



Creativity and the curriculum design process: a case study

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Introduction

This report details the findings of a study at University College London (UCL) into academics' views about the place of creativity in curriculum design. This work was commissioned as part of the Imaginative Curriculum project, funded by the Generic Centre of the Learning and Teaching Support Network (LTSN). It builds on a previous round of interviews that sought to establish academics' curriculum design practices. The findings will be used to inform the development of the web-based resources that will form an output for the project.

Methodology

This case study is one of four commissioned for this phase of the project; all followed an agreed methodology in order to provide a basis for comparison. This methodology involved carrying out semi-structured interviews with eight academics in a range of subjects, to include two programme co-ordinators and six module tutors. For this study, the participants selected discussed course design in seven areas: Dentistry, Education, Engineering, English, Physics, Science & Technology Studies and Skills Development. The two programme co-ordinators were drawn from Education and Science & Technology Studies.

The interviews covered topics including:

- The design process for modules and programmes
- Conceptions of the curriculum
- Their interpretation of the meaning of creativity in the context of curriculum design
- The relationship between creativity and curriculum design

All interviews were recorded and fully transcribed before analysis. The data were analysed around the major themes given in the interview schedule. Within each of these, sub-themes were identified. These are outlined and illustrated below.

Concepts

An important and consistent theme throughout the interviews was that the meanings of the main terms being used were contested.

Conceptions of 'curriculum'

The term 'curriculum' was used in a wide variety of ways. Not only did these differ from person to person, but also individuals used multiple conceptions (either tacitly or explicitly) within the course of their interview. The following exemplify this variety of conceptions:

The absence of curriculum: "The word curriculum doesn't actually mean very much in the day to day work of the department."

Curriculum as content map: In this sense, curriculum was held to be broadly equivalent to 'syllabus', and was used to refer to the topics to be covered during the programme.

I sometimes use the term specifically to mean something like, syllabus, topics, plus reading, let's say. That is, what is it that's being quite specifically covered - which is always a slightly dodgy word - in a course?

The bottom line of a curriculum actually is what we as a... an academic discipline consider as the basics for the subjects.

Curriculum as programme map: In some cases, the idea of curriculum as content map was extended to encompass some notion of course structure, addressing issues such as pre-requisites and overall course aims.

We got four programmes, quite different. Some of them are in collaboration with other departments or different institutions. Each one of them has got a set of topics that we teach the students. In kind of each topic, each thing that we kind of try to deliver to the students, there are actually blocks or modules that we deliver. So a curriculum as I understand it is the whole structure.

Something that we develop with a sense of what we would like the students to get out of the degree programme on the whole.

Curriculum as process: A further expansion of the concept of curriculum introduced pedagogy as well as content and structure, sometimes explicitly. This included a focus on the relationships that were planned between staff and students, and the actions that supported learning.

I use the term curriculum to mean something much broader, which would encompass any sort of processes, relationships even between say teacher and students, which happened in the course of, let's say, either a university level module or a university programme.

A course of study, basically, and what that course of study contains. So assessment criteria, the content of the course, that kind of thing.

The hidden curriculum: Less frequently mentioned, but still apparent, was reference to the values and political influences that influenced the course. These included external (governmental) policies as well as internal politics, such as interactions with senior colleagues or the need to 'fit in' with an established course context.

I guess behind that there's an agenda. All the stuff you want to achieve, whether or not you've written it down, or you're even aware of it. [What sort of thing do you

mean?] Well, whether you... if you believe people should be a certain way... I mean, if you think the course should be radical, emancipatory, challenging - or promoting a certain way of doing things or thinking about things. The things that you think are important, but don't necessarily write down as part of the syllabus. All the political things - big 'p' and little 'p' - that are going to shape the course.

The lived curriculum: There was a clear sense in the interviews in which the curriculum as described on paper was distinctly different from the curriculum as experienced in the classroom. This provided a new perspective on the concept: rather than being limited to intentions (curriculum as content map, curriculum as process) or being shaped by historical influences (as with the hidden curriculum), it arose dynamically out of interactions with students.

You've got to improvise - it's like a performance, in a way. One in which the audience can heckle and change the ending and stuff like that - you're not in complete control, and there's no road map, and you just have to prepare as best you can and then cope.

How one particular lecture goes will influence what you do in the next lecture. If something doesn't go down well, then you tend to amend what you do next week, and try to come up with a different approach which the students will prefer.

Whilst none of these could be viewed as *the 'right' definition*, it is interesting to note that some of the concepts presuppose others. With the exception of the absent and the lived curriculum, the definitions seem to become increasingly inclusive and holistic in terms of influences on teaching and learning. The move to the lived curriculum seems to represent a distinct break, however, away from planning or organising and towards spontaneous performance and coping.

Conceptions of 'creativity'

Just as there were differing ways in which individuals used the term 'curriculum', it became apparent that 'creativity' was a complex and contested concept. The following illustrate some of the ways in which this term was used:

Creativity as 'doing creation': One reaction to questions about creativity involved viewing the term in a very broad and inclusive way.

That's an odd question. I mean, the whole thing's an act of creation.

Creativity as breaking with tradition: Several participants explained creativity (or why an example was creative) by contrasting it with received wisdom. Such talk was also imbued with very active language, implying that creativity was about ongoing processes rather than discrete decisions.

They're not just having to produce according to some formula, they're also having to think about it as they go - and I guess that's what I see as being the key to this creativity thing, not just going with the routine, safe, pedestrian options, but pushing the boundaries, trying things out, and if it seems sensible really going for it.

This might sound silly, but it's a matter of us as teachers teaching in a different way than the one in which we were taught. Because the reflex is just to give the students what we were given.

Creativity as value-driven breaks with tradition: Some participants questioned whether there was a difference between novelty and creativity. One important idea in this distinction was that creativity should be goal-directed; specifically, in this context, it would only be 'good' creativity if it promoted particular forms of learning.

Anything that can get the students to interact and engage more, than is different from traditional kind of lecturing style, or traditional teaching style, is slightly creative. But you have to - I suppose the creative element is coming up with something that actually engages them, but still means that they're learning something. [...] You actually have to improve their learning by doing something novel. If you do something novel and they don't come out knowing any more at the end of it, then, ok, there's not a lot of point.

