

Using online mini lectures in your teaching delivery

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So you think you are a good lecturer ...

Why? What makes you a great teacher?

- You speak clearly and your students understand you.
- You try to boil a problem down to its components.
- You try and find the simplest way to explain things.
- You attempt to link the theory to problems which the students can relate to.
- You are patient and are happy to explain something again in a different way.
- You provide students with opportunities to practice the skills they should learn (and are examined in)
- You or your GTA's is available for students when they get stuck

For which of these do you need a classroom?



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Is this what happens in a normal class?

- You speak clearly and your students understand you.
 - You try to boil a problem down to its components.
 - You try and find the simplest way to explain things.
 - You attempt to link the theory to problems which the students can relate to.
 - You are patient and are happy to explain something again in a different way.
 - You provide students with opportunities to practice the skills they should learn (and are examined on).
 - You do your best to make your class available for students when they get stuck.
- No, and it may not even be desirable, as this may adjust the speed of the class to the slower learners.**

What do you really need contact for?

Lecture

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graph TD; Lecture[Lecture] --> B1[• You attempt to link the theory to problems which the students can relate to.]; OfficeHour[Office Hour] --> B2[• You are patient and are happy to explain something again in a different way.]; Tutorial[Tutorial / Exercise Class] --> B3[• You or your GTA's is available for students when they get stuck];
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- You attempt to link the theory to problems which the students can relate to.
- You are patient and are happy to explain something again in a different way.

Office Hour

- You or your GTA's is available for students when they get stuck

Tutorial /
Exercise Class

Consider this (Classroom Inversion)

<http://www.khanacademy.org>

- Let student's learn the basics at their own pace at home
- Use lectures to spend more time on what you wish you could teach if you weren't bogged down by the basics
- Let the students practice in tutorials (with other students and GTAs or teaching staff as a resource available)

Why does this capitalise on why you are good?

- I remember the lecturers who were enthusiastic about what they taught
- What are you most enthusiastic about?

What I will do

- ECON10062 Introductory Statistics
- 300 students
- Most of them think that after the exam they will not need statistics anymore
- **Lectures:** Will deliver the basic explanations of how to calculate stuff (means, variances, etc.) via online clips. Will use the lecture to talk about real-life applications of these techniques

What I will do

- **Tutorials:** Will deliver online clips of solved examples
 - Tell students which clips to watch before tutorial
 - 10 minutes to clarify issues arising from online clips
 - Hand out new unseen questions which students solve in pairs (GTA to be available to remove hurdles on an individual basis)

What do you need?

Normal Computer:

- Screen capture software
 - Jing, free software (max 5 min clips)
 - Adobe Captivate, £94 through EDS; suitable for software demonstrations
 - Camtasia Studio, £120; suitable for software demos and mini-lectures
- Touch Input Device
 - Wacom, Bamboo. app £200, cheaper are available but in smaller size
- Drawing Program
 - SmoothDraw, free
 - Microsoft, OneNote, (included in MS Office)

Tablet Computer

- e.g. Dell Tablet £1200
- but also need screen capture software and drawing program

How to get it

- Convince a couple of colleagues that online clips are useful in your area
- Explain to your Head of School / DA what you (or best a group of colleagues want to do) – just before you meet him send him [Salman Khan's TED Talk](#)
- Propose that they purchase a laptop with all the required hard- and software (between £1000 and £1500) for departmental use.
- Offer that you administer the lending out to colleagues.