Abstract

Like most leading universities across Europe, the Università degli Studi di Milano (UniMi) and University College London (UCL) have aspirational strategies to develop future-looking, digitally rich, flexible programmes, attuned to students’ expectations for engaging, professionally related learning experiences. Yet in both institutions only a few of the most pioneering teachers have the design skills, technology knowledge and above all time to remodel their programmes. Deep institutional change must by definition engage mainstream teachers, but traditional course and programme redesign processes, while effective, generally demand too much time and support. This contradiction frustrates educational ambition at both institutions. Recognising the need for a radical rethink, the digital education team at UCL developed high-energy hands-on workshop called ABC in 2014. The key to this approach is pace, engagement and collaboration. In just 90 minutes using a rapid prototyping format teaching teams 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. Assessment methods, cross-program themes and institutional policies are also integrated into the process. ABC is particularly useful for new programmes or those changing to an online or more blended format. The method is highly transferable and has been tested successfully in universities in Denmark, Sweden, Belgium, Chile, Canada and elsewhere.

The ABC method was initially trialled with two programmes at UniMi in early 2017. The trial was a success but the London and Milan teams realised that the key to adapting any “global” methodology was localisation. There is never ‘one size fits all’ in tertiary education and the workshop itself raises complex issues of learning design support; before, during and after. Language localization is one way to reduce barriers, the materials were translated into Italian, but this is obviously only the first step of the process, and not the most important one. It is also vitally important that learning design is aligned with institutional strategies and priorities. The drivers for educational change at UCL and UniMi for example are analogous but expressed and implemented in different ways. This was built into the UniMi version. The workshops also uncovered differences in approach to assessment and the issue of post workshop training and development support, either online or face-to-face. Over the next few years the UCL and UniMi teams will work together with other like-minded universities to localise the method while retaining the advantages of a “global” methodology. Participants at the presentation will be invited to download, use and maybe even localise the ABC resources (https://blogs.ucl.ac.uk/abc-ld/abc-workshop-resources/).

Keywords: innovation, learning design, rapid prototyping, curriculum design, learning types, blended learning.

1 INTRODUCTION

The Università degli Studi di Milano (UniMi) and University College London (UCL) both have aspirational strategies to develop future-looking, digitally rich, flexible programmes, attuned to students’ expectations for engaging, professionally related learning experiences. Yet in both institutions only a few of the most pioneering teachers and academics have the design skills, technology knowledge and above all time to remodel their programmes.

In order to address this contradiction, both UCL and UniMi realised they needed a rapid, streamlined process that would result in innovative, well-designed courses, aligned to institutional strategies but also based on sound educational principles and practices. It was recognised that the process of change from conventional face-to-face approaches towards more innovative or blended formats is very often regarded as a discouragingly challenging task for academics (e.g. [1], [2]). The dynamics of classroom and online environments are rich, multifaceted and subtle, dependent on both context and domain. Transferring from one mode into the other is fraught with difficulties. Many academics simply
lack the experience or knowledge of blended methods and the time to acquire them. Even if “at elbow”
educational and technical support is available, and this is far from common in the sector,
conversations can be unstructured and hampered by the lack of a shared “design language”.
Educational technologists and teachers sometimes think of their courses and the student experience
from markedly different perspectives and this can be alienating and frustrating for both parties.

This issue was emphasised in 2016 at UniMi when the university launched the EXEL (Experiment of
Enhanced Learning) initiative. EXEL aims to foster capacity and community around teaching and to
promote an institutional culture that values effective teaching and meaningful learning. The project
collaborates with individual academics, academic departments and schools to support and help
develop excellent teaching across the university at all stages of a faculty member’s career. The EXEL
team had the daunting task to engage in redesign with a wide range of academics within a short
timescale. Multi-day intensive processes such as the well-known Carpe Diem [3] and CAeIRO, [4]
workshops while effective, seemed to demand too much time from hard-pressed academics and
EXEL’s small support team. A sustainable rapid-development design method was sought.

