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Rapid and creative course design: as easy as ABC?

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Abstract

How do we best help our time-pressured academics design rich blended and online courses? To address this challenge, University College London has developed ABC, an effective and engaging hands-on workshop that has now been trialled with great success over a range of programmes. In just 90 minutes using a game format teams are able to work together to create a visual 'storyboard' outlining the type and sequence of learning activities (both online and offline) required to meet the module's learning outcomes. ABC is particularly useful for new programmes or those changing to an online or more blended format. We are currently expanding the initiative and developing a set of online support resources.

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1. Introduction

Enhancing conventional face-to-face approaches to teaching in colleges and universities towards more blended, online and distance learning formats is recognized as a dauntingly challenging task for academics and learning technologists alike (e.g. Beetham & Sharpe, 2007; Ellis & Goodyear, 2009). Classroom and online environments are both equally complex, subtle and hard to define, so transferring from one mode into the other is fraught with pitfalls, especially for faculty with little experience of online course formats.

University College London (UCL) is a renowned research focused and multidisciplinary university with over 38,000 students and 6000 academic and research staff. One of its key strategic aims is to be a global leader in the integration of research and education, underpinning an inspirational student experience (UCL, 2015). These ambitions to enhance curriculum quality are represented especially by the Connected Curriculum initiative (Fung,

* Corresponding author. *E-mail address:* n.perovic@ucl.ac.uk 2014) and are reinforced by the use of data from external benchmarks such as the UK National Student Survey (HEFCE, 2016). Top down interventions are augmented by widespread grassroots interest and activity in blended learning and technology enhanced flexible modes of study.

UCL's Digital Education team, together with our Centre for Advancing Learning and Teaching, work closely with faculty to provide on-demand contextualized support to review and develop new curricula. However we recognized Beetham's (2012) general critique of curriculum design in higher education in that "practice and process had often been local, ad hoc, unexamined, and unresponsive to changing demands". As Nicol (2012) also acknowledged "Curriculum design in higher education is not a formal activity and there is little support, formal or informal, provided in most higher education institutions to help academics become better at designing learning activities, modules and courses". However Beetham had cautioned "although change was seen as necessary, it was difficult to bring about in complex and devolved institutions".

We therefore began to look for a lightweight, streamlined process that would result in well-designed courses, aligned to institutional mandates but also based on sound educational principles. We realized that time was the critical factor for large-scale faculty engagement. While 'away-day' intensive formats such as Carpe Diem (Salmon and Wright, 2014) were known to be effective we felt it was unrealistic to expect faculty and support teams, at least initially, to commit more than a few hours to the design process. For a process to be adopted at UCL it would have to show time efficiency for curriculum teams and other stakeholders.

Providentially UK higher education has extensively researched in just this area. Over four years the JISC Institutional Approaches to Curriculum Design Programme (JISC 2012) evaluated a range of institutional change methods. It was noted that "particularly successful were face-to-face workshops where curriculum teams could work intensively on a module or programme of study, developing graphical representations of the curriculum such as timelines and storyboards" (Beetham, 2012).

The University of Ulster's Viewpoints (University of Ulster, 2012) project met our criteria. Their curriculum design team had pioneered a storyboarding approach, using a course 'canvas' along with sets of cards that could be selected, sequenced, annotated, and used as discussion prompts in the outline design of a course 'timeline'. Viewpoints had developed a number of card sets based on for example principles from the Re-Engineering Assessment Practices (REAP) project (REAP, 2010) and the SCONUL Seven Pillars of Information Literacy model (SCONUL 1999; Goldstein, 2015). Nicol (2012) had thoroughly evaluated the project and found it had encouraged reflection and creativity, helping "identify solutions to curriculum design challenges and to maintain an educational rather than a content focus, a learning rather than a teaching focus".

2. UCL's ABC method

The ABC curriculum design method (Perovic and Young, 2015) built on the Viewpoints principles and was developed in 2014 as a ninety-minute hands-on rapid-development workshop for UCL module and programme teams. The name itself has a significance as it references Arena, UCL's popular faculty development programme, blended learning and the Connected Curriculum, mentioned above as UCL's major strategic educational initiative. The Connected Curriculum itself is represented with six dimensions of learning though research and enquiry and is usually articulated as a series of student activities that "close the divide between teaching and research" (Arthur, 2014) and "integrate research into every stage of an undergraduate degree, moving from research-led to research-based teaching". To align with the Connected Curriculum and its foundation of activity-based learning a new card-set was developed based on Diana Laurillard's (2012) notion of six 'learning types', derived from her theory-based Conversational Framework. The six learning types are acquisition (or read/watch/listen), inquiry, practice, production, discussion and collaboration, and these types form the ABC six-card set.

In addition new workshop documentation was created and the Viewpoints workshop sequence adapted. At least two or three members of the team involved in the programme or module development attend a workshop (Fig. 1.). It is required that they bring the module specifications (or programme overview) with learning outcomes to the workshop.



Fig. 1. ABC workshop faculty module teams

The ABC workshop is organized in the following manner.

- Brief presentation introducing the toolkit elements and their pedagogical background to the workshop attendees.
- The first task for the teams developing either a module or a programme is to agree on a tweet size description (strapline, unique selling point, value proposition etc.) of the module/programme and write it on the workshop graph sheet (Fig. 2.). Team leaders also report this back to the facilitators.

