WESTMINSTER EXCHANGE

Giving Effective Lectures

UNIVERSITY OF INSPIRATION INNOVATION COLLABORATION WESTMINSTER
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1. WHAT IS THE PURPOSE OF LECTURES?

There may be a number of reasons for using lectures in University education which include:

- providing a basis on which students can build by further reading.
- engaging students’ interest in the topic.
- consolidating information from a range of sources.
- informing students about cutting edge research developments, or current issues, which may not yet have entered the academic literature.
- providing students with the expert’s perspective and/or enthusiasm.
- an opportunity for the lecturer to model certain reasoning processes.

All the above can be advantageous and effective ways of stimulating students into further work and learning, and can be met through the medium of the lecture. However, frequently lectures are used as a way of relaying information to students, particularly where their numbers are large. It is important to remember that the provision of information does not guarantee learning; students must go through a process of interacting with information to convert it to knowledge.

Some students (particularly in their first year) will have a poor understanding of the purpose of the lecture and how they should learn from it. There are a number of ways in which we can increase student engagement with lectures and we should try to deploy these because otherwise student learning and their development of critical reasoning and analytical skills will be worse than with other forms of teaching.

2. POTENTIAL PROBLEMS WITH LECTURES?

The potential challenges of teaching through the medium of lectures are listed below.

- Information overload can hinder student learning. Give your students an understanding of the purpose of the lecture and activities to help transform the information into learning and knowledge.
- Carefully plan and structure your lecture, relating content to learning outcomes so that students do not become confused and lost.
- Biggs, (2003) has shown that students lose concentration within 15 – 20 minutes, so include students-led activities to enhance learning.
- Students become passive if they are presented with a lot of the material as notes or handouts so build in activities that encourage student participation with the materials.
- Student perception of the lecture may be influenced by the lecturer’s skill at presentation increasing the risk of false self-efficacy. Make your lectures as student-centred as possible.
- Large class sizes might make lectures impersonal and alienating for students try to overcome this for example by asking student names when they ask questions.
- Students may be reluctant to ask questions in a large group resulting in poor comprehension and misconceptions. This can be overcome by using anonymous polling approaches (e.g. electronic voting systems) to determine the level of student understanding.
- Clearly establish mutually respectful rules at the start of the module. Do not humiliate students in front of their colleagues but address behavioural issues immediately and on an individual basis. Recognise that the problems may arise because the students do not understand the purpose of the lecture.
- If you are asked at short notice to give a lecture using another academic colleague’s notes and slides you may appear lacking in confidence or feel under-prepared. To avoid this, always prepare your own notes and materials, even if you find it helpful to build on a
colleague’s notes.

- Lecturers may misuse audio-visual aids (AVA), or find that they are not working, and hence disrupt the students' learning. So always think carefully about how you use technology and include a back up plan in case they are not functioning.
- Your presentation skills may need improving because although these are only part of the lecturing process, it can be unhelpful if the students are unable to hear, or if the lecturer seems disengaged. So practice and gain feedback. Peer observation is often very helpful in strengthening your skills and giving you more confidence. Westminster Exchange has private recording facilities that can help you with this.

Teaching is an integrated process, not a series of individual activities. A lecture is only part of the process and must be aligned with other aspects of the module (e.g. seminars, practicals, assessment tasks etc.).

It is important to ensure that the lecture has an obvious purpose which you can clearly explain in respect of other learning activities, and the learning outcomes of the module. Make sure that the lecture relates to the tasks that the students will undertake, perhaps in a subsequent tutorial/seminar session, through group work or by independent study.

Rather than just providing information you can use the lecture to model your reasoning processes as an expert, or you could compare two contrasting views of a topic, or pose a series of questions which the students could follow up later. You can relate the material to work they have undertaken before, in the same or different modules, and to assessment tasks they are undertaking.

Students need to understand that learning not just absorbing information provided in handouts, but it is an active process that requires them to fully engage in the process in order to ensure their learning. It might be useful to elucidate what students should gain from a lecture and how you have designed it to enable them to engage with the material.