Through joint membership of the League of European Research Universities (LERU) E-Learning
Thematic Group [5] the Milan team heard of UCL’s fast-paced hands-on learning design workshop
called ABC [6] (within LERU there are 11 Thematic Groups that are primarily responsible for
contributing their expertise on specific topics related to their remit; they operate on an activity-driven,
self-organising and voluntary basis and activities fall within the scope of LERU’s mission).

ABC workshop had been developed specifically for teachers in research-focused universities like
UniMi and had already been used successfully for over two years in UCL. The UCL team had found
the method to be highly transferable beyond research-focused universities and had run workshops
successfully in universities and colleges in Denmark, Belgium, Chile and Canada as well as several
other UK institutions.

The ABC approach aligned closely to the ethos of the EXEL initiative. The key to UCL’s distinctive
methodology is pace, engagement and collaboration (Fig. 1). In just 90 minutes using a rapid
prototyping workshop teaching teams co-create a visual ‘storyboard’ outlining the type and sequence
of learning activities, both online and offline required to meet the programme or course’s learning
outcomes (Fig. 2). Assessment methods, cross-program themes and institutional policies are also
integrated into the process. ABC had been found to be particularly useful for new programmes or
those changing to a wholly online or more blended format.

Figure 1. ABC learning design workshop in UCL.
2 EXPERIENCE OF RUNNING THE ABC WORKSHOPS AT UCL

The ABC method was piloted from 2015 to 2017 in over 50 sessions representing more than 100 UCL teaching teams and some 300 faculty members. A range of disciplines was represented from medical sciences through engineering to education and social sciences. The UCL team found the level of pedagogic sophistication expressed to be remarkably high (e.g. range of methods and learning types proposed to meet outcomes). 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 also reinforces the notion that the design is a narrative describing the student experience over time. One of the strengths of the workshop is that module teams can discuss and share their approaches across the whole programme, using the same language and design representation, enabling a more cohesive student experience across modules. Participants felt the resultant narrative based on the student experience would help communicate the dynamics and purposes of the course activities to students.

The feedback in UCL was overwhelmingly positive, as exemplified by participant comments,

“I thought the ABC session was really helpful. I had been a little unsure ahead of the session what it would achieve – but I genuinely got a lot from it. Going back to the basics of methods etc. really helped focus on the structure and balance of the module. I thought the output was very useful” [Teacher – UK- 1].

“I found it thought provoking and challenged the way we think about our teaching. It is too easy to stick to what we have done previously and I found today gave me different ways to think about how to evaluate our current teaching and to bring in different approaches. It will definitely improve my thinking and I will continue with the approach to incorporate some of the ideas into the modules” [Teacher – UK- 2].

“We found the ABC workshop to be stimulating, particularly in terms of making us think about the interconnections both within the module and across the whole course, especially the module that is running concurrently” [Teacher – UK- 3].

“This process was really useful. It helps us think about the modules in their entirety. It is really good how everything maps out in a clear framework like this” [Teacher – UK- 4].
“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” [Teacher – UK- 5].

Most importantly for busy academic colleagues (and for institutional promotion of the method), participants recognised the speed and efficiency of the process, “This saved me two weeks of work” [Teacher – UK- 6].

Variants of the ABC method have been adapted to design short professional development courses and UCL’s suite of MOOCs. ABC stimulated national and international interest attracting invitations from other institutions for ABC workshop facilitation and ‘train the trainer’ sessions. Over 200 participants from 13 higher education institutions across Europe and beyond have attended the sessions to date.

3 LOCALIZATION OF THE ABC METHOD AT UNIMI

One of the key institutions that have used the ABC method is UniMi. The London and Milan teams realised that the key to adapting any “global” methodology was localization. There is never ‘one size fits all’ in tertiary education and the workshop itself raises complex issues of learning design support before, during and after.

Language localization is an important way to reduce barriers, partly to reduce cognitive load in the workshop itself (even if the participants are proficient in English) and partly to ensure the methodology is seen as “owned” by the local institution and not in any way imposed externally.

