

## **Graham Roberts Transcription**

### **Q1 Summary**

The courses I'm working on are introductory and intermediate courses on programming and software engineering.

I use video to capture a subset of the material the ideas in a format which is going to be accessible to the students outside of lectures and also engaging.

There is a clear body of material which is Introductory Basic that doesn't make good live lecture material but nonetheless the students need to be familiar with and need to be able to review multiple times.

I still recommend textbooks and there is a wide range of textbooks available. But students these days look to prefer one by material videos video courses and so on are very familiar with that format ,so that's what they're looking for and increasingly want to engage with.

I use video to capture the core material. Examples in programming.How to use the programming tools and things that need to be demonstrated.

So the goal is that over time I build up a library of these videos, which can really be used throughout the course and also across multiple courses. Reuse of material is actually one of the important goals

### **How video is used in teaching**

#### **Q2: the pedagogical context 1.43**

It does take time to learn how to produce good video good material. It's different from doing a stand-up live lecture.

You have to select carefully what you're going to include.

You need to plan the length so short videos in the range of maybe 5 to 10 minutes the most of what you're aiming for.

You're not trying to give an entire lecture in that time so you often have to cutout edit material in order to get down to the essential points or the central demonstration you give. In order to make it good material that is watchable.

If you're just recording a lecture effectively than it's less interesting, boring and really no better than actually giving the lecture live.

So its a different medium and you need to exploit that the fact that it is a different medium.

### **Video in computer teaching**

#### **Q2: the pedagogical context 2.52**

The course has a lot to core basic details.

An example is learning to program.

You can run through the syntax of a programming language. But that's not particularly interesting lecture material.

What's interesting is running for examples of how you write programs and solve problems that language.

That's better presented live with the reference material the basic material available in other sources such as in video that students can make use of as and when they need to.

### **Lecturecast**

#### **Q3: How video is used 3.22**

I do use lecturecast. In fact I record all the lectures I do. So they all go up in lecturecast but increasingly want to use the lectures as much more interactive sessions. So may be

setting a problem that the students spend five minutes working on then working through the solutions.

Lecturecast does not capture that well at all . It doesn't capture students working. There is problems with the sound if students are asking questions or giving answers. So lecturecast doesn't match that style of teaching.

## **Lecturecast**

### **Q3: How video is used 4.10**

Another problem lecturecast is that it doesn't record things like the whiteboard or blackboard at the front of the lecture theatre.

You can use the rostrum camera that's is provided in the sum of the lecture theatres that you have to remember to do that.

One of the problems I have is remembering to take along bank paper continues with that. But also the whiteboard is in some ways a more expressive medium by drawing sketching on it more freely than you can with the camera on piece of paper.

## **Producing video**

### **Q3: How video is used 4.52**

My own video I actually use either slides prepared in powerpoint or keynote or i'm using Screen Capture. So software that's running on screen on capturing that.

I looked at writing by hand using tablets and things like that.

The trouble is trying to do that and keep your handwriting neat some legible.

It's one thing to write on a piece of paper it's another thing to write on one of these devices. I find it harder to maintain handwriting quality on that It's something i'm continuing to experiment with.

## **Assessment**

### **Q2: The pedagogical context 5.32**

I use video assessment quite a lot. Have been for three or four years now.

So students are as part of an assignment or part of project work asked to produce a video demonstrating that work. Explaining what it's about and so on.

Now I've tried that first time and i was worried that students would have problems producing the video that actually that would turn out not to be a problem at all.

With the sort of mobile phone smart phones, laptop cameras and songs are available.

They all have the equipment and a lot have produce videos they are used to the idea from things like Facebook, and that's worked very well.

## **Assessment marking**

### **Q2: The pedagogical context at 6.13**

I mark the video by watching it and then I have a mark sheet with a set of criteria.

Each criteria is scored out of three.

I also have a standard set of comments about things that are going well or not in the video that I use.

And while watching a video i'm also writing additional extra comments. That works quite successfully.