You need to encourage the students to engage with the material to ensure they process it and convert it to knowledge. This processing might also be encouraged by activities which are built into the lectures which ask the students to think about the material, analyse aspects of it, make judgements on it, discuss ideas in pairs and/or relate the input to other components of the module.

3. WHAT TO CONSIDER WHEN PLANNING LECTURES

Key points:
- As with any other teaching session, lectures should be planned. Use a session plan to help you (see Appendix 1).
- Be clear about the relationship between the lecture and the rest of the module.
- Be aware of the students' prior knowledge and understanding of the topic, and of the diversity in your students in terms of previous experience, disability, cultural diversity and learning styles. Take these into account when planning your session.
- The lecture should have clear learning outcomes, which are explained to the students, and activities should be planned to ensure that they can be achieved by the lecture and any associated follow up activity.
- Clearly ‘signpost’ your lecture so that as you move through the lecture and move to different ideas or activities, students understand the logical progression.
- Throughout a lecture ensure it is related to other topics addressed in the module and where possible to other modules the students have studied.
• It is good practice to start a lecture by encouraging students to summarise what they learned in previous session(s) so that there is a sense of continuity.
• At the end of each lecture provide a summary of what has been covered, this results in students learning more (Biggs, 2003).

4. BUILDING CHANGES OF ACTIVITY INTO LECTURES
We have already mentioned that students lose concentration after 15-20 minutes of listening and taking notes, and hence their capacity to learn diminishes rapidly (Biggs, 2003). In order to increase their concentration it is essential to introduce a change of activity. This is possible even in large classes e.g.
• Ask students in pairs to discuss a topic for a specific time. In large groups have a signal which indicates that you wish the students’ attention to revert to you (e.g. a particular noise).
• Give the students a question with a number of alternative answers. Ask them singly on in pairs to select the right answer (you could use an electronic voting system for this). If you are in a very large class where you feel this is not possible you could ask for a show of hands on each answer.
• Give the students a mini case study, or practical problem to solve on their own, or in pairs. Talk through your solution, asking them to note how their answer differs from yours.
• Ask students to think of and contribute examples to illustrate a particular point. This could be oral or written on an overhead which is distributed and then displayed. You can take a selection of answers; you don’t need to address every student, but try to make sure that it isn’t always the same student’s contributions.
• Stop and ask the students questions. Don’t let the silence ‘frighten’ you into answering them yourself too quickly, give the students some time. You can also ask the students if they have any questions, this often only elicits silence or negative body language. Use questions which help you to assess how well the students have understood the material being discussed. Again this can usefully be done by asking students in group to address the questions and/or using voting systems.
• Build in a quiz for students to take. This is especially useful at the beginning or at the end of a lecture.
• Simply give the students a quiet break to do nothing but reflect on what you have been saying. This can be very refreshing for everyone.
• Get the students to write a brief review of their learning/understanding, in stages and/or at the end.

When giving students a change of activity in any teaching session always explain exactly what you want them to do, for how long, and be clear on how you will indicate the end point of any discussion time.

5. MAKING LECTURES MORE STUDENT-CENTRED
Many of the changes of activity noted above will help make lectures more student-centred. The following points are also very important:
• A lecture will be more student-centred if you start from the point of the students’ knowledge. It is worth taking time at the start of the module/lecture to find out what students do understand about the topic, perhaps by some questions and answers, or a quiz.
• It is helpful to use examples which, either are familiar to the students or are their own.
• Try to build on the students’ knowledge and understand by getting their own contributions
to develop the principles and theories you wish to bring out in the lecture, rather than always starting with the theoretical framework.

- You can ask students to reflect on what they are learning, and make notes on this, as you go through the lecture, or at the end. This will help them to transform the material into learning. These strategies will help the students to make sense of your views, thoughts and ideas, by embedding them within their understanding.

