

CADQ Guide

Teaching large Groups

The 50-minute lecture is a problematical beast: The awkward child born of administrative convenience and academic habit. It's a convenient way to transmit large amounts of information to large numbers of students, although not necessarily a more effective one (Bligh 1998). Moreover, the lecture is often a poor method to inspire students or help them engage with the substance of the subject.

I'm defining the lecture as a learning process where one person, the lecturer, does most of the talking and the students' main job is to listen and take notes. The degree of interaction and student engagement will be discussed throughout.

I'll be honest and state from the outset that I take the view advocated by Gibbs amongst others that we tend to put too much content into most lectures. Students (see student attitudes section) tend to be grateful for vast amounts of quantity. It doesn't matter that they don't understand it during the lecture, or do anything with the notes subsequently; they're metaphorically satiated and so are satisfied. I won't be arguing that lectures should be content free, but instead that more emphasis needs placing on encouraging students to engage with their notes and act upon the information provided, either individually or in small groups.

This resource covers some issues about structuring lectures and communicating effectively. Both are such huge areas that I can't possibly hope to cover them in any detail; I've therefore picked out a few themes to prompt your thinking. Similarly, I've spent a little time looking at ways of dealing with disruptive behaviour in lectures.

The various sections of the guide can be accessed via the links in the content bar above.

Contents

[Thinking about the lecture](#)

[Structuring a lecture](#)

[Communication basics](#)

[Student attitudes to lectures and learning](#)

[Developing greater interactivity](#)

[Dealing with disruptive behaviour](#)

[Some key texts](#)

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Thinking about the lecture

The lecture can be an effective way to communicate with the student, but not necessarily one that is very deep or encourages students to do much with the materials. Three issues worth thinking about in your lecturing practice include:

- Are your students fluent in 'lecture'?
- Moving the focus from tutor inputs to student outputs

Are your students fluent in 'lecture'?

Have they ever experienced a lecture before?

Do they know what to listen for, how to prioritise information presented, how to take notes, how to engage with the content?

We tend to take it for granted that students come to the first year lectures fully equipped with the skills to make the most of them. Some, of course, do, but many appear to have a much vaguer relationship with the lecture.

I would strongly recommend discussing with them what you expect them to do in a lecture, perhaps how you will highlight major features and things that are particularly important to note. One issue in particular is whether to make notes based on what you say, or what they can see on the screen.

One important issue around fluency is what the students do with the notes taken. King (1992) noted that when trained to do so, students tended to engage more actively with their notes. See Burns and Sinfield (2004) Chapter 9 for a sample lecture exploring note taking issues.

Moving focus: Student outputs rather than lecturer inputs

As lecturers, we tend to focus on delivering the information in a competent and professional manner: Our inputs. We worry about getting the slides right, keeping the content contemporary and projecting our voice to the back of the theatre. Whilst these features are obviously important, there's a danger that we focus on our inputs rather than the student outputs.

- What do you want your students to achieve by attending the lectures? (Is it a set of competent lecture notes, or something more?)
- What do you expect students to do with the information contained in the lecture?
- What is the relationship between the lectures and seminars?
- Can a student use the lecture notes to write an essay?
- How much pre-reading should a student do for each lecture and what is the consequence of failing to do so? (Do you need to make explicit hints during the lecture about their pre-reading "As you'll know from reading Maslow, when we think about human motivation...")
- Do you want understanding, retention, comprehension? If so, what activities have you built into the session to test and engage students?

Helping the students to make connections

You may have spent hours carefully planning how your lecture content will gradually develop allowing a sophisticated picture to unfurl about the subject. However, many students fail to make the connection between lectures in the module, even fewer across modules (Gibbs, Habeshaw and Habeshaw 1988).

This problem might be particularly acute when a number of lecturers are taking it in turns to deliver the lectures. It's important, particularly with first year students, to periodically remind them of the connections. See the Linking Lectures section in *53 Interesting Things to do in Your Lectures* for ideas.

Structuring the lecture

50 minutes is a long time for an audience to sit and listen to one person talk. A number of studies suggest that the optimum attention span for a student might be as little as 10 minutes (Smith, 1997) and whilst with practise this can be improved, few people are at their best for the full lecture. You need to help the audience as much as possible by:

- Introducing the topic
- Clearly sign-posting each section
- Concluding and summarising
- Breaks and reflective activities

Introducing the topic

When I attend lectures, I will occasionally use mind maps to make my notes. It's only possible to use this technique if the lecturer clearly announces at the start what the structure of the lecture is to be. Occasionally it's not possible to do because the tutor either ignores the introduction or skims over it so quickly that it's impossible to see the structure.

