DELIVERING A COURSE OF LECTURES

THE CONTEXT
LEARNING & TEACHING
PRACTICAL TIPS

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An abridged, combined version of the three presentations written for the original 2007 workshop by Adrian Taylor, Brian Stewart & Claire Stocks
SECTION A: CONTEXT MATTERS

[After Brian Stewart ..........]

• Students

• Colleagues & the “department”

• The overall course structure

• ........all have implications for the lecturer!
STUDENTS

• Very bright
• Highly motivated and ambitious
• Young, immediately post-school
• 200 or more in a `big' subject, 30-50 in a ‘small’ subject
• Diverse backgrounds
• Substantial overseas contingent
• …… how do these factors influence us?
COURSE STRUCTURE

• A course typically specified in terms of

• Syllabus: Academic Experience + QAA Benchmarks plus Professional Accreditation (eg. UK Engineering Council for C.Eng)

• Pre-requisites
• “Learning Outcomes”
• Learning & Teaching strategy
• Assessment regime
TEACHING METHODS

A course typically consists of a planned mix of

- Reading
- Lectures
- Classes and Tutorials – with written work and formative feedback
- Practicals – with written work and both formative feedback and summative assessment
- Other Coursework – with summative assessment
- Followed by an assessment (examination)
STUDENT EXPECTATIONS

• Subject skills
• Mastery, enthusiasm, (love of subject)…
• Technical competence as lecturer
• Legibility, audibility, pace, …
• Clear handouts, slides, notes, webpage,…
• Willingness to engage
• Knowing where the students start
• Welcoming questions
• Covering the ground
DEPARTMENT EXPECTATIONS

- Examiners
- The students demonstrate the outcomes
- Other Course Lecturers
- Good articulation with their courses
- College Tutors
- Good exercise sheets related to lectures, with helpful model answers or tips
- The Head of Teaching / DoS / DUGS
- Contented students and faculty
CHALLENGES

• What do you expect to be the biggest challenge you’ll face in delivering such a lecture course?

• Work in pairs/threes
• Two or three answers per group
• Report back in 10 minutes
SECTION B: LEARNING & TEACHING

• [After Claire Stocks...........]
Oxford Learning Institute

Teaching

Learning
Lecturing for Learning

• Lecturing is a two-way process which involves the students.

• Ideas and facts being presented must be capable of being easily assimilated into existing knowledge and understanding.

• Both lecturers and students have intentions for the lecture, and those intentions may not be aligned. Taking their intentions into account, or making yours explicit may be productive (especially with first years).

• Getting some feedback from students and/or peers may be beneficial in revealing aspects of this process from your own perspective.

• You must ensure that you gain and retain the students’ attention.
What students do during the lecture

• While lecturing, students are not attending to what is being said 40% of the time (Pollio, 1984, p 11)

• The majority of students (84%) felt that they could only attend to a lecture for a maximum of 20-30 minutes (MacManaway, 1970, pp 321-329)
Based on Bligh (1998:56) after Lloyd (1968)
Notional effect of interruptions on attention
Encouraging ‘Deep Learning’ (Ramsden, 2003)

- Factors that encourage a student to take a ‘deep approach’ to learning include:
  - Interest in the material being presented
  - A perception that the material is relevant/important
  - Contextualisation – real world applications or broader implications of the material being presented
  - A reasonable workload – too much material can overwhelm students
  - Beginning from a point of student understanding
  - Asking students to apply/manipulate information
What you do after…(getting feedback)

• Use eye contact and check for body language (formative)
• Ask for questions at key moments (formative)
• ‘Instant questionnaires’ - ask for questions/key points/learning at the end (summative)
• Ask a sample of students to allow you to see their lecture notes (summative)
• Be observed (peer review - summative)
• Video yourself (self-evaluation – summative)
• Reflect on all feedback, including the JCCU questionnaire
• Engage with the JCCU Questionnaire by providing a brief written response
What students do after…(not very much?!) 