6. MAKING LECTURES MORE PERSONAL

This can be more difficult with large numbers of students; however there are some points which will help:

- Arrive early and talk to those student who are also present early.
- Smile at students and thank them for their contributions, questions and attention.
- Maintain eye contact with students and address them directly as “you”.
- Be sure you address students in all parts of the room, not just those in the front and middle of the room. Roaming your eye contact around the class is helpful in making all students feel part of the lecture and indeed may solve some disciplinary problems.
- It may help (particularly with younger groups) to divide the room into sections and give each “division” a team colour (this could be done with coloured “post-it” notes). You can then direct questions at specific teams. This approach ensures that students at the back of the room know from the beginning of the session that they will be involved, and it ensures that you will spread your attention over the whole group.
- Move about at times so that you are closer to students at the back of the room. This may help in solving some of the disciplinary problems, as student will feel involved more of the time.
- Learn some students’ names and use these when talking to them, however don’t just use the same names week after week.
- If you have a mixed group, identify where the students come from. For instance, at the start of the session ask for a show of hands e.g. “Who are the physiotherapists? Who are the homeopaths?” Then direct questions to, or seek comments from, these groups e.g. “Can I have a view from the homeopaths?” This will help a mixed group of students all feel engaged.
- When a student asks a question, repeat it so that everyone can hear and then answer it to the class as a whole. Avoid alienating most of the class by having a one-to-one conversation with a particular student (unless you are trying to manage disruption by a particular student).

7. ENCOURAGING STUDENT QUESTIONING IN LARGE GROUPS

Students are often shy of contributing or asking questions in large groups. They fear that their contributions will be wrong, or trivial, and that they might get a rebuff. There are some solutions to this:

- If you want the lecture to be interactive always start early, in the first few minutes of the class so that the students do not go into a passive mode. It is much harder to get students to participate, if you talk for twenty minutes before opening it up to them.
- Always start your questioning with simple ones to which students will find it reassuringly easy to respond. Once their confidence has been built up, you can move on to more complex issues.
- Always thank a student and give a positive response to a contribution or question even if it is not correct. Never ridicule or dismiss them but lead them to a more appropriate answer by careful questioning.
- Get students to formulate their questions or answers in pairs or small groups. This will give them confidence to share their ideas with the larger group.
• Ask students to formulate questions and then hand them in at the end of the class (or at a coffee break). You can then address these at the start of the next session and this also provides you with feedback on any areas of misunderstanding or uncertainty.

8. DEALING WITH LATECOMERS AND DISRUPTIVE BEHAVIOUR

You must address these issues. By ignoring them you can reinforce bad behaviour, as students will think it does not matter, and such behaviour is always disruptive of a class.

• Be aware of School/Department policy on latecomers and apply this. If such does not exist, clearly explain to the students at the start how latecomers will be treated. You might deny access to the room after a certain time, ask them to apologise and explain their lateness. If they miss out on materials or input provided you must be clear that it is their responsibility to get the material from their colleagues, not from you.

• Do not fall into the trap of offering each latecomer a summary of what they have missed. This wastes time and can become very irritating for the rest of the class.

• Always be early and start the class on time. If you are late for any reason, make sure you apologise to them – you should be a good model for them.

• It is helpful to pre-empt poor behaviour by laying down “ground rules” at the start of the module explaining what standard of behaviour is expected. This is often very effective if you ask the students to suggest the rules and get their agreement (a mutual code of conduct).

• Students may become restless because they have been sitting in a passive mode for too long. Try giving them a 5 minute comfort break or introduce a student-centred activity for a few minutes. If they have been working in groups or pairs, get them to get up and change places.

• Other disruptive behaviour should also be dealt with. It may be enough to politely ask the guilty parties to ask students to stop what they are doing and to explain that this is disrupting the learning of the rest of the class. You will find that most of the class will welcome this approach. Where the offence is persistent, discreetly discuss this with the individuals, not in front of the whole class. Ask them why they are behaving in this way and reinforce the need for them to develop a professional approach which is expected of university level students. Remind them that learning is a partnership and they have obligations to work towards this. Alternatively you might like to suggest that you appreciate that they probably know the work already and that they are under no obligation to attend the class if they don’t think they can learn anything. However, if they stay, they must not disrupt the concentration of others.