In the rush to get the maximum content out in the 50 minutes, lecturers can skip the introduction and get straight into the heart of the matter. The introduction serves an important function for the listener; it helps them to orientate themselves to the subject matter from the beginning.

A good introduction ought to also give the opportunity to contextualise the course material. A few tips for introductions include:

- Tell the students how many issues the lecture is going to pick up
- Briefly introduce each issue
- Remind students where the issues have come up in previous lectures and seminars
- Point out where the lecture might be relevant for any assessments coming up
- Less is more. Less content discussed and contextualised is likely to be easier to understand than huge shopping-list lectures

Clearly sign-post each section

You are an expert in your subject matter, you've engaged in research, discussion and debate about it. You probably think about it every day to some extent. Your brain will be so finely attuned to it that you can easily integrate new stories, incidents and discoveries into your map of the subject.

Most of your students can't. They'll need big signs to point out what the priorities are and what the main theme looks like. So for each new section, clearly point it out to the students "So, the second theme I'd like to discuss is..."

If I'm using PowerPoint, I tend to use a Title Slide for each new section to help students see the structure. One tutor at NTU puts up a slide of an unrelated calm/beautiful picture at the end of each section to help the students mentally finish that section of the lecture and then move on.

Concluding and summarising

It's an entirely natural reaction to want to finish presenting the content and then get out the door quick, particularly if the students are rustling their papers and the next group is pressed up against the door waiting to come in. However, the conclusion is an important opportunity to pull together some of the main strands of the session and consolidate the learning.

There's a saying used by public speaking trainers to help structure a presentation:

- Tell them what you are going to tell them
- Tell them
- Tell them what you just told them

Repetition is a useful tool. It will help students to understand better your main points, so don't skip the conclusion. Of course, if you feel the word 'conclusion' will kill off their interest, you can always use 'main points from this lecture', 'Summary of issues' or whatever else helps draw their attention to your themes. This can be a good opportunity to engage the group and ask them to share their understanding of the lecture (the one minute paper may also be usefully used at this point).

Breaks and reflective activities

Taking good quality notes continuously can be hard work for some students. A few studies have suggested that inserting breaks for students to catch up on their notes can help. Whilst in theory it ought to be a simple activity to give students a few minutes to review their notes, it takes some nerve to stand at the front of a lecture theatre and not say anything.

Reflective activities can also include posing questions to the group. These could be worked on individually or in small groups. This will give students the opportunity to re-read their notes and check for understanding.

Communication basics

Presenting information verbally is, of course, very different to reading it in a textbook or journal. It's important, therefore, to reflect on the way in which we communicate. There is a wide range of textbooks to help improve your presentational techniques, but a few points are included below:

- What do we listen to?
- Ways of telling
- Using rhetorical questions
- Visuals and PowerPoint

What do we listen to?

In most textbooks on communication and presentation techniques, there's reference to research that states "93% of communication is non-verbal". Whilst this is a glorious oversimplification of research by Albert Mehrabian (1972), the fact remains that good communication is so much more than the words presented.

As an aside, Mehrabian looked at the specific communication of the emotions of like and dislike and asked volunteers to identify which form of communication, non-verbal, verbal technique and words, most reliably showed the true emotion. In 55% of instances the participants felt it was non-verbal, in 38%, verbal technique and 7%, words. Obviously, when presenting on the history of tractor manufacture in Ukraine, it's harder to make an emotionally moving presentation, but if you are enthusiastic and interested, that will be transmitted to the students.

It is possible to engage with students in even the largest of lecture theatres. Students expect that you'll make eye contact with them, talk to them and not just read your notes. Even if for no other reason, making eye contact reminds students that you can see them and may have a positive impact upon their behaviour, particularly in the latter stages of the lecture when fidgeting may be more of a problem.

The phrase often used for effective presenting is 'heightened conversational tone', a good presenter needs to speak slightly slower, with slightly more emphasis and 'punch' in their words. Obviously in larger lecture theatres, you'll need to use the microphone.