It does take time.

You got to remember that you've got to actually watch the videos.

Keeping the video length down so I usually recommend roundabout 10 minutes maximum.

But it's worked very well and I've been quite impressive.

We have had some very good videos produced.

So it's certainly something that students engage with and are able to do very effectively without having to have a lot of of training or specialised equipment.

They've got the equipment in their pockets literally and quite happy to go and do that.

### **Student reaction**

#### **Q2: The pedagogical context at 7.20**

I primarily use video assignments in relation to group project work.

The group is required to either do a presentation or video.

Some of the projects it is a live presentation because that's still an important skill. We want to make sure it's included and every student gets a chance to do that.

But for other project work its producing the video.

One of the reasons is that logistically that it works better than trying to arrange a session where all the students come together in their groups and give live presentations.

The other advantages is it gives the students time and opportunity to work on refine the presentation.

They're not trying to give a presentation in front of a live audience.

Some students find that difficult.

So it also does raise the threshold in quality, in that students can't get away with rushed presentation or poor quality because they have time to do it properly. That also forms part of marking criteria.

### **Advice for colleagues**

#### **Q2: the pedagogical context 8.37**

What I would advise is that you pick carefully where the video is going to be required. So it has definite purpose and the students can see what the value of it is.

That you produce a proper set of guidelines.

So what is the video meant to contain.

What are they trying to communicate and give them a copy of the mark sheet and the feedback comments so they can see that upfront. So they use that to assess the quality of what they are doing.

### **Advice for colleagues**

#### **Q2: the pedagogical context 9.07**

The staff using video I think one of the first decisions is 'what are they using it for'. 'What quality does it need to be'.

Because you can literally sit in front of your laptop with a camera which most do and just start recording. Software is widely available. You can even use the microphone in the laptop . Even with a tablet these days. Just get in and do it

Now that kind of quality is fine for students in the your own courses. It's in the same as what they might expect to get in the lecture theatre. And it's got all the ums and ers and other mistakes, but that's not really an issue. It is what the overall content is.

If you're making want to make video for wider audience. Especially outside of UCL . That's where you really need to think hard about how they can produce it . The quality the equipment and most probably you need to get somebody into at least give advice.

Most likely you'd want to get somebody in to provide support or training in order to provide better quality equipments lighting and the features you need to make that better quality video.

At the top end, of course, essentially equivalent to what you might see on the television.

But that's really I think outside the scope of where you want to be most of the time.

There might be a small amount of material because you want to use it to promote or the flagship material.

But otherwise it's doing something basic and straightforward gets the job done without it taking up too much time and resources .

## **Advice for colleagues**

### **Q2: The pedagogical context 11.01**

I've been using video now for three or four years. Really just starting off as a complete novice. Recording stuff and editing it to see what comes out. Also starting to use it so make available to students as appropriate.

I've been on various courses which have been very valuable but in the end it's been the experience of producing videos in multiple years.

One of the experiences I've had is that the first time round you tend to do things which are quite elaborate and also tend to be quite specific to the teaching that you're doing at that time, which tends to make material rather harder to reuse.

Also starting off by effectively being in standard lecture mode, and what you're trying to do was capture lectures rather than look at the medium and how to use it. What order video presentation needs to be to make it effective. So that's cutting down the material. The way you present, not speaking too much. Making sure you have good sound and sorts of issues like that.

So I've learnt about this over time by making all mistakes I possibly could and then going back and reviewing them

One of the things I've found is that but will you need to break the material down into relatively small chunks so round about five minutes is a good target. Anything longer but only takes longer to create in the first place that students are less likely to watch things which go over 5-10 minutes So is no use producing something which is 20 minutes the students will not watch the final 10 minutes of it

Then there's looking at what your recording saying the content to see how how little age.

One example is if you start including things like module codes, or talk about the year will give information at the date then you realise when you want to use next year is got is not there information of the previous. So that sometimes it doesn't matter that surprising often that it sticks them in jars. And you end up having to go through editing we can re-recording process if you don't want to do.