• If the problems continue, consult a more senior member of staff.

9. USE OF AUDIO VISUAL AIDS (AVAS)

• Know what resources are available to you in the lecture room, and have a fall back in case the one you have chosen doesn’t work. Not all teaching spaces are the same, so make sure you check in advance and order anything you need that is not provided.

• Remember some students are greatly helped if they can see material visually so diagrams and illustrations can be very useful. Try to use a range of visual materials, and make sure they are visible to, and readable by, the entire class.

• Provide a change in activity by using a short video on which the students can comment or ask/answer questions. Always have a purpose for watching a video and make sure it is not too long (about 5-10mins maximum).

• Have a sound pedagogic reason for using AVAs, otherwise, don’t use them!

• Don’t blind them with technology, using too many different types of AVA in one session can be distracting and/or confusing.
Avoid the pitfall of reducing an interesting topic to a long series of short bullet points (a danger of PowerPoint!).

Use handouts carefully, and with purpose. Leave gaps for students to complete, provide a complex diagram which students can annotate further with key points from the session. A synopsis of the lecture might make the student more passive during the lecture and reduce the amount of processing of the knowledge that they undertake.

Flipcharts can be good for capturing students’ ideas in a spontaneous manner in a small room, but are too small for use in a lecture theatre. The whiteboard or a visualiser can be used for this. These techniques have the added advantage that one can ask students to come forward and contribute.

10. PRESENTATION SKILLS

Although we tend to concentrate on our presentation skills when lecturing they will not be effective unless the lecture had been carefully designed as indicated above. However, it is important that we have a level of competence in presentation skills. These include the following points.

- Greet your audience, smile and introduce yourself (if necessary).
- Start with stating the purpose and learning outcomes of the lecture.
- Speak so that you are audible, keep a steady pace, take some pauses, and introduce some variety of tone. If you are not sure that you are audible check with someone in the back row.
- Use language which is accessible to your audience, avoid jargon unless you are talking to specialists.
- Avoid reading directly from your notes or a text, unless it is a very short key section.
- If you are using powerpoint, make sure the type face is of an appropriate size and colour. Do not just read from it but also do not ignore it. Powerpoint should be used to summarise key points and to help illustrate complex ones e.g. through the use of diagrams.
- Maintain eye contact with the audience. Ensure that this encompasses the entire room, not just the middle and the front row.
- As you move from topic to topic during the lecture introduce the change of ideas.
- When you introduce an activity make sure the instructions are clear to the students. It is often helpful to display these visually as well as explaining them orally.
- Ensure that there is time for summarising the main points at the end.

11. CONCLUSION

In conclusion, the key to successful lectures is to look at them as a learning experience for the students, rather than as a presentational opportunity for the lecturer. A clear purpose and structure will help you achieve a more student-centred approach, even if you are dealing with large lectures in a formal lecture theatre.

12. USEFUL REFERENCES

- Race, P and Brown S (2001) The ILTA Guide Inspiring Learning about Teaching and Assessment: ILTHE & EducationGuardian.co.uk, available online at www.Education.Guardian.co.uk by searching for 'ILTA'.

WEx Guides:
- How to use handouts effectively.
- Dealing with Difficult Situations in your Teaching.
- Starting Your Module: Getting the first session right.
- What is Student Centred Learning?
Appendix 1

Sample Plan for Teaching/Learning Session

Module (long term) learning outcomes:

Session (short term) learning outcomes:

Student group (How is the group made up, what is their prior experience relating to this learning, are there any particular factors you should take into account?)

Delivery methods (How will the learning outcomes be delivered in the session?):

• Lecturer activities:

• Student activities:

Resources (What resources will help the students' learning e.g. handouts, AVA etc.?):

Guideline timetable of events:

Possible ways of assessing learning (What will help you identify that the students are learning during the course of the session? how does the session relate to the module assessment strategy?):

Reflections/evaluation/suggestions for future development: