Part 1.
Introducing ABC Learning Design

Clive Young and Nataša Perović
UCL Digital Education

This series of guides together with accompanying videos and workshop resources form the ABC to VLE Toolkit (Version 2, 2020). Supported by the Erasmus+ programme of the European Union.

Resources available from http://abc-id.org
PART 1 INTRODUCING ABC LEARNING DESIGN

1.1 Why ABC Learning Design?

How can we engage and enable our time-pressured teachers to design rich blended and online courses? Even before the Covid epidemic of early 2020, most leading universities already had aspirational strategies to develop future-looking, digitally rich, flexible courses attuned to students’ expectations for engaging, professionally related learning experiences. Covid however has forced even traditionally minded universities to ‘pivot’ rapidly to online learning provision, a cultural transformation that is unlikely to be completely reversed.

Yet we know only a few of our pioneering academics currently have the design skills, technology knowledge and above all time to remodel their programmes to the creative standards the new circumstances demand. Deep institutional change must engage mainstream academics but current methods of learning design consultancy and ‘away-day’ workshops are support-intensive and time consuming, therefore poorly scalable.

Recognising the need for a radical rethink, in 2014 Clive Young and Nataša Perović of the Digital Education team at University College London (UCL) began to experiment with a ‘light touch’ alternative team-based approach. ‘ABC’ is the result, a high-energy hands-on workshop. In just 90 minutes teaching teams work together to create a visual ‘storyboard’. The storyboard is made up of pre-printed cards representing the type and sequence of learning activities (both online and offline) required to meet the module or programme learning outcomes. Assessment methods, cross-programme themes and institutional policies can all be integrated into the process. The key to this approach is pace, engagement and collaboration. ABC was found particularly useful for new programmes or those changing to an online or more blended format. The approach generates high levels of engagement, creative informed dialogue and group reflection about curriculum design among even time-poor academics.

The paper-based process itself is as significant as the outcomes. Storyboarding is an established technique from filmmaking to illustrate a narrative as a sequence of scenes. The ABC version provides a storyboard overview of the learner experience visualising the module’s structure, therefore making it immediately discussable by the team. The storyboard’s sequences comprise learner activities, classified into six type cards using a simple and easy-to-learn taxonomy based on the highly respected ‘Conversational Framework’ created by UCL’s Prof Diana Laurillard (2012). Example activities are provided, but teams are able and encouraged to add their own activities to the cards. The creative hands-on, analogue format of the workshop together with the presence of colleagues and support staff always stimulates a wide-ranging discussion. The discussion among teachers generally includes the purpose of the course, module or programme, teaching methods, alternative technologies, new assessment methods and above all the student experience. The storyboard approach also reinforces the notion that the design is a purposeful, discussable and transparent narrative describing the student experience over time.

Evaluation of the ABC methodology at UCL and other institutions has shown high levels of transferability, academic enthusiasm and satisfaction. The workshops seem to have immediate impact.
in terms of stimulating a level of collaborative ‘educational design thinking’ in a range of academic contexts. This first (2018) version of the Toolkit was funded by the former Higher Education Funding Council of England to help other institutions adopt and adapt the ABC method to support educational change in their context. This 2020 version was co-funded by Erasmus+ and the universities and partners participating in the ABC to VLE project.

1.2 BACKGROUND: THE ORIGINS OF ABC
The Digital Education team at UCL has many years of experience in supporting academics through the process of educational (re)design. Although our expertise is in digital methods for teaching and learning, we always try to ground interventions on solid pedagogical principles. However, we recognise that enhancing conventional face-to-face approaches to teaching towards more blended, online and distance-learning formats is a dauntingly challenging task for academics and learning technologists alike (e.g. Beetham & Sharpe, 2007; Ellis & Goodyear, 2009). As we know, classroom and online environments are 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.

This was brought to sharp relief for us in 2014, when the Digital Education team was asked to support the development of an ambitious new paramedical undergraduate programme. Although the outcome was very successful, we realised we did not really have a structured approach to learning design. This meant that the discussions were often reactive, unfocused and somewhat frustrating for all sides.

In this dilemma we recognised Beetham’s (2014) 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, modules and programmes, aligned to institutional mandates, but also based on sound educational principles. We realised 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 (2012) Viewpoints 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”.

1.3 ‘LEARNING TYPES’ – ABC’S UNDERLYING PEDAGOGY

Viewpoints had developed a number of card sets to explore specific components of courses such as assessment and information literacy. The UCL team wanted a more universal approach to address the holistic design of modules and programmes. In addition, they required to focus on blended learning and find a way of encouraging the adoption of digital modes of teaching and learning. After exploring several possibilities, they settled on Professor Diana Laurillard’s concept of ‘learning types’, itself derived from her Conversational Framework model of adult learning. In the view of the UCL team, the operationalisation of the learning types model contributed greatly to ABC’s success.