Don't be afraid of walking away from the lectern. It can be a challenge to change PowerPoint screens from the very back of the lecture theatre, but it can create a very different dynamic for your students. Some staff find that standing still behind the lectern can actually stultify their presentations.

Ways of telling

An audience will tend to be able to process ideas and information better if they can contextualise it. There are perhaps two approaches to consider.

Firstly, do the contextualising yourself "This relates to the subject matter we covered last week...", "I'd like to remind you of the last time we looked at...".

Secondly, give it hooks that the students can connect to.

For example, has the issue been in the news?

Can you use illustrative examples that draw out the themes?

Have you any anecdotes of your own, perhaps of students dealing with the issue last year?

Using rhetorical questions

It's a failing in my education, but I always thought that a rhetorical question was one that the speaker later answered. Having recently been put right by several first year fashion students, I now realise this isn't the case, but haven't yet found the correct word to describe the following technique, so I'll keep it for now.

One technique that can help hook your students in, is to pose questions to yourself and then answer them. For example

“So where have we dealt with this before? Well, remember when we looked at...”

“How is this similar to my previous point? That’s right, it’s very similar to...”.

As with all techniques it can be over-used and you will need to be clear when you are asking a ‘rhetorical’ question and one that you want the students to actually answer.

Visuals and PowerPoint

When, in student workshops, I ask the question “What makes a good presentation?” probably the most common answer is “Good visuals”. Whilst it’s a slightly depressing response, it demonstrates how much students expect there to be something to look at, and expect it to look good.

Particular issues with PowerPoints are:

Note making: Students will often prioritise taking notes from PowerPoint rather than listen to the points you are making. Given that PowerPoint is generally used to aid speakers and not replace them, this is a potential problem. It’s worth exploring with your students what you expect them to do.

Copies on NOW: If you are providing your PowerPoint slides on the VLE, why should a student bother turning up to your lecture in the first place? Why not just download them directly?

As HE changes, lecturers’ slides become a resource that potentially is used in a number of ways: as a resource for distance learners, as a resource for dyslexic students, as a resource for students who were ill and missed the lecture, etc. However, just putting your slides on NOW runs the risk of giving the false impression that all they need to do is download the slides. If you are making your slides generally available to your students, it might be better to concentrate on only providing:

- Diagrams, equations, and charts that might be difficult to draw in a lecture
- References and further reading
- Names and organisations

If you want to put fuller notes up, consider including blank sections that the students need to fill in themselves during the lecture

Get feedback: Clearly one of the best ways to check how clearly you are communicating is to gather feedback. It’s unlikely that end of module surveys will give you useful feedback unless you ask for very specific feedback. It may be much more effective to use activities such as the One Minute Paper (See greater interactivity for ideas how).

Feedback from peers when done well is invaluable, if a little uncomfortable at times, each school has a peer review process, your Learning and Teaching Coordinator will be a source of further information about it. We can also learn by observing others lecture, so where possible try and observe others in action.

Student attitudes to lectures and learning

Students generally view the lecture positively (Machemer and Crawford 2007), they tend to like the fact that they get the lecturer's expertise mainlined directly into them. This does not necessarily mean that students do very much with lecture notes and often take the quite naïve view that simply attending the lecture is going to be enough for learning.

For example, I ran a series of study skills sessions for a first year course covering a range of study skills: time management, note taking, academic writing, etc. The week after the session on note taking, I asked the students to complete a questionnaire identifying what they had done with any notes taken in the session. Very few students had actually taken notes, and fewer had done anything with them. Which given the whole point of the lecture was about taking and then reviewing notes, it was a little disappointing. Incidentally, I also asked the group to try and recall what they had remembered from the session and found that in most cases it was essentially nothing. Of course I am prepared to accept that this example might illuminate more about my teaching skills than how little value students put on learning to learn. But it does illustrate the danger that students can see lectures as something to be present at, rather than engage with.

Reactions to interaction within the lecture are ambivalent; Machemer and Crawford (2007) found that that students were less positive about working with others because they were afraid of 'diluting' the quality of information gained during the lecture or that less-able students would 'hang on' to their learning and in return give nothing back. Others (Stead 2005; Weaver and Cottrell 1985) found that students enjoy the opportunity to reflect, consolidate knowledge or work on a problem.