As outlined in [6] at the storyboards used in ABC are built from sequences and groups of learner activities, classified into six types using the taxonomy from UCL's Prof. Diana Laurillard 2012 classic “Teaching as a Design Science” [7]. In the ABC process, the activity types are represented by cards placed and rearranged on a pre-printed storyboard canvas. The accurate translation of these cards which represent and exemplify the learning types is key. This translation is itself turned out to be an integral part of the ABC process, some of the English to Italian mapping was difficult, but this discussion helps to clarify and embed the ABC concepts in the context of the national educational and institutional cultures.

It is also important that learning design is aligned with institutional strategies and local priorities. The drivers for educational change at UCL and UniMi for example are analogous but expressed and implemented in different ways. The main educational strategy at UCL focuses on Connected Curriculum [8], promoting research-based teaching and learning. This institutional change driver has propelled ABC into more widespread adoption, and the UCL developers have carefully aligned and integrated ABC with the Connected Curriculum initiative. UniMi, though in many ways a similar institution to UCL, is at different stage of the academic development process. UniMi is currently defining its own educational strategy and with it the academic development support that will be offered. The ABC workshops therefore have to be contextualised to participants (and potential participants) quite carefully in order to manage expectations.

4 EXPERIENCE OF RUNNING THE ABC WORKSHOPS AT UNIMI

UCL are keen to ‘train the trainers’ in order to enable local facilitation of future workshops. The UCL team facilitated the initial two workshops in UniMi with some 30 colleagues from the International Medical School and the School of Ophthalmology with the assistance of the EXEL colleagues (Fig. 3). These trials showed that as in UCL and other institutions the hands-on analogue format of the workshop and presence of colleagues and support staff stimulated wide ranging discussions of the purpose of the courses, teaching methods, alternative technologies and assessment methods and above all the student experience.
UCL workshop leaders noted that the tone and academic level of the discussions seemed to be independent of language and context, very similar rich conversations occurred as at UCL. The storyboard approach again reinforced the notion that the design is a purposeful, discussable and transparent narrative describing the student experience over time. The workshops run seem to have immediate impact in terms of stimulating a level of collaborative ‘educational design thinking’ [9].

With this experience, the EXEL team ran four subsequent workshops in UniMi with a range of academic groups. Through the evaluation feedback a number of issues emerged.

As the academic development strategy (not only at an institutional level but also at a national level) is still emergent, it appears especially important to provide a clear description of the workshop in terms of contents and objectives. When an educational strategy is not yet “formalized” misunderstandings in purpose can occur. Developing a relation with the programme coordinator is fundamental to ensure that colleagues’ expectations are managed, that the workshop recognises and addresses the stage of development of the programme and the workshop is tailored for their needs, focusing on the most pressing tasks for the group. Even the brief introduction speech from the programme lead at the beginning of the workshop can be critical as it can set a productive academic “climate” and tone for the subsequent discussion.

It was realised that ABC assumes at least some awareness of blended learning methodologies and technologies. These are listed as suggestions on the learning activities cards but some of the UniMi participants expected these would be covered specifically in the workshop. One participant commented in the feedback, “actually, I thought it was a course about online learning” [Teacher – IT-1]. As we shall see below learning design also has to be carefully framed within the technical and advisory support of the institution, for example another UniMi academic remarked they were hoping to explore “new technologies made available for innovative teaching by UniMi in the near future” [Teacher – IT- 2].

Other teachers were looking for more general educational development advice, such as “new tips on how to schedule lessons in order to improve the student learning process and at the same time simplify my lesson preparation work” [Teacher – IT- 3]. Particularly in a context where interest in educational innovation is quite recent, it may be risky to focus too much the technological aspects
when broader educational development perspectives need to be addressed. Innovation and technology are not synonymous and this has to be clarified from the very beginning.