Creativity as discipline-specific: Some participants made it clear that the criteria for judging the value of an act of creation were discipline-specific. For example, in a discussion about assessment, one participant delineated the kinds of creativity that were acceptable:

The project report has to be factual. If they want to go off in their discussion and conclusions and speculate, so long as they're speculating with a physical basis, then yes, I mean, that's creativity, that's good, they're thinking in a wider context, then yes, that's brilliant.

Additionally, in order to effect a break with tradition, there must be a tradition to break from. What then 'counts' as creativity may well vary depending on the perspectives of the people within those disciplines.

Mathematicians I know talk about the classical curriculum, and how the curriculum doesn't - it's not to say it's not creative - but that it doesn't... I suppose it's down to how one defines creativity. [...] they would say well, actually, the curriculum hasn't changed for 40 years in the classical maths programme; I don't think they would they say they're not creative. But others might say, well how can that be creative if it's not changed? You know, I think, there are some interesting - what's one person's creativity may not be another's. Which raises interesting issues for this project, because it might be that creativity is very much based in the discipline, is defined within disciplines.

Creativity as 'motherhood and apple pie': At several points in the interviews, participants questioned whether or not the concept of creativity held any discriminatory power. It was felt that this was the kind of concept that would be universally believed to be good, and thus everyone would claim to value and to practice it.

Do you really think anyone's going to say that they don't value creativity?

I should think everyone wants to be their students to be creative, rather than just dull automata, so I should think that sort of thing's taken for granted. It'd be a bit like saying you want your students to be breathing at the end of the course.

Interestingly, however, a couple of the participants criticised their own disciplines for a lack of creativity, and in particular how this influenced teaching.

Yes, in the sense that any academic discipline requires and encourages creativity. But there is a sense in which [this discipline] has become quite formulaic. It has almost become like a hard science, in the sense that there are clear expectations, there's a definite body of literature that you're expected to refer to and engage with, definite forms in which publications should be cast. So in those ways, I think maybe the most creative days of the discipline are quite possibly over. [...] I would say two or three generations ago there were probably very few people trained up in [this discipline] because [it] didn't really exist in that formalised and structured way. So you had people who had degrees in various other subjects [...] coming in to practice it. That probably does encourage a bit more creativity. [...] In terms of teaching, I think - I would say there probably isn't very much active encouragement to be creative. [...] Teaching's supposed to just be something we deliver.

The Process of Curriculum Design

Various aspects of the process of curriculum design were covered in the interviews. (The issue of course inheritance will be addressed in the next section.) From the analysis, it became apparent that this process cannot be described without reference to both the historical context and the contemporary socio-political climate within which the designers are located.

Internal orientation

The idea of curriculum as programme map was influential in the design process. In several of the interviews, participants described their practice as starting from a process of locating the module they were designing in relation to the rest of the programme. Equally important was gaining a sense of who the students were and what they might need from the module.

I'd start by looking at whatever was run before, and the rest of the course. I'd want to know if there were certain pre-requisites I had to cover, any topics I had to get through, to make sure that people were ready for whatever came next. After that, I guess I'd want to find out more about the first years - what they're like, where they come from, the range of abilities, that sort of thing. I think I'd want to make sure that the module was accessible to as many of them as possible, and useful in terms of the rest of their degree.

One participant commented that it was also useful to know who the course was not for:

One other thing that I've found is a problem, are course pre-requisites. I mean, that's part of the external factors, really, and part of the widening participation agenda. Because we don't have any course pre-requisites [...] at all. Which is supposed to be a way of not preventing anyone from actually the course, which is good, I mean, we do want people to do it, but it does make life difficult, in terms of knowing what type of students you're dealing with.

However, this process was described almost exclusively as being about orientation to 'typical' or 'expected' students. Actual students were not consulted (although their views were important when re-designing courses; see below).

I think ideally one might want to talk to students, but probably my experience in the past has been that I haven't done that, in developing a new course.

This process of orientation was not entirely positive. It could also constrain practice, making innovation or creativity difficult to achieve and forcing individuals towards an established *status quo*.

That's because of the environment around me that's not particularly inclined towards trying to come up with different approaches. [...] I mean, there certainly are other lecturers in the department that are trying to do this sort of thing. But there are still a lot of people - and the nature of the subject as well, which pushes people towards just talking at students and just giving them problem sheets to do. So I think that kind of environment works against people coming in and trying to do things differently.

External orientation

In addition to locating a module within a programme (and its departmental context), most participants also described a process of comparison with courses taught elsewhere. This appeared to serve three purposes: it provided inspiration about what could be done, it led to a sense of the 'norm' for this area being established and it also helped to locate resources that might be of use to students during their studies.

if I think that it's a subject that's been taught well elsewhere I'd look and see what sorts of things other academics have put together for such a topic. I always go to reading lists and to textbooks and to related texts and to see what the most recent writing on the, in the field is. [...] And I've probably looked at what sorts of related materials might be available online, in the library, the types of things that students might have access to as a matter of course.

The ease of this varied considerably from discipline to discipline.

Now I use one anthology as the textbook for that course, so what I cover is actually, is partly swayed by what's included in it.

We know all our competitors, and we actually meet them once a year in conference, and it's that kind of thing, there are something like ten courses of the same type running in different departments around the world, and you do meet like - it's like a relatively small community that works in that topic, so we need to tailor things. There aren't that many - there are kind of generic textbooks, but we... it's an area simply to make it clear.

[This subject] borrows from [lists disciplines], and so on. There's something like six or seven different disciplines that we draw on.

Importantly, as well as national and international points of reference, one participant discussed how their programme had to be related to others within the same institution but in different departments, and also to the needs of potential employers.

I actually discussed it with people in the department, discussed it with... [...] I talked with someone from [another department] because it might be relevant to

that. I emailed people in [a different department], people who we're interested to get involved with, and I asked them what they would like to see. [...] And then, in a conference or a workshop, I had an opportunity to talk with people from outside academia, people from [a public-sector agency] to ask if they think that this is relevant for them, and can they provide any input, so I've got some guest lecturers.

Personal sense-making

Although most participants described their design process as beginning with these processes of orientation, this was not always possible. Indeed, it seemed to propose a hidden step that only became apparent when faced with problems. This involved developing a personal understanding of what the topic in mind means. This issue is particularly acute when the topic is novel.