The participants then draw the rough "shape" of their programme (as they envisage it initially) as represented by learning types on a spider graph (e.g. how much practice, or collaboration) and the envisaged blend of face-to-face and online (Fig. 2.).



Fig. 2. ABC workshop module tweet and spider graph

• Next the team plan the distribution of each learning type by sequencing the postcard-sized cards along the timeline of the module, represented by a large A1 sized paper 'canvas' (Fig. 3.). Often activity sequences are repeated.

- With this outline agreed participants turn over the cards. On the back of each card is a list of online and conventional activities associated with each learning type and the team can pick (by ticking) from this list or write in their own. The type and range of learner activities soon becomes clear and the cards often suggest new approaches. The aim of this process is not to advocate any 'ideal' mix but to stimulate a structured conversation among the team.
- Once learning activities are selected and agreed, participants then look for opportunities for formative and summative assessment. These are represented by affixing silver (formative) and gold (summative) adhesive stars to the activities.By this point module/programme development team have an overview and the details of the learning and assessment activities on the module/programme (Fig. 4.).



Fig. 3. ABC workshop storyboard initial overview

- Now they can go back to the graphs from the beginning of the workshop and adjust the shape of the module/programme on the learning types and the blend graph and discuss any changes.
- The final stage is to photograph the new storyboard. The storyboard can then be used to develop detailed student documentation, describe student 'journeys' or outline a course in our virtual learning environment, Moodle.



Fig. 4. ABC workshop final module design

Teams can write an action plan and take all the sheets and cards they used with them. The action plan can include further input from the Digital Education support team, additional resources to be gathered, identification of copyright issues etc.

3. Piloting

The ABC was piloted throughout 2015 and early 2016 in 23 sessions representing over 55 UCL module teams and some 180 faculty members. A range of disciplines was represented from medical sciences through engineering to education and social sciences.

An ABC workshop and resources variant for continuing professional development (CPD) courses was requested and produced. This includes a basic resource cost exercise. The aim is to generate a discussion on the need to balance cost and activity design, rather than produce a detailed costing model. Activities are given a resource indicator (one to three "stars") depending on the time, cost or human investment needed to produce. Thus videos and animations are three-star (expensive), quizzes two-star and forum-based activities one or two-star depending on the moderator support envisaged. All UCL-funded CPD courses are required to attend an ABC workshop to begin to design their courses.

The promotion of the ABC workshop in UCL is via presentations at UCL conferences and faculy education days, through Centre for Advancing Learning and Teaching colleagues and increasingly by personal recommendation. The ABC curriculum design facilitators are usually invited by a programme lead to facilitate workshop for module teams.

There is growing interest from other UK and European higher education institutions in trialing the ABC method and adapting the workshop to their local needs.

4. Discussion

Participants were asked to give feedback on camera and almost without exception, participants found the experience positive, engaging and valuable. A number of key points arose from their comments.

As the JISC project had found, the moderated workshop setting provides teams with "a neutral, supportive and non-threatening context for sharing ideas, away from the pressure of formal approval events and also minimising markers of staff roles and status" (Beetham, 2014). Indeed we found the level of pedagogic sophistication expressed to be remarkably high. The format of the workshop and presence of colleagues and support staff clearly stimulated wide ranging discussions of the purpose of the module or programme, teaching methods, alternative technologies and assessment methods and above all the student experience. The storyboard approach reinforces the notion that the design is a narrative describing the student experience over time. Participants felt this would help communicate the dynamics and purposes of the module activities to students. Generally participants appreciated the opportunity for reflection on teaching, as one put it, "a rare commodity since we are all so pressed for time". Representative feedback comments are listed below.

"We haven't had such level of detailed discussion as a team. I think the structure and the materials are facilitated well."

"I think it was good to take a step back from the content and look at the varied type of activity."

"It is a good way of focusing on creating the balance within a course."

"It makes you think about: OK, we are going to use this technique, but where, how, for what and how does it fit with everything else? And this is the way into that, I think."

"It helped us formulate in our own mind the course structure. Yes, very useful."

"It was an eye opener. I found it really useful to think about categorising how the learning objectives will be delivered and assessed, and examining the variety of ways that these can be achieved. It made me think more deeply about what skills the students can develop by making them responsible for their learning journey and not simply the content that needs to be delivered to them."

Three areas, around technology alternatives, novel modes of assessment and links across module reoccurred spontaneously, with little prompting from the moderators.

"Made me more conscious of a formative assessment, which really did not occur to me before."

"It reminds you of all different formats that you can use, rather than sticking to the same old same old."

"This has been extremely useful. Not only that we start to think about individual modules and how we can

use electronic resources, but it makes us think about the degree together, rather than as separate modules." Again as predicted by JISC, and recognizing this as an 'ironic outcome of a technology-based programme", the face-to-face nature of these discussions was a key part of the engagement with and success of the process. Exactly as Viewpoints had found there was a real haptic and democratic value in "sharing physical resources that could be selected, handled, annotated and (re)situated by users allowed a collective solution to emerge in real time/space" (Beetham, 2012).

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