One issue cited by colleagues trying new activities in lectures is that students become very quickly acculturated to a particular way of behaving in lectures. Once learnt, it can be very difficult to shake them out of this passive mindset and students can be very resistant to attempts to engage them within lectures. If you plan a greater degree of interaction, don't take it personally if it's hard work to begin with.

If you are planning to try something different, it's worth discussing it with colleagues for two reasons. Firstly, if your lecture approach is very different to that of your colleagues, there's a danger that students will view it as aberrant and may simply not attend, viewing it as 'harder'. You may need colleagues' support in emphasising the benefit of your approach. Secondly, if someone else is using different approaches, even the best ideas can be blunted by over-familiarity. You may need to use a different technique.

Developing a greater degree of interactivity

You may have noticed that one agenda being pushed on these pages is the need for a greater degree of interaction within lectures. Fundamentally, when well integrated into the lecture, such activities give students the opportunity to consolidate their knowledge and the chance to give them a break from note taking for a few minutes. Huxham (2005) found that students viewed positively opportunities for interaction and were able to recall more from the experiences.

Furthermore, there may be direct evidence that some activities lead to a better academic performance. Almer, Jones and Moeckel (1998) found that students who regularly completed [one minute papers](#) (see below) noted an average increase of 10% in their grades when compared to those who didn't (although obviously the motivation to complete them may have been a factor).

This section will look at the following issues:

- How to build interactive opportunities into your lectures
- Issues with greater interaction
- Use of video and other rich media
- Some example activities

How to build interactive opportunities into your lectures

In a 50 minute lecture, I would normally expect to insert 1–2 activities for the students to reflect on. In some instances it may be more, occasionally, I'll deliver a 'straight' lecture with none. Usually the activities are quite short, taking up no more than 10 minutes in total. I'll try and vary where I use activities to keep them fresh and will always try to space them out a little so as to create some variety in the 50 minutes.

For an activity to work, it needs embedding as naturally as possible into the session. Perhaps the simplest activities are questions. I'll normally use these in two ways:

Focussing questions

These are often best used at the start to get the group thinking about the topic of the lecture

- What do we know about...?
- What's your experience of...?
- What are your thoughts about...?
- What did we discuss in last week's lecture...?

Consolidating questions

These may be best used at the end of the lecture, or as an opportunity to reflect after each section.

- "Please summarise in two sentences the section on..."
- "Using the material presented so far, would you please answer this question..."

Issues with greater interaction

Timing: It takes time for the students to settle into a task and, usually, even longer to come back together at the end, this additional muddling needs working in to your planning. It's always useful counting down at the end of an activity. I'll normally warn the group that there's two minutes to go, then one, then call the time. It helps them to focus a little and as there's no surprise that the talking time is ending, helps bring them back a little faster.

Keeping it simple: In most circumstances, if you are asking the group to look at a question during the lecture it needs to be less complex than an essay question (the exception might be if you ask it in advance). It will take time for students to interpret and understand any questions set. It's therefore better to ask a question that elicits a simpler response, rather than hit students with one that has the potential to enlighten them, but in reality most will struggle to comprehend in the time available.

Being explicit about requesting feedback: Do you want to discuss their thoughts and notes? If so, you need to be clear about that so that students are prepared to share their thoughts at the end. "And at the end, I'm going to ask for feedback from four of the groups." They won't necessarily be any more forthcoming than if you didn't warn them, but at least they won't feel aggrieved about doing so.

Spreading discussion around: One problem with gathering feedback from students is that even after being prompted to speak loudly, many students won't respond in a loud enough fashion for everyone to hear. It's therefore important that you paraphrase the responses loudly back to the whole group.

It's also often at this point that you get other groups of students talking to one another whilst your attention is focussed on the respondent. I'll nearly always pause and pick the group up by reiterating the importance of listening to one another (and then often ask a student who's just been talking for their response to their colleague's feedback). Occasionally, there are occasions when I'll just shout "Oi, shut up you lot...", but that is potentially confrontational, so needs careful consideration.

Feedback from more than the usual suspects: Most lecturers know quite quickly who the students are who can be relied upon to respond in a lecture. They are probably also the students who've had contact with you a number of times, and let's be frank, are a lot keener than many of their peers. Nonetheless, it's important to try and engage with as many of the group as possible. By all means, draw upon a 'usual suspect' if it helps get the responses started, but then try and move the conversation around the room.