You have to fall back on your own creative processes to build a course. [This involves] a lot of brainstorming, actually. Thinking about what could possibly fall under the remit of this title - because I find often that you are working to a title or a topic anyway, like [gives title] is one example of something I had to teach and I couldn't find any other courses. And in that case I couldn't even find textbooks. So I remember doing things like thinking, well what does - you actually start asking quite deep and difficult questions, like what classifies as [this category], how do you know - if nobody else is teaching this, why is nobody else teaching it? Is it something quite specialised that only my students are going to be interested in? Is it something that other people have found too difficult? Does it fall under, into other types of courses as maybe just a sub-category? You know, I mean, you ask, you ask question - because absence is significant.

In some cases, this process of sense making can require the academic to quickly master an unfamiliar body of literature.

I was told, we've actually got it now in the syllabus, you can't change it, it's there. We've published it, someone needs to deliver that; deliver it! And I found that I didn't know enough about this area. Like, it's ok when someone dumps on you to give a lecture in a field that is not yours. Someone is out of the office, someone gives you their lecture notes, you go, you deliver - that's fine. It's not perfect, but it's fine. Because you can tell, look at it. But it's something different when you have to give an option module. And you don't really want it. So I had to kind of find my way through the literature.

This requirement was largely absent when the academic was designing in an area of research interest. However, this absence appears to be because such an understanding is taken for granted, rather than because it is unnecessary. As such, it appears to precede the processes of orientation described above.

I talk to colleagues, although that's probably not my first port of call, I probably try to get something in my own head first, before I show other people that.

The idea of 'core' knowledge

In addition to needing a personal understanding of the topic, it was also important to have a sense of how this fitted with other themes and issues in the area. Within particular disciplinary

traditions, these relationships meant that some topics were designated as 'core', being seen as vital pre-requisites for further study.

To do [this subject], there's a certain core knowledge that you have to give students, and there's the [...] concepts you have to take them through, and they have to be taught the maths to be able to apply and solve problems. I mean, when you start off, you do actually have to do that, there's always at the beginning of every course, probably, and element where you just, you have to.

In some subjects, logical pre-requisites for topics may exist; in others, 'core' knowledge may be the result of social conventions. It is important to recognise, however, that what counts as core knowledge in a given discipline may remain contested.

There are continual debates about what belongs in the core course and what doesn't, and it's an evolving organism for that reason exactly. But I mean there's sufficient agreement for us to run a course.

As with personal understanding of a topic, it appears that participants who did not identify core knowledge as a precursor to design may have omitted this because it was taken for granted, rather than absent, in their discipline.

Political considerations

Curriculum design does not take place within a social vacuum, as participants in the interviews were all too aware. The politics of curriculum design were numerous, relating to issues such as departmental identity and intellectual property.

you might find that political issues are at work at a micro-level too. It might be that there are particular reasons within the department or the faculty why such a course hasn't been offered before, or it was offered but then it was seen to be the intellectual property of a particular member of staff, who... [...] I suppose this comes into the development of any new curricula, [...] how does it relate to existing courses, and are you stepping on somebody's toes or infringing on somebody's territory? And even if you're not in your own department, is that because it's being offered in another department?

Other comments focused on exercises of power, and who had the authority to decide what out to form part of a curriculum.

There's someone I know who can't do what she wants with her course because other people keep interfering. There's real issues of power and control there, which I guess also relate to security. It's hard when you're a junior member of staff on a part-time contract; how do you turn round to a professor, and say, "hang on, that's stupid, and this is my course so I'm not doing that?"

The sense of powerlessness did not always arise out of conflict, however; sometimes it seemed to follow from a more general sense of self-preservation.

I suppose even your own position as an academic in terms of whether you're on a full-time contract, part-time or short-term contract, part-time hourly paid... I think the less security you have, the less willing you'd be to take risks.

Status was not the only source of power, however. Perceptions of expertise also seem to determine the right to intervene in curriculum design.

In the one that's been easy for me to feel I could do what I want and take risks, it's because it's a new area where people haven't done any work themselves, and those people who are making judgements would not necessarily have much experience. In the other one, I want to take some risks, but it's an area where a lot of people think they know what ought to be taught, and what ought to constitute this, so there I feel I'm treading very carefully, wording things very coyly in such a way that I can do what I want to do, but perhaps can be read by others as reflective what they think ought to be being done.

Inevitably, curriculum design entails the creation of texts (particularly since the 'nested' conceptions of curriculum all shared the same core of curriculum as syllabus). It may be that the political nature of curriculum design is, in part, a consequence of the process of making public one's claims to knowledge and authority in an enduring format - particularly if these claims are considered unwarranted, or appear to stake a claim to intellectual 'territory' desired by others.

Historical and organisational constraints

As well as what might be described as personal political influences, a number of organisations factors influenced design. Typically, comments within this category identified a group with influence and an historical norm that they sought to uphold.

While it has been received very well on the whole, occasionally I get external examiners or second markers who just can't see that this is a possibility at all, and I suspect it's because they've never had exams of that sort when they were students. It tends to be people who were straightforwardly brought up in the Oxbridge system, where long essays and exams - that's all there is.

Such groupings seemed broadly tolerant of small variations, but more suspicious of systematic changes to a course.

I guess, in any circumstance, there's always a teaching committee that's going to have to approve the design of a new module or changes to the existing module. They seem to be - well, given my very limited experience of it, erm, if you don't change things very much, then they're quite happy, but if you want to change things radically then they're a little more resistant.

This inertia around changes was perceived to have detrimental effects on individuals' ability to be creative.

I was extremely surprised to realise I don't have the right to change the title or the assessment process without getting validation from all levels of institutional management as well as externals. So there is one part of me feels there's a very strong line of control that inhibits creativity because if you're doing something new, you feel you want to be able to make mistakes, and you realise if you get the assessment wrong or the title wrong or any aspect of the thing, it's going to be really difficult to change - I mean, it's going to take a lot of administrative time on your part to change things.

More pragmatically, historical limitations were also identified in terms of the infrastructure for teaching and learning.

Funnily enough, it's very difficult to get the right kind of teaching rooms for what we want to do. Because the reality of room bookings at UCL are such that we will be guaranteed to get a room of some kind for what we do, but we're often given a large lecture hall for a tutorial. Which has ten people in it. And that just doesn't work.