- Although every student surveyed intended to do follow-up work based upon a particular set of lecture notes, 87% did not subsequently even read the notes! (Hartley and Cameron, 1967, pp 30-33)

- Approximately 60% of a lecture is likely to be forgotten within 24 hours unless reinforced in some way (McCleish, 1976)
CONCLUSIONS

• Lecturing is a two-way process which has to take account of the student. The best lecturing begins with a consideration of the student and is responsive to students.

• More variety in a lecture helps to sustain attention and this may well have a knock-on effect on both assimilation of information and recall.

• Lectures should aim to encourage ‘deep learning’ by ensuring that the material is relevant, interesting, at the right level, in the right quantities and well structured.

• Students need to be encouraged to work on lecture material after the lecture to aid recall and understanding.

• Lecturers should be aware of student diversity and methods for helping students to engage with lecture material.

• Feedback should be obtained in order to improve and adapt lectures.
SECTION C: PRACTICAL TIPS

• PRACTICAL TIPS TO GET YOU STARTED

• IN TIME YOU WILL FIND YOUR OWN STYLE

• USE FORMAL & INFORMAL FEEDBACK TO HONE YOUR SKILLS:

  CHAT TO A COUPLE OF STUDENTS AFTER THE LECTURE & PERHAPS LOOK AT THEIR NOTES
  REMEMBER TO PROMPT THE STUDENTS TO COMPLETE THE ON-LINE END-OF-LECTURE-COURSE QUESTIONNAIRES!
  CHAT TO THOSE TUTORING YOUR MATERIAL
PART ONE

A FEW THINGS THAT YOU SHOULD BE FAMILIAR WITH FROM YOUR EXPERIENCE OF DELIVERING RESEARCH TALKS
• IF POSSIBLE CHECK OUT THE LECTURE THEATRE & AUDIO-VISUAL AIDS IN ADVANCE, INCLUDING A SOUND-LEVEL TEST

• ALWAYS TAKE A BACK-UP COPY OF SLIDES

• AVOID COLOURS THAT PROJECT BADLY

• BEWARE THAT SOME WHITEBOARD MARKER PEN COLOURS SHOW UP VERY POORLY IN REFLECTED SUNLIGHT – BLACK & DEEP BLUE ARE THE SAFEST

• COVER A MODERATE AMOUNT WELL, RATHER THAN A LARGE AMOUNT BADLY

• LEAVE SLIDES IN VIEW LONG ENOUGH FOR THE CONTENTS TO BE DIGESTED AND/OR NOTED DOWN
Supplement: How to make your slides

- Keep style and layouts consistent
- Avoid too much complexity
- Combine text with figures to highlight main points
- Check room size and make sure size of features and text is clear enough to be seen by the whole audience (Helvetica 24, 20, 18, 16, 14, 12, 10)
- Avoid unnecessary details
  - too much decoration
  - too much numerical information in tables (use of highlighting)
- Use colour wisely and avoid distracting animations
- Sans serif fonts such as ‘Arial’ or ‘Helvetica’ are clearer than ‘Times Roman’
PART TWO

TAUGHT COURSE LECTURES
YOU ARE ALREADY AN EXPERT

YOU MAY NOT HAVE DELIVERED AN UNDERGRADUATE OR MSc LECTURE, BUT FROM THE STUDENT PERSPECTIVE YOU HAVE EXPERIENCED HUNDREDS OF LECTURES, IN A VARIETY OF STYLES.

CAST YOUR MIND BACK TO WHAT YOU LIKED & DISLIKED, AND WHAT WAS EFFECTIVE AND INEFFECTIVE.

NOTE: IT DOES NOT NECESSARILY FOLLOW THAT AN ENJOYABLE LECTURE IS ALSO AN EFFECTIVE ONE!
THINGS TO DO

• KNOW YOUR SUBJECT, TALK TO THE PREVIOUS LECTURER OR THE HEAD OF TEACHING/DoS/DUGS, CREATE A GOOD SET OF LECTURER’S NOTES (YOUR ‘COMFORT BLANKET’), AND ALWAYS REVISIT THESE NOTES DURING THE 20 MINUTES PRIOR TO THE LECTURE

