



Cats, Coffee, Canberra: Course Design Principles for E-learning

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The rapid shift to online and blended modes during the COVID-19 pandemic era resulted in the adoption of digital tools and the development of online resources at an unprecedented scale. However, limitations in time, resources, and learning design or online education experience meant that resources developed were not always fit for purpose or constructively aligned. After designing online modules with teaching staff and students over the past several years, we identified a gap in the knowledge of pedagogical and design principles as they apply to e-learning. This workshop will bridge this gap by providing a step-by-step guide for developing effective e-learning courses. We will explore key considerations and practical strategies and share best practice examples from our own projects. Participants will practice these skills in hands-on activities while storyboarding and designing their own e-learning resource. The workshop is aimed at tertiary educators and developers new to e-learning and those with some experience who wish to upskill in this area.

Keywords: e-learning course authoring, constructive alignment, student engagement, active learning, accessibility

Background

The rapid shift to online and blended modes during the COVID-19 pandemic era resulted in the adoption of digital tools and development of online resources at an unprecedented scale (Ali, 2020). However, limitations in time, resources, and in some cases, learning design and/or online education experience meant that resources developed were not always fit for purpose or constructively aligned.

Teaching staff reported feeling demotivated and experiencing burnout due to the enormous workload in adapting in-person activities and content to online and blended modes, and not having adequate time or resources to upskill in best practices in online teaching and learning (Turnbull et al., 2021). Resources recycled from in-person teaching were not always suitable for engaging students in online environments (Martin, 2020). Our experience was that content was often adapted into digital formats without much consideration for interactivity or active learning, and aspects like aesthetics and accessibility had to be compromised to deliver remote teaching in a pinch.

Three years into the pandemic, flexible learning is here to stay and will undoubtedly be the norm, not the exception, in the tertiary education tapestry. If universities are to retain students in a pandemic era, we must raise our digital learning standards to meet student expectations – of being engaging, interactive, fit-for-purpose, constructively aligned, accessible and visually appealing (Rapanta et al., 2021). While this is a challenge, we see it as an opportunity to reflect on how online learning experiences could be as engaging and interactive as in-person experiences (Stone, 2019).

While there has been professional development offered in this area, after working closely with teaching staff and students over the past several years, we recognise that there is still a gap in their knowledge of pedagogical principles and design principles as they apply to e-learning course development. In this workshop which addresses the theme “Reconnecting people with educational technology”, we will attempt to bridge this gap by sharing our step-by-step guide for developing digital learning experiences which can be applied regardless of the discipline, software or audience.

Proposal

The workshop will comprise of six interrelated segments – Purpose, Content, Structure, Interactivity, Aesthetics and Accountability – each discussing key considerations and practical strategies for high quality course design. The aims of the workshop are for participants to reflect on the importance of each of the segments and complete hands-on activities to practise these skills. We will share best practice examples from our own projects and discuss lessons learned. Together, the six segments will provide a tool kit for participants to use in their own practice.

The workshop is aimed at tertiary educators and education developers new to e-learning course authoring, as well as those with some experience wishing to upskill in sound pedagogical and design principles applicable in any context. The workshop can accommodate a maximum of 30 participants and minimum 12, working in small groups of 3-5. Participants must bring their own device (laptop/tablet).

Room and technical requirements include tables (at least 6) and chairs suitable for group work, a computer or laptop connected to a screen projector, internet access, power outlets and power boards for participants to connect their devices.

Workshop Outline

Below, we outline the aims and activities of each segment. Participants will choose one of three topics – cats, coffee, or Canberra – on which to base the activities throughout the workshop.

1. Purpose

Participants will reflect on the importance of identifying the purpose and target audience of an e-learning resource prior to commencing design. They will practise skills in identifying the purpose of any given content and thinking outside the box to design activities most suited to meet their outcomes and engage their audience, using the tools available to them. Participants will engage in a scenario-based activity in which they will be given different contexts and asked to explore and propose the most appropriate format for presenting the topic based their audience and the purpose. We will also discuss limitations such as tools available, time, and familiarity bias of subject matter experts.

2. Content

In this segment, participants will learn to map content to learning outcomes, recognising that not all content drafted in the initial stages will belong in the final product. During the activity, participants will scrutinise the content provided to identify what is relevant and what should be removed, based on the learning outcomes. We will discuss the concept of constructive alignment (Biggs & Tang, 2011) wherein every activity and assessment in their resource should align with one or more learning outcome(s).

3. Structure

This segment will explore the importance of weaving familiarity throughout a course or resource to help the audience place themselves and find their way around. We will present our concept of constructing a narrative and share examples from our own projects for developing a consistent and coherent structure. Participants will complete an activity wherein they explore the features of different tools and mock-up a structure for their resource that suits the format they proposed in the first segment.

4. Interactivity

In this segment, we will discuss the different forms that interaction can take – namely, between students and content; students and their peers; and students and educator(s) – and explore how to foster active learning in online resources through interaction. Participants will engage in an affinity mapping activity where they will brainstorm all the options for interactivity in e-learning and group them by theme based on their use. We will also showcase some examples of best practice in using interactivity.

5. Aesthetics

This segment will stress the importance of aesthetics in e-learning for reducing cognitive load (Mayer & Moreno, 1998). We will discuss the purpose and use of graphics, how to choose and use a colour palette

appropriately, and our tips for designing consistently visually appealing courses. Activities will include participants learning to choose a colour palette appropriate for their resource, developing rules for applying their palette, and selecting the most suitable image for a given context.

6. Accountability

In this final segment, we will explore some key aspects to be accountable for in e-learning course authoring: accessibility, referencing and image credits. We will discuss the importance of considering these throughout the entire design and development process and not just at the end. We will share strategies for ensuring all students can access the content, including alternative text, high contrast, subtitles and content warnings. Participants will review their colour palette, design and interactive elements against accessibility tools, and explore tools for sourcing and crediting images.

We will close the workshop by reminding participants to continually review the resource to ensure learning outcomes and the purpose are being met, and the importance of feedback and iterative improvements. Finally, we will showcase our own versions of the e-learning resources on cats, coffee and Canberra.

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