There are, thus, structural as well as individual pressures to conform when designing courses.

Planning and refinement

Given the prevalence of rational, structured curriculum design processes in the educational and staff development literature, there is surprisingly little evidence from the interviews that these methods are actually used. As noted above, there is a planning process when designing courses, but it appears to be one of orientation to norms rather than derivation of course design from first principles. Typically, the planning activities discussed were about conceiving of something that met needs, rather than analytically starting from course aims and working towards content and format.

That was again a process of thinking, what are the most basic things which I think anyone who has taken a course in [this discipline] should know? But that was only one concern. The other main concern was, what is the best way of getting people interested in the subject? And then you've got to consider the likely audience.

There was evidence, however, of processes akin to constructive alignment, although only in spirit rather than method - not least because there is no break-down of the aims involved into the carefully crafted objectives called for by Biggs (1999, 44-46).

The goal there is to get the student to do things that are really done by real scholars out there. Because undergraduates, right up to their final year, usually have the sense that they're not doing real work, they're not creating anything, they're just being fed information and they're being tested on how much they've absorbed. So I've tried various things in various courses to get them to practice, not in the sense of practicing "for the real thing", but getting into the actual practice of scholarship. So for a different course which is reserved for third years I've tried to get them to do independent research to a publishable level, helping each other in the process. [...] I try to get them to experience what it was like [to engage in this practice]. So they'd be reading the primary sources in the original, and they'd be asked to imagine that they are [these professionals] actually responding in a scholarly way to what they're reading, rather than just commenting as [...] students all the time. [... It's about] how to be a scholar, rather than how to absorb the research of other people's scholarship.

In the only instance where formal design processes were mentioned, it turned out that this was not used for designing from first principles, but instead as a reflective aid when analysing an existing course.

I think I would start by deciding what my learning objectives actually were, and then coming up with ways to assess those learning objectives, and then go back from that to put the content into the course, and write the lectures, and plan the

practical sessions. [Interviewer probes whether this is actual practice or an ideal] Well, since, erm... I haven't actually designed a course from scratch, I haven't actually done that, I haven't followed that process all the way through. I suppose what I have done is try to change the part - I've been teaching half of a course for three years, and I've been trying to change it slightly each year. And to start with, no I didn't do that at all, I just concentrated on the content and didn't think much about any of the other issues. But the last couple of years I have tried to think more about what it is that I actually want students to come away with at the end of the course, and try to work back from that.

Arguably, this is still an important and worthwhile application of the concept; however, the absence of analytical design of courses is notable as a contrast to much of the current literature.

Following on from this observation, it is clear that designing from a 'blank slate' is unusual, and that rather than being a rational, analytical process, curriculum design may be better understood as a cultural and historical practice. Instead of an one-off act of creation, it seemed that much curriculum design was either a form of *bricolage* or else an iterative process of refinement and readjustment.

I looked at it and delivered it for the first time, and I know what I want to change in the next year. So it's an incremental thing. And we are currently at the process of revising the whole course, so we are actually going to do a whole new course the year after the next, so that's kind of put me in a good position for the next year. Again, we are designing exactly what - voicing exactly what we want to do with the course or how we should go about it, what to deliver, and then we will go to the specific textbooks and collect the information. Then the presentation. And then the lecture. So that's how we go about it.

Within this process, a number of important sources of advice and feedback were identified. Again, most of these can be viewed as a process of orientation.

Some from the students themselves. Others from external examiners who looked at our courses and said, "how about...", "why aren't you covering such and such..." Other times from ourselves feeling the same things that our students or externals were feeling. Other times from talking to each other and saying, "hang on, I cover that in my course too", so that's a case of getting rid of overlap. Other times, one of us teaching an advanced course saying, "I would have thought they would have learnt all of this, that in the other in the second year, but why isn't anyone teaching that?"

Valuable as these processes were, however, it was felt that most courses failed to take advantage of these opportunities for feedback. One suggestion was that part of the reason for this might be that academics begin to take for granted the curriculum of well-established courses.

Partly because we were so new, we were open to taking advice, literally from the students themselves and the external examiners. And I think that has been very, very productive. Now I've observed various other cases of the examining process, and it doesn't seem to be very often that external examiners are asked to give their views on the curriculum. They're asked just to make that the assessment is fair and so on. I think we've benefited enormously from the externals' views.

Importantly, the institutional feedback mechanisms were not always felt to be useful as part of this process of refinement. In particular, the value of students' feedback was questioned because of the superficial way in which students appeared to engage in this process.

They would be [valuable] if the students take the process seriously, but I think quite often they get the sense that, well, we fill these things out and term after term nothing changes. So they come to see it as just an annoying routine. I do try to tell them each time that I actually do mean them, and if you found my courses good at all then it's thanks to these forms from previous years, and then they seem - some of them at least seem to take this seriously and give me advice that I can use. [...] I think that any form works so long as the people filling them out do it in the right spirit. And you can spend hours designing just the right forms - which we have! - but still you get certain groups of responses that are not that helpful because all then they just tick the numbers, and the numbers are arbitrary anyway, what does plus two mean? So you can only get - I mean, I get a lot more out of the verbal comments than the statistics.

In addition, one participant expressed concern that their ability to give feedback was not unlimited, and that whilst they might be well placed to comment on immediate concerns, they might be less able to see how particular parts of modules contributed to a course-wide 'big picture'.

The students are the people who know best what works and what doesn't work on a course. They tend not to be all that insightful about the whole curriculum. I mean, the best ones are, but mostly they don't tend to have that sort of maturity of viewpoint. Within individual viewpoints, they're the best people to ask.

Developing new channels for feedback on courses would be a valuable way of prompting reflection and curriculum re-development, and may have important consequences as a means of promoting creativity.

Differences between designing for first and third years

One area explicitly addressed by the interview schedule was whether there was any difference in designing a module for first year students as opposed to designing one for third years. Some participants only taught at postgraduate level, and thus found this question difficult to answer, but went on to give opinions based on the difference between a (compulsory) introductory module to their course and a later optional module. This differentiation proved key in terms of the differences in design irrespective of whether the participant was discussing undergraduate or postgraduate modules.