I think overall the biggest lesson i've learned for the video i want is to make the editing lightweight. That means that i can produce material quickly and get it out into use.

I don't want to be in the position where it takes a long time to produce relatively short amount of material and that's taking time away from all your activities and it means you might mean you have to then repeat that next year because he got to go through the editing again.

So it's it's defining your own lightweight quick process which is good enough getting proficient at that and not spending too much time.

## **Video preparation process**

### **Q2: The pedagogical context 14.30**

My preparation processes to look at the context in which the videos can be used. So it's there is body of material which will try to deliver. Which parts that material are potential video annual .Again you're looking at very small chance. It's not an all or nothing .So there's the combination of what you might do in the live lecture environment and the parts you as video.

So you do not try to replace the entire lecture. And then feature one those video chunks. I do some planning I experiment with trying to write the complete script. What I found was that trying to recall the video read the script and get that synchronised was not ready working out I kept stumbling over the script .

So instead I reduced my script to a list of bullet points Things i need to say and then fit the talking around that so I have my cues but i haven't got a fixed a script that i'm reading

Then selecting what's the what what you'll taking video of whether that's slides or whether it's screen capture or anything else.  
Make sure that's that's available and you capture it and then with all the bits just putting it together and edited together to create the video.

### **Contact time**

#### **Q2: Pedagoical context 16.09**

The pedagogy is primarily to make best use of contact time with students.

I see that in terms of interacting with the students. Asking questions but also getting them to do exercises, solve problems during the lecture.

So you get interaction and you don't have to devote the entire lecture just to yourself standing in front of the students talking for 50 minutes and then walking out of the room. What typically happens if you do that is that the students disengage after 15 to 20 minutes. It can be hard to sit there listening to me droning away at the front.

One solution that is to really practising you lecturing skills **you are a great actor** and hold their attention and in practice .There's a lot of material where it's hard to do that it's quite detailed material it takes time to go through it and it's often best illuminated by having good example so "here is an idea or concept feature programming and here's how you use it to solve a problem".

So you know you're swapping out the details on the idea into material like video which can be watched before the lecture. And then using that material in the lecture to interact with the students solve problems and so on.

So it's a mixture of flip lecturing blended learning and traditional lectures. In my experience I don't try and do just one of those. It is the mixture that you come up You also got to remember that from the students point of view they got to have a good reason to watch this material that you provide online whether it is video or websites or whatever.

You need to make sure that what you do in the lectures and then the contact time builds on that materials. So a student who hasn't done it realises that they are not following their missing and that they need to make sure that they in the future engage with the online material. So they don't the that out .

That also means that you need to scope that material is no use saying" there's for five hours of video you've got to watch the lectures tomorrow" because that's where they can happen obvious reasons.

So the amount of material the kind of material you need to be selective about to match what's realistic to achieve and also to match the what you are what you intend to cover in the forthcoming lecture so you don't have what is obviously superfluous material and students ask "i didn't need to know about it" . "Why do I need to bother to learn it "

So there's keeping that relationship that engagement going.

Online material is not a substitute for being the good lecturer. It is not a substitute for lectures. It is an addition that you have to use it the right way and effective way.

### **Advice for colleagues**

#### **Q2: The pedagogical context 19.40**

What I've learnt about video at UCL is that it's harder than you think.

But if you get it right it works.

It works best if you use the introduction of video on your material to redesign your modules.

Rather than just fitting bits in, redesign the whole module the teaching programme so that it integrates in.

You need to recognise that can take time.

You can't leave this to just a few days before the course starts.

It's something that is going to take time for months so planning set out preparation to do properly.

Having said that it is useful to run some pilot so while I think you want to ultimately redesign your module, you might want to do it in small parts so is a five lecture chunk you start with so you are using that to build up experience and try things out without disrupting the whole thing.

Another set of issues about access to things like equipment.

Being a computer scientist and the sort of person who collects the use the equipment that is not a problem for me.