**Video:** Prof Laurillard introduces the Conversational Framework
https://youtu.be/HEwuIKEKxfE

Through our ABC workshops at UCL and elsewhere, learning types has proved a remarkably robust and accessible route into teaching and learning discussion and reflection and shows how pedagogically informed rapid development learning design is achievable. The six learning types are: Acquisition (i.e.to read/watch/listen), Investigation, Practice, Discussion, Collaboration and Production. Each type of learning activity represents a cycle between learner and teacher, or learner and peers, at the concept and/or practice level. The role of the teacher then is to ‘motivate the internal cycles generating and modulating the learner’s concepts and practice, which is what facilitates learning’ (2012, p. 86).

**Video:** Prof Laurillard introduces the six learning types (2’)
Note: ‘Inquiry’ is used here instead of ‘Investigation’.
https://youtu.be/wnERkQBqSGM

For teachers with limited experience of (and sometimes enthusiasm for) educational theory, the learning types approach is easy to grasp, resonates with practice, and stimulates rich pedagogical conversation. As Laurillard puts it, the simplicity masks a complexity, ‘derived from conceptual learning, experiential learning, social constructivism, constructionism, and collaborative learning, and the corresponding principles for designing teaching and learning activities in the constructional design literature’ (2012, p. 93). The UCL team often remark in workshops that although there is weighty educational theory behind ABC, participants don’t need to know it. The theoretical underpinnings, however, provide an authority to the approach (which can look over-simple at first glance) and in the view of the ABC developers its theoretical robustness has been proved in practice.
The six learning types were converted into the ABC cards. The colours have a significance and were copied an online session design tool **The Learning Designer**, that Prof. Laurillard’s team had developed, and which used the same underlying pedagogy.

**Fig 1.1 Conversation Framework and Learning Types (Laurillard, 2016)**

The cards can be used by academic teams to reflect on current practices. The learning types in this sense provide a slightly abstracted ‘design language’ that can be learned quickly and shared by participants. There are several implications of this

- The student-centred design of the Conversation Framework is naturally embedded
• Courses are reframed as series and combinations of activities, rather than defined by ‘content’, coverage, curricula and even learning outcomes (we will return to them later)
• The activities themselves become slightly abstracted from the mode of delivery (lecture, lab, tutorial etc) helping provide some pedagogical perspective

The reverse of the cards is equally important. These were derived from a table in Laurillard (2012).

<table>
<thead>
<tr>
<th>Learning types</th>
<th>Conventional technology</th>
<th>Digital technology</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acquisision</td>
<td>Reading books, papers,</td>
<td>Reading multimedia resources, websites, digital documents and resources,</td>
</tr>
<tr>
<td></td>
<td>cooking a lecture</td>
<td>listening to podcasts, watching online content and videos.</td>
</tr>
<tr>
<td></td>
<td>in front of the board</td>
<td>Watching animations, videos.</td>
</tr>
<tr>
<td>Collaboration</td>
<td>Small group project, discussing</td>
<td>Small group project, using online content, videos, chat, email, etc., for discussing other student’s ideas,planning a joint output.</td>
</tr>
<tr>
<td></td>
<td>other students’ outputs,</td>
<td></td>
</tr>
<tr>
<td></td>
<td>creating a joint output</td>
<td></td>
</tr>
<tr>
<td>Discussion</td>
<td>Tutorial, role-plays, student</td>
<td>Online tutorials, for groups and seminars, small discussions.</td>
</tr>
<tr>
<td></td>
<td>participation, students'</td>
<td></td>
</tr>
<tr>
<td></td>
<td>writing discussion, discussion group, class discussions</td>
<td></td>
</tr>
<tr>
<td>Investigation</td>
<td>Using boot-loaded study guides,</td>
<td>Using online and printed guide, using digital tools to collect and analyse data.</td>
</tr>
<tr>
<td></td>
<td>using text and pictures</td>
<td></td>
</tr>
<tr>
<td></td>
<td>in order to design a piece</td>
<td></td>
</tr>
<tr>
<td></td>
<td>of writing, and tests,</td>
<td></td>
</tr>
<tr>
<td></td>
<td>to collect data for analysis,</td>
<td></td>
</tr>
<tr>
<td></td>
<td>comparing text, browsing and</td>
<td></td>
</tr>
<tr>
<td></td>
<td>evaluating information and</td>
<td></td>
</tr>
<tr>
<td></td>
<td>ideas.</td>
<td></td>
</tr>
<tr>
<td>Practice</td>
<td>Doing practice exercises, using</td>
<td>Using digital tools, models, simulations, digital games, computer packages, visual labs and field trips, online laboratory activities.</td>
</tr>
<tr>
<td></td>
<td>tools, doing practice-based</td>
<td></td>
</tr>
<tr>
<td></td>
<td>projects, skills, field trips,</td>
<td></td>
</tr>
<tr>
<td></td>
<td>facing each other in class</td>
<td></td>
</tr>
<tr>
<td>Production</td>
<td>Producing their own representations of what they have learned, using presentations, reports, artefacts, designs, performances, artefacts, animations, models, objects.</td>
<td>Producing and sharing digital documents, representations of designs, performances, artefacts, animations, models, resources, artefacts, photos, videos, blogs, portfolios.</td>
</tr>
</tbody>
</table>