They'd be into options by then, so I think I'd have more freedom in terms of what I wanted to do. I would have to think so much about setting them up for some follow-on module, you see. I think that'd give me more room to play about with.

Again, the important sense here was of curriculum design taking place in a given context, whether this was in terms of fitting in with other modules' requirements or accounting for students' existing knowledge.

I suppose you would have to, erm - take into account students' prior knowledge a bit more, than at a more basic level, first year course, whereas particularly doing

postgraduate courses you get students in with a lot of different backgrounds, and they don't always know the same things, so there's more diversity and you have to try and cater for that, which is a lot harder. You do have to do that and I don't think I've quite got to grips with that yet.

Another important difference concerned expectations of the students. It appeared that academics expected more autonomy and responsibility from students as the course progressed.

The other place I would expect some difference, but I don't think this is necessarily so much reflected in the design process, is that I would maybe expect third year students to take on more responsibility for what happens within the course. And so I would build into the planning process space for them to either determine some of the curriculum

This expectation was not always met in practice, however, as will be discussed later in the section on creative curricula. Nonetheless, this expectation of autonomy and of following one's interests was seen as giving academics greater freedom to pursue their interests too.

With third year courses we feel much more free to do something related to our own research interests. They are electives; nothing is required strictly by the time they become third year students, so we take for granted that people will do what they're interested in, rather than because they have to. It gives us a little more freedom to teach things that we find interesting, rather than going by what the discipline as a whole considers essential.

Teams

Two course leaders were asked about the involvement of course teams in the design process. There appeared to be little difference in design from the processes described above. For example, one of the course leaders described a process of group sense-making that seems closely akin to the personal sense-making activities described earlier:

I was going to say, "not in the sense that we all sat around and had a brainstorm", but actually, in the first meetings, that's exactly what we did. So I guess, yes, there was that in the process, as well as in the values.

However, it also became clear that the process was not always collaborative, even though a team was involved. The team served to establish more points of reference - local norms, values and practices - but for the most part, the development process involved individuals agreeing this framework then acting individually within it.

We share this vision, we get the context set, and then we go off and do our various bits and contribute them. As the course leader, I had to carry the bulk of the course-wide stuff, so I'd make sure we had plenty of meetings and chances to discuss drafts and so on, but for the most part people seemed to think I was roughly on track, so we all carried on travelling in parallel.

Summary

Contrary to the rational models advocated in contemporary research, the accounts of participants in this study portray curriculum design as a social practice that involves orientation

to historical precedents, accessible resources, local values and interpersonal micro-politics. Even when designing a course 'from scratch', participants described a process that focused on accommodation within existing frameworks, comparison with other offerings and the iterative refinement of current offerings. One-off acts of genesis, particularly with the analytical flavour of methods such as constructive alignment, seem conspicuous by their absence.

The problem of inherited courses

One recurrent problem identified in the first round of interviews for the Imaginative Curriculum project was inheriting courses that had been designed by other people. This seemed to be a particularly common experience for junior lecturers. It was also something that prompted particularly emotive responses.

I'm now designing the course that I'm going to replace the course that I inherit. I culled it - I'm not going to deliver it next year, it was horrible enough to deliver it this year in a discipline that you don't understand.

Part of the reason for this is that the course was intimately bound up with the personality and experience of its previous owner.

Anyway the number one expert in the world, the guy who did the textbook, this kind of thing, was there, was here. He was delivering the course. The guy that people would come in deliberately to hear him, so people coming from developing countries because they knew that professor this and this was giving the course. That was the framework. And he retired. And that's why I'm here. Because he retired, and another lecturer left the department.

Interestingly, this is another issue that formal methods such as constructive alignment are often silent about, viewing the teacher largely in an abstract, generic sense. However, in some cases, the individual teacher cannot be distinguished from the curriculum; they are as much of a resource as the textbooks or assessment tools. (This emphasises the importance of the conception of the lived curriculum outlined earlier.)

He never wrote lecture notes. Because he was so immersed in the area that he simply stepped into the class, delivering whatever topic, telling all kind of titbits from... you know he was active in [professional practice], and all things like that, since the 50s, like he was [working in a named country] when it was still a British colony and whatever. So he had lots of stories and just... you know. This type of lecture. So, how can you... It's not how can you compete or something like that because the students here are on a year basis, so the students that are here don't know anything about the previous year. [...] But how do you deliver a topic that you don't know anything about? All I had was the titles of the lectures. That's it. One page with the titles of the lectures, and nothing else. And I had to figure out how to find information about it.

Not only was the experience of inheriting courses felt to be emotionally unsettling, it was also seen as demanding a significant input of time and effort that could hold back other areas of work for the academic and simultaneously disappoint the students involved.

I was thinking also that this was not a worthwhile investment, thinking that I'm going to kill this course next year, like it was very clear to me from the start that it's very unfair to the students, like it's practical unfair to people. Because we've got here also overseas students - think about it, you pay that amount of money, you get here and then you've got a non-expert telling you things that one day, when they ask difficult questions that I don't know anything about

Although inheriting courses raised emotive and resource issues, the process of engaging with it seemed quite similar to that of re-designing an existing course (as described earlier).

It's not often that people who inherit courses are required to stick to the exact syllabus and format that their predecessor used. So it's probably not that much of a problem, it's probably not like inheriting the "introductory mechanics" course in the physics department, in which case you pretty much do what you do. But then again, in those cases it is probably the same...

However, the freedom to redesign inherited courses is far less than re-designing a course that the academic created themselves.

Technically I've inherited a course; in reality I've felt I've had to re-design the whole thing. And in some ways - in some ways that's a little bit trickier, because that's where the expectations are set up already, and that's when you're reacting against set expectations. Elsewhere when I've inherited courses that I've then felt obliged to make my own in order to teach them, there are things I've inherited like assessment structures which I've been unable to change, and on balance - it's a tricky one, because on the one hand you've got a frame in which your work is already defined for you, but if you have strong feelings about any aspect of that sometimes it can be harder to change it rather to start with a clean slate.

The tension that arises, then, is between the need for the academic to take ownership of the course and the established framework and expectations that make changing the course difficult.

You've got a history. There's a context [...] With something you inherit, all that context's set. You might not like it, but you've got to take it into account or you'll be doing the students no favours.