Another unexpected aspect arose from UCL’s emphasis localisation and how the “brand” is communicated, as a local or external initiative. Two contradictory reactions could be observed. On one hand the proposal of a workshop with a clear label (UCL in this case) could be read as “too UK” to be relevant and so useful in a different context. For some, however, the UCL brand could help to provide “prestige” or “assurance” of the proposal itself. One Milan participant commented “teaching and learning strategies that come from the Anglo-Saxon world are well known but hard to put in practice in the context of our programmes’ structure and resources” [Teacher – IT- 4]. However a colleague provided an almost opposite perspective, “Perhaps have examples of teaching and learning methods used for the same type of course/programme in foreign universities” [Teacher – IT- 5].

This last observation is especially interesting, shortly after the UCL-led workshop with UniMi ophthalmologists the UCL team ran ABC with a group UCL ophthalmologists, and the parallels in teaching and learning approaches across the two institutions were striking. The potential for transnational exchange of practice is an area both UCL and UniMi may explore in the future.

A final difference arose concerning how to manage the assessment process within the storyboard, several UniMi teachers asked questions and explanations on this issue during the workshop: “how and where to put “assessment stars” [these are used to identify formative and summative assessment points on the storyboard] is not clear enough and sometimes require forcing: for example you do not know where to place on the board the final exam”[Teacher – IT- 6]. This is a controversial and current topic that has been identified also within a deep research that compares Higher Education in three different countries: Italy, Switzerland and United Kingdom [10].

5 POST WORKSHOP SUPPORT

Translation and alignment with local educational strategies and initiatives are only part of the ABC localisation process. Equally significant is post-workshop support for academic teams, and again this has to be tailored to local institutional culture and resources. UCL now has a complex support network of centrally based digital education advisors, academic educational developers, a volunteer network of e-learning champions and in some faculties local learning technologists. This human community is itself assisted by a digital education infrastructure comprising a virtual learning environment (Moodle) and associated technical services (e.g. lecture recording, media, portfolio, assessment) together with training and online resources. The UCL team are trying to align ABC to this structure and vice versa in order to present to workshop participants a coherent and cohesive course of follow-up action so that workshop plans can be more easily implemented without the need for too much personalised support.

On the other hand, we cannot expect all the support elements and strategies to be in place before thinking about learning design. UniMi is working right now to develop its own educational strategy and ABC seems to represent a workable “Trojan horse” to start talking on teaching practices and innovation. The particular approach to the design process allow to facilitate the dialogue with teachers, to reduce their “defences” and reassure them no-one is trying “to teach them how to teach”.

From this workshop therefore some programme re-design projects emerged and it’s important to evaluate them and show how a path could be built starting from the right stimulus at the right time. As the UniMi experience highlights, learning design has to recognise the stages of development of programmes and individuals. Both teams discussed what is the “right time” for learning design in a programme lifecycle, how much preparation is needed/possible for individuals beforehand and how much advice and support afterwards.

6 CONTINUING RESEARCH AND NEXT STEPS

As we have seen UniMi already have in place a system post-course questionnaires to elicit feedback. In the more established programme at UCL, a longitudinal impact evaluation process is underway. In late 2016 UCL were awarded a project UCL Action for Curriculum Enhancement (ACE) via the HEFCE Catalyst Fund [11], which aims to drive innovation in the UK HE sector. The project [12] will evaluate the impact of UCL’s rapid-development approaches to programme development on student outcomes and experience via four UCL case studies. This is on-going and results will be available in early 2018. The ACE project will also produce an online and downloadable pack which can be adapted and used by any UK HE institution (and indeed non-UK institutions). The final part of the project is to establish a
supportive community of practice in the UK around its implementation and international ABC communities of practice are also already emerging.

Over the next few years, the UCL and UniMi teams will work together with other like-minded universities to localise the method while retaining the advantages of a “global” methodology. UCL and UniMi are already collaborating with other LERU universities and UCL has recently run workshops with other universities in the UK, Sweden and Estonia. We also hope to extend the ACE evaluation approach to other institutions to build our knowledge base on localisation and impact and encourage national communities of practice for the exchange of practices. A range of ABC-related tools and support resources are also to be developed and will be available on the ABC blog.

REFERENCES