Tactics that can work include:

- "Okay can we have an idea from this half of the room..."
- "I was talking to this group and you had an idea that I liked..."
- "Can someone from this row..."

Probably the most important tip for anyone seeking to get a response from the group is to get in amongst them when asking for feedback. It's very easy to ignore a lecturer stood at the lectern asking for ideas; it's much harder to do so when the lecturer is stood next to you looking directly at you. Also use body language to make it clear who you are talking to/ asking for feedback from.

Using video and other rich media

I'm not actually convinced that playing a video is a more interactive activity than delivering a presentation. However, it does offer a useful change of attention that students may find useful. Whilst students may feel entertained, using video potentially also confirms to them that they are just passive recipients of an information transmission process. Video can be really useful, but like all tools, is probably best used in moderation.

I use an episode of the TV sitcom 'Friends' at the start of a lecture on presentation skills. It's funny, surprisingly instructional and, most importantly, short. The five minute clip works really well almost as an icebreaker. I've seen lecturers use a selection of clips from Youtube to inject humour and energy into a lecture. I've sat with tears rolling down my face laughing, but I'm not sure I'm learning. Most students will be used to using Youtube as a resource for entertainment, nipping between clips of epic fails, dancing dogs and favourite bands. But using video for instructional/ illustrative purposes is perhaps different.

Youtube, Vimeo and other video sharing channels can be a wonderfully rich resource and there's something seductive about dropping in a professionally produced piece of entertainment. As with all riches, they dull with overuse, here are a few pointers for usage:

Do you need to include it? – could students watch it in advance as part of their preparation, or might you only include a short section as a reminder?

Keep it short – I can't prove this, but my experience of working with others is that 15 – 20 minutes is more than enough for most students.

Think about why and how you are using it – do you want to merely lift the mood, or can video show you something more effectively than simply the spoken word or still images?

Integrate it into the lecture – I would suggest that offering students a few moments to review their notes after each film would be valuable, or invite them to discuss a key question with the person next to them.

Setting it up – In most lecture theatres the sound works and the buttons are in easy to find places. Nonetheless, make it easy on yourself and use video only once you are familiar with the set up. Similarly whatever benefits there might be from good use of video are undermined by five minutes faffing under the lectern as you try to find the remote control, volume button or power lead. Similarly, during the lecture, can you set the video up to play whilst asking the students to work on a question so they're not waiting for the browser to open and the video streaming to work?

Some interactive activities

I strongly recommend that anyone interested in developing a greater degree of interaction in their lectures spends some time reading *53 Interesting Things to do in Your Lectures*.

The one minute paper:

Stead (2005) suggests using the one minute paper in the following fashion. At the end of the lecture, or earlier if you want to get 'live' feedback, set the group the following questions:

- What was the most important thing you learned in class today?

- What question is unanswered?

Then ask the group to write for one or two minutes in response. Collect the papers in and either, respond to them at the start of the next lecture or respond individually to student queries.

With large groups it may be more appropriate to read a sample of responses; furthermore it's unlikely that you'll be able to set the question, have the students complete the task and gather the responses in a minute.

The one minute paper is probably best used frequently, either weekly or fortnightly, so that students can learn to be competent with it.

The idea is particularly appealing as it allows you to respond to feedback from students and adapt your approaches to meet their needs. It may also have benefits in that it will help encourage them to see you as interested in them, not a remote figure on the stage.

One further important point to note is that when students' one minute papers are marked, they appear to have less benefit in subsequent assessments (Chizmar and Ostrovsky 1998). This may be because students are concentrating on giving the 'right' answer, rather than engaging with the lecture content.

Dealing with disruptive behaviour

What is disruptive behaviour

It's incredibly rare for a lecturer to face aggressive or confrontational behaviour in a lecture, but there is a range of low-level disruptive behaviour often encountered in the lecture theatre. I take disruptive behaviour to include the following:

- Talking (when inappropriate to do so)
- Mobile phones ringing
- Answering said mobile phones
- Texting (a)/mobile phone gaming
- Turning up late
- Leaving early
- Less disruptive for the lecturer, but annoying for the cleaners is eating and drinking in lecture theatres

Although on a cautionary note, I recently ran a lecture and had words with a student for meddling with his mobile phone; he looked a bit crestfallen as he was copying my email address that I'd just written up on the whiteboard.