Another important consideration, linked to the issue of having to invest time, was that taking ownership of the course is problematic when the academic involved lacks confidence in their knowledge of the area.

You might start with some resources to hand, instead of having to gather them from scratch, but you'd still want to weed them, and give the course your own feel, if you could. If you had the confidence to know what you wanted to add. I guess that's a difference: where you're designing your own module, you know the topic, or you probably wouldn't be proposing it. You might get given something that you're not an expert on, though, and then would you have the confidence to change it substantially?

Finally, it is also worth noting that issues of power and inter-personal politics also influence this experience. Not only may there be expectations from colleagues and students, but in some cases

the person who created the course may still have some involvement. This can seriously limit the new tutor's ability to take ownership of the course.

So far I've only inherited part of a course, and the original lecturer still lectures the other half of the course. And so changing the course in that respect is harder because you don't want to end up with two halves of the course that have very different approaches, and so you basically have - well, you have to get the agreement of the other lecturer on the course, they have to be amenable to making the same kinds of changes that you want to make, and that's not always the case. [...] It's additional work for them. You know, he's been teaching the course for several years in this way, and he's very busy, and he's really - he might think some of these ideas are a really good idea, but actually finding the time and putting in the effort to do that are something he can't do because of who he is.

Creative curricula

A major focus for this second round of interviews was how creativity is expressed and experienced in curricula. In this section, aspects of this are illustrated.

The need for creative space

A recurrent theme in the interviews was the need for 'creative space' - areas of the curriculum in which teacher and students felt able to try things out and negotiate what should be done. This space for negotiation could apply to the process of learning as well as the topics involved:

We require them to do a certain amount of modules where they pick the topic, and negotiate it with the tutor, and then go off and try something to see what they learn from it. So I guess that's an explicit requirement, even if it doesn't say the word "creativity".

Importantly, it was felt that this space should be enjoyable, and that students should not be held to tightly to account, which might inhibit their willingness to take risks and explore ideas.

With whatever space I then had left, I'd want to make it fun! Give them a chance to do things, rather than just listen to stuff or read books and so on. [...] Room for them to try ideas out, and see what each other thought, and so on.

When this notion was mentioned, it arose in the context of finding and protecting space within planned curricula. One participant took this notion further, expressing a concern that this space should not become the curriculum, and that some sense of structure was still required.

I suppose your creative act is in trying to build in these spaces in a way that will still enable you to have a coherent curriculum which won't - which will still will enable a sense of cohesion and still allow students to feel secure that there is a curriculum and that they aren't just in a free for all

Curriculum as performance

Another aspect of creativity also related to the difference between plans and experiences, and tied in closely with the conception of the lived curriculum. This was the sense of the curriculum being a performance, rather than the set of documents that pre-empted it.

In some ways the most creative act, because [...] the actual event surrounding each part of the established curriculum is always a sort of new act of creativity. You know, how do you deliver these? How do you get the best and most exciting examples? How do you keep things lively and spiced up and different and varied? So you might think, well I've delivered, you know, I've used this method or this approach for three lectures, I know the material for the fourth one is really fresh but I want to have a different approach to it, so what can I do methodologically that's different? Or how can I get students...? So I think - the question was how creative is... For me that bit is very creative, and I find it, once I've actually got something down as a frame that might be my paper documents and my syllabus, then I feel, if I've done the design process properly, and I've kept some spaces I suppose for myself as well as for students, that then you really get to the creative and exciting bits.

This sense of improvisation and excitement ties in closely to the notion of getting feedback; here, the sense is of being able to 'read' the students' experience, although spontaneous change might also arise as the result of direct comment from students or colleagues, or even personal development that brings a fresh perspective to a forthcoming topic.

Constraints on creativity

Although creativity may be viewed as an important, and in some senses intrinsic, element of the curriculum, it is not always easy to achieve. Interpersonal, social and structural constraints were all identified as influencing the process of curriculum design. Similar limitations were identified in terms of supporting creative activities within the curriculum.

I'm concerned about over-committing my colleagues, and so limit what I expect from them. Since I can't carry it all single-handed, that also limits what I can give, in terms of time and topics.

Only basic lack of time, and certain resources such as - well, I mean a good case in point is access to primary resources, which we are trying to address with the secondment project. Other times, even with current sources, just having enough copies of books - but I'm sure that's not a problem that's peculiar to what I do.

Another practical constraint related to the complexity of the teaching arrangements. In order to cope with teams of teachers in a way that does not disrupt learning, it may be necessary to adopt a simple, consistent structure, which might limit opportunities for individual expression and creativity.

I sometimes think having very large numbers of different people coming and teaching on bits of a course can inhibit the way you - I've taught on courses where one or two people do the lectures, and eight or nine other people come in and teach

bits. And you feel again you've got to be so structured if that's going to happen, to enable that to run smoothly, that it is hard to build in those creative spaces.

A similar concern was voiced by one of the course leaders, who followed the phase of individual creativity with a period of standardisation in order to provide coherence throughout the course.

It was open-ended, but more systematic than creative, I would say. I think the really creative part of the process was earlier, when we were each coming up with modules to teach.

One important constraint was personal confidence, which was closely linked to perceptions of reaction to the possibility failure.

If you're worried you don't know enough about the area, or what other people will think, then you're not going to take risks, are you? You've got to have a certain confidence, a certain security.

I find it increasingly working in a culture perhaps which doesn't like failure, it's hard to fail. And if you want to take risks you have to be prepared that some things just won't work. And no-one wants to be seen to be a lecturer who's not popular or not able to... be successful.

This reluctance to take risks places obvious limits on peoples' willingness to innovate.

Finally, it is worth noting that some participants saw that such constraints existed but did not feel bound by them personally. For one person, this was simply because the constraints fitted what they were seeking to achieve anyway:

It's all within the framework of the university and the way you deliver things, and resources that are available. I'm not trying to do things... you know, I don't want to do things that we don't have the resources to do. So that's why it's full [freedom]. It's within the framework of what we've got here.

Another, however, hinted at another level of creativity that involved coping and working around the constraints to achieve what they desired.

I probably feel more free because I have taken the freedom to do things in different ways.

Assessment

The relationship between creativity and assessment was explicitly addressed in the interview questions; it also arose spontaneously throughout the interviews. This was felt to be a particularly problematic area for a number of reasons, including institutional norms.

