘how do you ...?’
- Ask for descriptions of specific instances in order to get below the surface: ‘During last week’s lab, what exactly did you do?’
- Use artefacts such as student notes or their assignments to prompt replies: ‘When you wrote this in your report, what were you thinking?’
- Check that the things students say are typical rather than unusual: ‘Can you give me another example of that?’; ‘Is it always like that?’
- Ask about things that go on out of class as much as in class: ‘What do you spend your time on out of class?’, ‘How much time?’, ‘How useful is that?’
- Ask about the assessment system, not just about teaching: ‘Tell me about the assignments’, ‘How fair is the marking?’, ‘What aspects of the feedback are most useful?’
- Allow students to lead you to important areas that you might not have asked about: ‘What should I be asking you about?’
- Don’t be afraid to test out your hunches: ‘My impression of how it’s going is X. Is that about right?’
- Don’t accidentally throw the baby out with the bath water: ‘Whatever else I change, what should I keep the same?’
• Ask what students think you should do to change, or bounce alternatives off them: ‘So if we need to change this, would it be better if we did A or B?’

• Summarise at the end: ‘So the main things you have told me are ... and what you are advising me to do is ...?’

• Allow the students to interview you briefly – their questions can be very informative, and it makes the process feel less one-sided: ‘What would you like to ask me about my experience of the course and what I could do to make it work better?’

Interviewing small groups of students

In a group interview, it is easy for one student, or one topic, to dominate so that you end up with an unbalanced impression. You can avoid this by using a number of techniques.

• Move on to a different student as you ask about each topic.

• Use ‘rounds’ in which each student in turn says something briefly on the topic you are enquiring about.

• Check that the feedback is balanced and representative.

  So far the impression I am getting is A, B, C. Is that a fair summary?
  Are there things we have not covered yet which it is important that I hear?
  Would other students say the same things?

Planning the interview

Write down a list of things that you would really like to know about, and then a short list of questions that would be likely to get students to talk about these things.

Focus on a few key issues rather than trying to list everything you can think of.

If you have more than about half a dozen questions, then cluster them so that you can glance at them easily during the interview.

It is easily possible to make half a dozen questions last half an hour if they are the right questions, so you probably don’t need a long list.

Concentrate on exploiting the flexibility of the interview to pursue interesting issues in depth rather than covering as much ground as possible: questionnaires can cover the ground.

Taking notes

Full transcripts of interviews are very time-consuming to produce and read afterwards, and much of a full transcript will be uninformative. Instead, take notes during the interview, writing down phrases, summaries and particularly punchy verbatim quotes where appropriate. Take 10 minutes immediately afterwards to write a list of key points that emerged. My experience is that if I return to interview notes after a break, I have trouble remembering what my scribbles mean. Concentrate on capturing your conclusions and interpretations rather than on summarising the raw data.