One of the main problems with disruptive behaviour is that it's contagious. One person texting is hardly a problem, but it sets the tone to other students in the lecture that it's okay for them to switch off or concentrate on the immediate gratification received from a text/YouTube video. Similarly, a couple of people talking quietly isn't a problem, but it does tend to spread.

Strategies for dealing with disruptive behaviour

Most students aren't being intentionally rude; it's more likely that they're bored, unable to engage with the content, or, most likely, have forgotten that you can see them.

Let them know you can see them: Good communications practice suggests that it's important to make eye contact with people you are talking to. It's also much harder for them to talk to one another if you are looking directly at them. There's an important caveat though, in that you can end up delivering the lecture to the 'naughty children' and that's not a satisfactory experience for anyone.

The mid-sentence pause: One technique that works well, is the mid sentence pause.

- "The impact of religion for justifying these actions cannot..."

I'll normally make sure that I'm saying something forcefully and clearly so that it doesn't just sound like I've forgotten what I'm saying. I'll then stare at the students who are being disruptive. It can lead to a situation in which the whole lecture theatre is looking at the two students talking who haven't noticed that you're waiting for them. I'll normally wait for about 10 seconds and if by this point the students still haven't noticed. I'll interrupt them with "Excuse me".

You might not like the fact that this technique embarrasses the individuals involved and so need to consider whether you would use this approach.

Insert an activity: Sometimes the group just struggles to engage. They may have been out the night before, it's the end of a long day, or they just find the subject dull. It may be worth changing the pace of the session and scripting in an opportunity for them to talk, by setting them a question to discuss. This might be enough to provide students enough of a vent to allow them to settle back into the lecture.

Physically move to them: One tool the lecturer has is to move around a little. Students get used to the lecturer standing at the lectern and therefore know that the best place for a chat is at the back of the lecture theatre. It's a good idea to occasionally move around and deliver part of the lecture from the aisles just to shake the students out of their assumption. Don't overdo it because it can become hard to control other students if you are at the back out of their line of sight.

Humour: Using humour is potentially very powerful, but also potentially difficult to use. Particularly as the most appropriate humour is usually sarcasm. If over used, it's likely to turn the whole group against you. But it can be a way of getting the message across that you're displeased with an individual's behaviour.

Build a relationship: The most important tool that you possess to control disruptive behaviour is to get to know your students. It is significantly easier to quieten a group if you can ask 'Peter' to be quiet, rather than "Excuse me, would you shut up please." This works on two levels: Firstly it's usually easier to be rude to a stranger, and secondly, as the person marking their work, you are in a power relationship with the students. Although, can I just make it clear, I'm not advocating punitive marking in response to disruptive behaviour.

Deal with the problem outside the lecture: Other than asking the student to be quiet or stop texting, it's probably inappropriate to take the matter any further in the lecture. The lecture theatre is too public an environment to start discussing the impact of their behaviour, or to expect them to apologise. The situation can escalate to the point where one or the other of you has to back down and that does little for the rest of the group.

It's usually better to ask the student to stay behind after the lecture, or to come and see you in your office during office hours and then discuss with them your dissatisfaction with their behaviour.

Don't struggle on alone: If you find that you are continuing to have problems with an individual student or group of students, it's important to not struggle on alone. You ought to ask for help from colleagues or Course Leader. It may be appropriate for them to make suggestions about approach or even attend the lecture themselves.

There is a disciplinary route and if you feel the situation has got serious enough to warrant it you need to speak to your Academic Team Leader. They are responsible for investigating the issue and taking it further.

Information about the student disciplinary code can be found in the [Student Code of Behaviour](#)

Don't start from here: Finally, there is a problem-solving adage that I feel is appropriate to use: "Don't start from here".

In other words, if the first time you tackle disruptive is when you encounter it, you've already missed a trick. In the same way that it's useful to discuss with the students the purpose of a lecture and how you expect them to learn from it, it's also important to consider acceptable behaviour with them from the very outset.

Large group teaching: some useful texts

General

SMITH, B., 1997. *Lecturing to large groups: SEDA Special No 1*. Staff and Educational Development Association.