Certain institutional policies about assessment and a drive towards end-of-term exams for me inhibits creativity in design.

A continual debate is how much weighting we should put on the exams, because many of us feel that exams are really not the best way of testing, especially in the higher levels, the skills that we want students to learn and the kind of knowledge that they

would - that we want them to acquire. But just about every time we go to the faculty saying that we want to get rid of these exams or lower their weighting, we have pretty stiff resistance.

Another problem involved defining what 'counts' as creativity in a way that could be assessed.

It's not written into the learning objectives, but then again, it wouldn't be, would it? How can you objectively measure that? But like all these things that are important, you can't pin it down - so we try to encourage it, and we hope we'll have an ethos of creativity, of constructive disagreement, and so on, but we don't necessarily give marks for it. [...] These things are subtle, and they come out through the whole process, not in some discrete, carved-off component.

Reactions to this problem varied considerably. Some participants drew a clear distinction between assessment and areas of the course where they felt creativity was appropriate.

There's not a great deal of creativity in actually writing the report, I don't think. It's more in how they - how they approach solving problems and how they relate that to other problems and put them in context.

Others, however, responded by using assessment in novel ways. One, for example, began using assessment as an in-class activity for formative rather than summative purposes.

I had the idea from the teaching a learning programme, that actually it's possible and it's quite useful also to do with postgraduate students to give them an assignment and to stand back and see how they do that.

Another achieved a similar end through structuring a series of linked assessments that, in combination, taught students about how to write (as well as providing feedback on the content of their writing).

I've given to the first year [...] course what I've called component-based essays, in which each student did as many as six different exercises, each designed to teach them a different skill. So there's one on organisation, one on understanding difficult texts, one on style and grammar etc., one on making [...] arguments, that sort of thing. And they're given a composite mark at the end, as if they'd written a whole essay. But this sort of process was effective I found in teaching them what sort of criteria we are using to assess their work, rather than giving them just one mark.

Even within immovable, summative exams, one participant found it possible to subvert the format and provide students with space for individual expression.

There are constraints, but again, there are ways of getting around the constraints, or using the constraints in a creative way, so - for example, in an exam I have given questions such as, "discuss what you have learned about the process of doing independent research". Because they had all done independent research in that particular course. That just gets around the problem of conserving that format.

Nonetheless, the problem of assessing creativity does appear to be endemic and (unsurprisingly, given the effects of assessment backwash discussed in Biggs, 1999) central to the whole issue of designing creative curricula.

It's fundamental that you enable students to be creative in their processes, because I don't really see how your curriculum can be creative if there's not an element for students' creativity within it. And I think absolutely [...] that creativity is not valued in the assessment process generally. And I think that relates directly to the previous point, because if it's not valued in the assessment process then how is to be valued in terms of what students think about their learning by them? Because they see the institution placing value on those things it assigns marks to. So it's a really interesting circular dilemma there. Yes, we privilege students' capacity to be creative, but no we don't let them show it to us in anything that counts.

The influence of students

Perhaps the most complicated influences on creativity in the curriculum was the involvement of students. At a simple level, their involvement in acts of creativity was seen as vital to this process:

It's also your students, allowing them to express something too, because I think without that dynamic it's really hard for you to be creative with your audience stifled or dull or unwilling to participate. So yes, I think it comes from the students and from the lecturer, but it isn't something that the institution can sort of sprinkle on, as it were.

Moreover, in some situations it was seen as necessary for making the curriculum viable at all, let alone creative.

If there is genuine interest, it's quite possible that some of your students may know more about it than you do, if you're teaching it for the first time. And it seems to me both pedagogically sounds but also pragmatic to harness some of that potential and let people be very creative themselves, and let students take ownership of some of the material. Now what that means is you've got to have a curriculum in advance that's sufficiently flexible because you can't sufficiently determine before you know what students are going to be involved what interests are going to be therein. And so, that can be difficult, but I think it can also be very, very rewarding. And you've got to be fairly confident when you're writing the curriculum to allow for such spaces. You've got to feel that you'll be able to adapt and support some of the work students want to do.

However, there were examples where creativity was not a celebration of students' qualities but a way of accommodating their needs.

Most of our teaching is postgraduate, and aimed at people who might want to study part time, so we're immediately forced away from the cliché of lecture, seminar, lecture, seminar... it's just not practical. If we're serious about taking our students into consideration, then we have to be creative from the outset - the rest just follows, I guess.

A still stronger contrast was provided by cases where academics' desire for creativity was thwarted by the perceived limitations of students.

For example, if I were to teach just the things I want to teach, that would include [a subject] that involves a lot of technical scientific knowledge. Now a lot of our

students aren't up to that. Even the students from [a particular background] wouldn't be able to deal with the kinds of things I'd like to cover, so I'm limited to teaching what they can comfortably learn.

Thus whilst students' potential is celebrated, their limitations can also act as a bar to certain topics or approaches.

Another limitation arose not from lecturers' concerns about students, but from the students themselves. One lecturer spoke optimistically about students becoming more creative as they developed their autonomy throughout a course - but went on to reveal that her experience contradicted this, and that what seemed to happen was that students developed set expectations about what ought to happen in a course, and this then limited what could be achieved.

I would assume that I had greater creativity with the later years, because they've had some exposure to the university system and hopefully they've learnt how it works and that they're supposed to think for themselves. That's the theory anyway. [Later that same interview.] That's what I expected when I started out. And I mean, there are some of the students, there are, I mean, clearly, there are some who really are just really interested want to think about things on different levels. But then there's a large majority, who are just there to pass the exam. And they are the majority, as far as I can tell, and they really do prefer just for you to transfer information to them, then they go away, they do the past papers, and then they regurgitate it. So it ought - three years of university ought to mean they were mature enough and make put in of their own effort outside lecture courses and practicals and what have you that you could do something different, but in reality, I've not yet found that that's generally the case.

This sense of the conservative student may appear negative and perhaps even dismissive, but as the interview progressed it became clear that this was a sensible strategy on the part of students. Much effort is invested in learning the 'rules' that govern the programme, the 'hidden' curriculum, and once learnt students are reluctant to have these rules changed mid-study, which might have the effect of wiping out their investment of time in learning how to play the game.