• CREATE A CLEAR STRUCTURE TO YOUR COURSE AND BE CONSISTENT FROM LECTURE TO LECTURE

• USE HANDOUTS FOR COMPLEX DIAGRAMS & EQUATIONS

• MAKE SURE THAT THE STUDENTS ARE ABLE TO LEAVE THE LECTURE WITH A GOOD SET OF NOTES (ASK A COUPLE OF STUDENTS TO SHOW YOU THEIR NOTES)
THINGS TO DO

• COMMUNICATE YOUR ENTHUSIASM FOR YOUR SUBJECT, YOUR PLEASURE AT BEING THERE TO LECTURE THIS GROUP AND YOUR CONFIDENCE IN YOUR SUBJECT KNOWLEDGE

• WHERE POSSIBLE, FROM TIME-TO-TIME INCLUDE REAL EXAMPLES FROM YOUR OWN EXPERIENCE, INCLUDING YOUR INTERACTIONS WITH INDUSTRY, TO ILLUSTRATE AND BRING ALIVE THE TOPIC

• INTRODUCE YOURSELF AT THE START OF THE FIRST LECTURE – VERY BRIEFLY OUTLINE YOUR RESEARCH AREA AND WHY IT EXCITES YOU
THINGS TO DO

• INCORPORATE ONE OR TWO ‘BREAKS’ IN THE MAIN 50-55 MINUTE SEQUENCE. Eg. ASK THE AUDIENCE A QUESTION, DESCRIBE A PRACTICAL APPLICATION (VIDEO CLIP?), GIVE A DEMONSTRATION OR PASS ROUND A SAMPLE.

• BE WILLING TO ACCEPT A SMALL NUMBER OF QUESTIONS FROM THE AUDIENCE DURING THE LECTURE.

• ACTIVE LEARNING IS IMPORTANT:
  TUTORIAL QUESTIONS ARE ISSUED. ASK THE STUDENTS TO WRITE DOWN THE ANSWER TO ONE OR TWO QUESTIONS DURING THE LECTURE AND ALLOW A MINUTE OR TWO FOR THEM TO DO THIS. PERHAPS FINISH THE LECTURE WITH A ‘TAKE AWAY’ QUESTION.
THINGS TO DO

• ENGAGE WITH YOUR AUDIENCE: MAKE REGULAR EYE CONTACT, PERIODICALLY SWEEP THE AUDIENCE WITH YOUR GAZE, ADJUST YOUR LECTURING ACCORDING TO THEIR REACTIONS, ASK THEM IF THEY ARE HAPPY WITH A PARTICULAR CONCEPT THAT YOU HAVE JUST EXPLAINED....

• ‘SPOT’ ONE OR TWO PEOPLE FROM WHOM YOU WILL GAUGE HOW WELL THE LECTURE IS GOING: ARE THEY STILL WRITING FURIOUSLY TWO MINUTES AFTER YOU FINISH SPEAKING? DO THEY LOOK CONFUSED OR BORED?
MORE THINGS TO DO

• USE THE FIRST COUPLE OF MINUTES TO REMIND THE STUDENTS OF THE FINAL TOPIC IN THE PREVIOUS LECTURE

• CONSIDER SUMMARISING AT THE END OF EACH LECTURE THE KEY CONCEPTS YOU HAVE COVERED, AND INDICATE WHAT WILL BE THE KEY TOPICS OF THE NEXT LECTURE (SOMETIMES OF COURSE THIS WILL JUST BE TO SAY “NEXT TIME WE SHALL CONTINUE TO DEVELOP THE SAME TOPIC AS THE PRESENT LECTURE”)

• BE WILLING TO ANSWER QUESTIONS AT THE END OF THE LECTURE, IF NECESSARY OUTSIDE THE LT

• CONSIDER USING THE ‘LECTURE CAPTURE’ TECHNOLOGY
SUPPLEMENT – EVEN MORE THINGS TO DO

• IN ADVANCE, PRACTISE WRITING LEGIBLY ON THE WHITEBOARD AND CHECK OUT THE RESULTS FROM THE BACK OF THE LECTURE THEATRE

• SAY ‘GOOD MORNING’ WHEN YOU ARE ABOUT TO START THE LECTURE!