This text is a succinct journey through the lecture. It contains plenty of innovative ideas for increasing the degree of interaction and some reflective activities for the reader. As such it's vintage Brenda Smith. Please note that it slightly pre-dates the widespread use of PowerPoint and this is reflected in the text.

GIBBS, G., HABESHAW, S., and HABESHAW, T., 1992. *53 Interesting things to do in your lectures*. Bristol: Arrowsmith.

The book is now pretty dated, with no references to PowerPoint or IT, but much of the content is still extremely relevant. It's a treasure chest of innovative ideas and always well-worth flicking through.

RACE, P., 2006. *The Lecturer's Toolkit: a Practical Guide to Learning, Teaching and Assessment*. London: Routledge.

This book by learning and teaching heavyweight, Phil Race, contains an interesting chapter on the role of the lecture and strategies for improving it. It's also contemporary enough to discuss the use of PowerPoint and other technologies.

BLIGH, D., 1998. *What's the Use of Lectures*. Exeter: Intellect.

An often-revised text on lectures, a useful starting point.

BURNS, T., and SINFIELD, S., 2004. *Teaching, Learning and Study Skills: A Guide for Tutors*. Great Britain: Sage Study Skills.

CADQ Guide: Teaching large groups

Chapter 9 – How to promote effective note taking contains an interesting example of a session plan for teaching students to take notes in lectures, well worth a look.

Presentation skills

There are plenty of texts for anyone interested in the skill of presenting and whilst most of these texts are aimed at a business audience, many contain useful ideas. Most cover very similar ground, so I'd always recommend browsing through a library or book shop if you are interested in improving your presentational skills to see what suits your particular learning style. One that recently caught my attention is:

BILLINGHAM, J., and BAUMGARTNER-COHEN, B., 2003. *Giving Presentations* (One Step Ahead). Oxford: Oxford University Press.

A really well laid out textbook with plenty of diagrams and a very readable tone.

Using PowerPoint

Most textbooks on PowerPoint are written to take the complete beginner through the different steps of producing and presenting with the software. And whilst most academics have some familiarity with the software, learning more can be extremely useful. I can't make a strong recommendation here, as learning a computer programme from a book is a very personal thing. My main advice would be browse for a book that suits you. One that I did like was:

LOWE, D., 2003. *PowerPoint 2003 for Dummies*. John Wiley and Sons

Whilst not radically different from any number of other PowerPoint manuals, I liked this book for two reasons. Firstly, it had a few amusing cartoons and secondly, there were a couple of sections with tips about presenting with PowerPoint. NB: I've only looked at the 2003 version; presumably more up to date versions retain the important points.

References

ALMER, E., JONES, K., and MOECKEL, C., 1998. The impact of One-Minute Papers on Learning in an Introductory Accounting Course, *Issues in Accounting Education*, 13(3), 485 - 497.

BLIGH, D., 1998. *What's the use of lectures?* Exeter: Intellect.

BURNS, T., and SINFIELD, S., 2004. *Teaching, learning and study skills: A guide for tutors*. Great Britain: Sage Study Skills.

CHIZMAR, J., and OSTROVSKY, A., 1998. The one-Minute Paper: Some empirical findings. *Journal of Economic Education*, 29(1), 3 - 10.

GIBBS, G., HABESHAW, S., and HABESHAW, T., 1992. *53 Interesting things to do in your lectures*. Bristol: Arrowsmith.

HUXHAM, M., 2005. Do 'interactive windows' help? *Active Learning in Higher Education*, 6(1), 17 - 31.

References cont'd

References cont'd

KING, A., 1992. Comparison of self-questioning, summarising and note-taking-review as strategies for learning from lectures, *American Educational Research Journal*, 29(20), 303-323.

MACHEMER, P., and CRAWFORD, P., 2007. Student perceptions of active learning in a large cross-disciplinary classroom. *Active Learning in Higher Education*, 8(1), 9 – 30.

MEHRABIAN, A, (2007), *Nonverbal Communication*. Aldine Transaction.

SMITH, B., 1997. *Lecturing to large groups*. SEDA Special No 1, Staff and Educational Development Association.

STEAD, D., 2005. A review of the one-minute paper, *Active Learning in Higher Education*, 6(2), 118 – 131.

WEAVER, R.L., and COTTRELL, H.W., 1985. Mental Aerobics – the half sheet response. *Innovative Higher Education*, 10(1), 23 – 31.