That you need to have not more cameras.

You need to deal with the sound.

Need to have the editing software.

For creating editing videos these videos start to take up a lot of this space so somewhere this has got to be stored.

One of the issues in UCL is that UCL computer accounts have limited space and that's been actually increase significantly recently.

But you can easily collect up tens hundreds of gigabytes of video data and you want that to be stored.

Somewhere make sure it is backed up not lose it accidentally.

And that's actually quite a big resource issue and it may well be that need to obtain additional equipment additional storage

In order to use video extensively one of things that UCL could do is by mass storage for this kind of data that is easy to access. 22.10

Another issue is okay got your video where do you put it how do you get it to the students.

Now one route is via a service like YouTube video what issues there are courses that you're putting your teacher material outside UCL which may not want to do may have consequences You can use services in within UCL like lecturecast server.

But there's no currently good solution that's not easy. I've got a video upload it very much like youtube, and get back the url to give access to the video and keep that all within UCL. I think there's lots of reasons why you want to maintain control over your videos and i'm not advocating you never let anybody outside UCL see it. i think you want to have that level of control that you're not just there in the wider world. That if you want to limit it to just your class or just within UCL selected groups people you can do.

One basic reasons is come down to quality in that the new you might be operating at a fairly low level of quality that is fine for the class you are teaching that you don't want that to be seen as the your quality you're able view more widely.

## **The value of video**

### **Q2: The pedagogical context 23.49**

I think the the best thing is that you know you've got a body of material in place. It's prepared. It can be delivered.

It gives you flexibility.

It deals with situations like if you're away off sick things like that. It's perhaps takes the pressure off the daily grind of preparing new lecture materials.

## **Video and student attitudes to learning**

### **Q2: The pedagogical context 24.22**

I think the student attitude to learning is changing because the students we have now, especially undergraduates are very much use to the online world.

So they go first online to find things out and it's very natural for them to do that. They have an expectation increasing expectation that that's the kind of delivery platform would be using.

I certainly found that getting students to read textbooks is increasingly difficult especially in the science where there's very wide range of similar material that is online, or in video and so on and students will go to that online material first rather than commit to reading the entire textbook.

Although I very strongly recommend they do so one of things they probably get fed up with me saying is have you read the text that yet. Because textbooks remain valuable they have space to go into a lot of detail to examples and we shouldn't ignore that.

## **The value of video**

### **Q2: The pedagogical context 25.48**

I think the role that video has to pay is that if it's if his video that you created it means that its can be accessed at a time it can be accessed against the students go back and see exactly what they seen before this is

For the video the students create i think it it provides focus it means they've got to organise their thoughts ideas the description work they've done in in the video media and typically with that kind of project work is not just they are producing videos are still producing written reports and so on some are not losing anything that creating a video requires a different approach into the content structure delivery than writing reports and i think these days they need to be do that and know that experience.

## **Server capacity**

### **Q4: Future media requirements 26.48**

For me, the critical thing is storage of data are stored video and how it gets distributed that currently the recent UCL doesn't have a YouTube like service. I know that there is discussion about setting something up this up because I been involved in various meetings and so on. The students have been asking about this but it's it something as straightforward as YouTube. You got a video, block of material you upload it, go somewhere secure, its backed up, it can be streamed accessed by whoever you give the url to and, is so simple so it doesn't require any more work filling out than you would expect from youtube facebook video or similar services.

Then there's how the streaming is managed to particular with videos related question for students to watch. You want to know who's watching them. What are they watching on the actually watching a whole video. What's the heat map, so that the streaming needs to have that facility as well as it's so unlike youtube where is this new jimmy did get some statistics that

For my money most useful things from the lecturecast is the the heat map. That we can see that 10 people watch the first five minutes and to be what's next 10 minutes and who has watched the remaining 20 minutes, so you can get an idea of what students are looking at and that means you're not just using this material blind. You got some great feedback about is actually many good i am

Another set of issues is that increasingly their online educational services now ucl has a licence to lynda.com this is a sitewide license and students can access videos on their free via UCLaccount and there's actually a fair amount of good relevant material especially in resort Coursera and one of the issues is do we simply make use of that existing material save having to to duplicate it should reproduce the producing our own version.