• USE PART OF LECTURE ONE TO PUT THE WHOLE COURSE IN CONTEXT – BRIEFLY EXPLAIN THE STRUCTURE AND INDICATE HOW THE COURSE RELATES TO OTHER PARTS OF THE PROGRAMME SUCH AS A SPECIFIC PRACTICAL LATER IN THE TERM, ANOTHER LECTURE COURSE .............

• AT THE END OF THE LECTURE MARK YOUR NOTES SO THAT YOU KNOW WHERE TO BEGIN NEXT TIME

• IF YOU HAVE MADE A MISTAKE IT IS ESSENTIAL THAT YOU CORRECT THIS AT THE NEXT LECTURE
THINGS TO AVOID

• FINISHING LATE (unfair on students and on the next lecturer)

• TOO MUCH MATERIAL IN ONE LECTURE – A GOOD RULE OF THUMB FOR AVERAGE SIZED HANDWRITING IS FOUR PAGES OF A4 PER 55-MINUTE LECTURE
  [4 pages of Times-Roman 12 (~2500 words) is generally too much!]

• GOING TOO FAST (OR TOO SLOW – YAWN!!)

• ‘FLASHING UP’ SLIDES WITHOUT GIVING TIME FOR THE STUDENTS TO DIGEST AND/OR NOTE DOWN THE CONTENTS

• TOO MUCH DICTATION AND/OR TOO MUCH READING DIRECTLY FROM YOUR OWN NOTES

• DOING NO MORE THAN READING OUT THE CONTENT OF A SET OF SLIDES
THINGS TO AVOID

• PROVIDING SUPPLEMENTARY MATERIAL WITHOUT INDICATING WHETHER OR NOT IT IS EXAMINABLE (IE. IN THE SYLLABUS), OR FOR INTEREST ONLY

• MOVING AROUND TOO MUCH, AND OTHER DISTRACTING HABITS.
  ASK YOUR FRIENDS WHAT YOUR DISTRACTING HABITS ARE!

• ISSUING AS THE NOTES FOR A TEN-HOUR LECTURE COURSE, THE FIRST DRAFT OF THAT 300-PAGE BOOK YOU HAVE ALWAYS WANTED TO WRITE!

• SPEAKING A LOT WHILE FACING THE BOARD – WHEN YOU DO HAVE TO DO THIS REMEMBER TO RAISE THE VOLUME
DISRUPTIONS

• IT IS ONLY FAIR TO BOTH YOU AND THE MAJORITY OF THE AUDIENCE THAT YOUR LECTURE IS FREE OF DISRUPTIONS

• YOU ARE THE BOSS!
  IF THERE ARE DISRUPTIONS IT IS NORMALLY SUFFICIENT TO ASK THE CULPRIT(S) TO SETTLE DOWN. OFTEN SIMPLY PAUSING MID-SENTENCE AND LOOKING SILENTLY AT THE AUDIENCE WILL DO THE TRICK.

• IN EXTREME CASES YOU SHOULD ASK THE CULPRIT TO LEAVE THE LECTURE THEATRE
PROMPTS FOR DISCUSSION LATER

• LECTURING FROM NOTES, CARDS, SLIDES, MEMORY OR FROM A SCRIPT?
• ‘POWERPOINT’ OR ‘CHALK ‘n TALK’ WITH A SMALL NUMBER OF SLIDES?
• VISUALISER - AN ALTERNATIVE TO ‘POWERPOINT’
• READING LISTS – HOW MANY TEXTS?
• LECTURE OR PROBLEM-BASED GROUP/INDIVIDUAL WORK?
• NOTE-TAKING BY THE STUDENTS?
• LECTURE HANDOUTS – JUST THE COMPLEX SLIDES OR COMPREHENSIVE NOTES?
GROUP WORK

Group 1: List the five most important features that in your opinion typify a good lecture

Group 2: List the five most important features that in your opinion typify a bad lecture

Group 3: List the five most important features that in your opinion typify a good lecturer

Group 4: List the five most important features that in your opinion typify a bad lecturer

Work in groups of 3 or 4
Report back in 15-20 min