**Fig 1.3 The origins of the ABC LD cards.**

**Fig 1.4 The reverse of the ABC cards**

The reverse of the cards link theory to practice in a visible, relatable way. It is easy to see how teaching practices map on to the learning types categories and in the workshop itself the two columns provide ‘serving suggestions’ to help teachers think of digital alternatives to ‘conventional’ practices.
GROWTH OF ABC 2015-2020

In UCL, ABC was launched as a service in the academic year 15-16 and has enjoyed steady growth in numbers of modules (re)designed per annum. Included as part of UCL’s 2016-21 Educational Strategy the team committed to work with 250 modules by 2021. Even with the COVID disruption, this was easily exceeded. Moreover, some academic enthusiasts at UCL started using ABC independently of the Digital Education team. The team estimates over UCL 1000 staff and students have participated in ABC workshops so far.

Word of ABC soon spread beyond UCL. The first external workshop was run at the University of Glasgow and the UCL team ran a highly successful workshop at the European Distance Education Network conference in Budapest in 2016. That event put us in touch with Vives University of Applied Sciences, Kortrijk, Belgium. After running a highly successful workshop with them later in the year, Vives became the first institution to adopt ABC outside the UK and later became a partner in ABC to VLE project.

At an early stage UCL made versions of the workshop materials available for download. The team received funding in 2016-18 by the HEFCE (Higher Educating Funding Council for England) Catalyst initiative to both evaluate the ABC method and develop these materials onto what became the first version of the downloadable ABC Toolkit. Supporting videos and FAQs helped practitioners in other institutions run their own workshops. We ran demo workshops at several JISC Connect More events and the UK digital education conference ALT-C. Workshops were also run at several UK universities and a UK community began to emerge.

The HEFCE evaluation revealed 90% of ABC participants surveyed agreeing their experience was positive. 71% agreed that the workshop enabled them to enhance the curriculum. Many follow-up interviewees commented on the ‘buzz’ in the room and enjoyment of the workshops:
'it’s just a fun workshop so it’s colourful, it’s paper based, you’re moving things around and you’re feeling things, people are excited, if there are tutors and there are many of those who actually have a fear of technology type things, well they don’t have to worry about it in a workshop like this, ... it’s alive, you can see it; people are talking and it’s great to see that...’.

In parallel we ran the workshops for 16 fellow-members of the League of European Research Universities, including at Edinburgh, Oxford, Imperial, Trinity College Dublin, Amsterdam, Copenhagen and the Sorbonne. This networking led to the current Erasmus+ project ‘ABC to VLE’ (2018-2020) investigating both how institutions localise ABC and link it to their online learning environments. Led by UCL, the ABC to VLE project includes 12 universities from 11 countries. This Toolkit is the major outcome. An earlier version was released in 2019. The project has run 45 workshops to over 600 participants across Europe, already produced an excellent evaluation report and is about to release a set of tools to help teachers implement their ABC designs in the VLE. Workshop resources have been translated by the ABC LD international community into 12 languages and are available to download under CC BY NC SA licence. Beyond the project, but aiding its dissemination, in 2019 the UCL Digital Education team ran workshops by invitation in Warsaw, Zurich, Geneva, Reykjavik and even as far afield as Auckland and Sydney. The global interest in UCL’s learning design method is pleasing but proved hard to keep up with. The COVID emergency and the completion of the Erasmus+ project provided an opportunity to rethink the approach.

REFERENCES


University of Ulster (2012). Curriculum design workshop resources. 
http://wiki.ulster.ac.uk/display/VPR/Home