This is that you something that the students themselves and raised that lost student consultative committee an interesting the what they identified is that they've already found multiple material very services and they're asking why don't we make more use of that is there their view is that this material is available let's use the lecture time the contact time

for other things to be able to interact with the lecturer. So there's demand from that point you coming from us from the students as well and that that was interesting we work. We were worried that if we say again is a nice course on call Corsaira or iTunes u students he was able with paying how many thousand pounds a year why you just sending us to watch a video which i could watch a free anyway. They seem to recognise that the value comes from being at university, interacting with experts in their area, doing things like working through problems examples and so on, which you can't really get on the online environment. So use your relationship with that kind of material and services is another set of issues in the start Lynda.com is quite interesting .

## **Resources**

### **Q4: Future media requirements 31.00**

Certainly access to equipment and space just a room big enough room is big enough where you can can special great better quality material is important that this. Certainly the training is available the rooms available but they tend to belong to individual demands of faculties so is more unified approach to that.

I think it's all part of what UCL develops as the teaching strategy so this currently a lot of attention being paid to research led teaching research-based teaching where students right from the beginning get involved in research as opposed to just being passive consumers.

That means that the why either teaching is delivered is going to be changing and it's the strategy for how nonmaterial video fits into that .

My experience is that it doesn't replace lecturers academic staff .What we call lectures it's it all made six part of that and it's working out how that mix works together working out what is that the best combination your particular discipline

## **Use of video a tUCL**

### **Q1: Summary 32.30**

It's all about where UCL sees teaching going in the future.

There's a great deal of emphasis on research led research-based teaching this means the way that we teach we interact with students is going to be changing.Its already changing and how the combination of lectures lab work classrooms online material, is put together and fix into that context.

How we going to define that for the future what's the outcome going to be.

## **Use of Video at UCL 33.18**

### **Q1: summary**

The use of video at UCL is all about transitioning to the future.

Where we know that teaching is going to change the way we interact this is going to change.

We want to have much more research led research-based teaching.

It's keeping the core experience of being at university alive and thriving while still delivering high quality material to the students.

## **Use of Video at UCL 33. 55**

### **Q1: summary**

I think UCL needs to be at the forefront of the development of teaching and the use of video and online material is going to be a key part of that we need to be defining how this works what is best practice and delivering it to our students

## **Use of Video at UCL 34. 04**

### **Q1: summary**

I use video in three ways. First of all as a producer of video secondly as a consumer video that I find that the students is relevant and thirdly by getting the students to become the leading producers of video

## **Use of Video at UCL 34. 22**

### **Q1: summary**

I'm certainly one of those people who will talk and talk and talk that by producing my own video I realise that I need to be talking less and be more selective and I've noticed I've started to do that in lectures.

So that I trim down the material or find the words to explain something during length and break up the pace a bit, so that I'm not talk talk talk .Section deliver it calls ask questions and move on starting as an invaluable for me as well. It certainly valuable to watch listen to yourself and the them videos recordings you've made and not only do you realise that sometimes you look strange standing in front of the lecture theatre.

That you start to realise that there is ways that you're talking delivering all those words you only use site. I over use ouse the word so I become very aware of that and it's almost a reflex reaction when the stars and conflict so doing something nice... lack of. I can do a lot of that I catch myself but not always and that that I think is useful and also just the way you express yourself how you express the audience so when I think I said so there When students doing and presentations one of the property often have is they either don't address the audience or that looking at the screen were staring out the window. All these basic faults and you recognise that you do that as well and you have to remember to train yourself not to do that and make sure that you properly address the room. You don't go twisting around or wildly pointing at way that the ball some other direction, so to use it been useful from the to reflect on that as well.