It's difficult to come along halfway through a lecture course and then change your approach completely, because the students are thrown by it. Also, what I've found is because it's a final year course [...] and because of the department that it's in, the teaching methods in that department are very traditional. It's pretty much chalk and talk. And the students actually seem to prefer that. They don't seem to like it if you - I mean, I do depart from that, but they seem uncomfortable with it, so it's hard - it's hard because you're coming along halfway through a course, and you can't do something radically different, the students in a sense are quite resistant to something that's quite different to the previous three years of teaching that they've had, and then also if you do do something that's different, the students don't like it and they do badly then they get berated [laughs] So I mean there's a kind of a - a sense of being worn down and saying, ok, I'll just do what everyone else does as well.

This idea that students becoming more conservative as they progress was echoed by another participant:

How to assess is an obvious case. I think first year courses are quite amenable to different modes of assessment, in a way because students haven't yet learned how to do the standard things.

Such changes in course format would not just make students feel uneasy, however; they would also render worthless many of the points of reference that enable students to judge their progress and prepare for forthcoming exams.

If you change a course that exists, and the exam questions then become different, and students rely very heavily on past papers.

Clearly, there are similarities here with the pressures to conform to social norms experienced by academics from their colleagues and from committees. Students may also have a vested interest in preserving these norms, which may result in innovation being unpopular in all quarters.

Creative justifications

One final example of creativity in the curriculum involved creating a 'presentable face' that seemed to meet wider political agendas whilst allowing the academic to preserve the parts of the course that they considered valuable.

We do nominally, but... I don't think those issues have really affected the substance of what do. What they have definitely changed is the look of the syllabi. We are required to state aims and objectives, and include in the objectives transferable skills and so on. In terms of what we actually do, I mean, I think personally that the generic and transferable skills are naturally taught if we teach a good, substantial academic course in any field. Not all of them in every course, but each course would be teaching enough of them to be able to justify what we do in terms of those requirements. So I think in practice they haven't changed what we do very much. Unfortunately they've come across as a bit of an annoyance, because there's pressure at every stage to spell these things out, and there are just certain things that we can't teach, for instance, if you're teaching [this subject], it's just going to be very difficult to work in numeracy into that. We could do it artificially, but we haven't done it because we don't believe that's an essential part of what people come here for.

This was not always a way of avoiding responsibility or action, but was seen as a way of making a course acceptable whilst still maintaining the personal integrity needed to feel a sense of ownership for the course.

What I do value is something that's very related to that agenda, but politically quite different from it. So I think that other people would look at my course who do value that agenda and say, oh, but you're doing that, you're doing the writing bit here, you'd doing the IT bit here, and I don't quite see it that way, even though interestingly it would still probably fulfil many of their requirements.

This tactic was not just used to defend principles, however; it was also used pragmatically to ease acceptance of the course by the people responsible for its approval.

We also have to conform to standard paperwork, but that's not too much of a bind - it's simply a case of constructing a narrative that covers... presents what we want to do in a way that the readers will find acceptable.

It also served to protect spaces in which the curriculum document could subsequently be reinterpreted, either as part of the curriculum 'performance' or as a refinement to the course.

I realise I've got multiple audiences for documents which are requirements in the curriculum creation process, and I am being quite - I'm leaving myself lots of space in the way I word... so subterfuge is maybe a bit strong, but there's an element of that, yeah.

What this illustrates is that creativity does not just take place within the curriculum; it also takes place around it. This particular creative tactic can be related to the contextual and social pressures that limit freedom within curricula - if a curriculum can be re-presented in a more acceptable light, then it may be possible to take a creative agenda further than would otherwise be considered acceptable.

Conclusions

It is clear from these interviews that the process of curriculum development is social, political and historical in nature. It involves an ongoing process of orientation, moving from personal sense-making through to reference to departmental, institutional and national 'norms' and then taking account of the expected qualities of students. Moreover, curriculum design rarely starts from a 'blank slate'; instead, the process involves the tutor drawing on existing courses, texts and web resources, as well as on their own experience and understanding, in order to shape a course. All the while, this process is shaped by interpersonal politics and other exercises of power which can result in the academic feeling ground down and forced to conform. This is a far cry from the technical, rational models of curriculum development so often advocated in the literature, although it is worth noting that one such approach (constructive alignment) was cited by one participant as a useful reflective aid when re-designing a course.

Inheriting courses provided a particularly acute example of these issues. Here, the context is fixed, as are features such as the title and method of assessment and the expectations of students and colleagues (sometimes including the previous course tutor). Nonetheless, academics are expected to take ownership of the course and make it their own. This can be a difficult and draining process, both emotionally and in terms of the lecturer's time.

Creativity features throughout this process, for example, in terms of creating new understandings of a previously unfamiliar area, improvising in response to students' experiences, negotiating the content and process of study or presenting the course in an acceptable light to those who might otherwise be critical of it. Such creativity involves calling into question received practice; however, this is particularly difficult when dealing with high-stake elements of the course such as assessment. The idea of preserving safe spaces for creativity was important, both for students and for staff. In an environment in which failure is unacceptable, risks will be avoided and innovation will eschewed in favour of safe, predictable developments.

One particularly interesting aspect of this study, however, has been the ambiguous role that students play in this process. On the one hand, their diversity and interest is celebrated, and becomes an inspiration (perhaps even a pre-requisite) for a creative curriculum. On the other,

however, it seems that students can also inhibit creativity. Students (wisely) learn the rules of the curriculum, hidden or otherwise, and invest time in perfecting their ability to play to these. Understandably, they may be reluctant to see these rules changed mid-way through their studies. Thus whilst academics may expect greater freedom to be creative with more experienced students, this appears to be only partially true. Students further through the course may well have mastered pre-requisites and be following their interests, giving greater freedom in terms of topics addressed, but their experience may have shaped their expectations of what courses 'ought' to be like, making them more conservative in terms of module format.

However, in spite of these challenges, the accounts of participants show that considerable value is placed on students' creativity, to the extent that this goal is pursued even when it involves working around assessment policies or introducing ambiguity into supposedly definitive documents. That this goal can be achieved is thus testament to the creativity of the academics involved.

References

Biggs, J. (1999) *Teaching for Quality Learning and University*. Buckingham: SRHE/Open University Press.