

**THE
DATA LAB**
value from data

THE DATA LAB GUIDE

A Quick Start Guide to Creating a Successful On-Line Course

thedatalab.com

info@thedatalab.com

 [@datalabscotland](https://twitter.com/datalabscotland)

Our challenges

After 2 years of running workshops on the value of data, we wanted to scale our capability to help more people across the globe. After exploring different options, we decided that a MOOC (Massive Open Online Course) was the best way to achieve that goal. With an existing course and years of experience, how hard could it be?

The short answer is, “harder than it looked”. It took us a year to get it right, but it was worth it in the end. MOOC’s typically have a completion rate of between 5% and 15%. We hit 21%.

It was quite a journey getting from a face-to-face offering to a standalone, on-line course. Here are some of the key challenges with suggested solutions:

1. **You can’t see the people:** you can’t read the room, gauge reactions or tweak the session to keep people engaged. So,
 - built in **frequent learning points with time for reflection.**
 - **Fore shadow** what is coming next so that there is motivation to keep on going.
2. **You can’t customise the case studies:** people like stories, especially stories they can relate to. In the workshop the case studies are specific to the audience and their challenges, but you can’t customise if you have thousands of learners with different challenges in different sectors. So,
 - **Focus on what is common** across industries and specifically how people (like them) have overcome these challenges.

- Give learners something to fill in to **capture their challenges and encourage discussion** through comments so that they can relate to the key messages you are conveying. We created a workbook with lots of templates and examples, this went down really well with our learners.

- **Tap into your learners’ experience**, ask them to share their stories, this is one of your greatest assets.

3. **You can’t alter the pace to the learners needs:** people learn at different speeds and prefer different techniques (reading, watching, doing etc.), so again, you can’t tailor this to the different needs of thousands of learners. So,

- Variety is key to keeping learners engaged so we **built in a mixture of learning experiences** including quizzes, polls, discussions, articles and videos.

- Create **different paths for different types of learners** e.g. “the time poor”, ‘the doers” and “the deeply curious” – we discuss this further in the “**Be passionate, engaging and authentic**” section below.

Those were the challenges, and as you can see from the tips, we managed to overcome them. We will now share some overarching themes from our experience, in other words, “stuff we wished we knew when we started”.

Some themes

We benefitted from talking with people who had already developed MOOCs. They spent time with us sharing their experiences, so we thought we’d continue the tradition and share with you the things we wish we had known at the beginning.

This list is not exhaustive, but it is representative of our experience:

1. **Think like a learner** - Create an intuitive and enjoyable way for the learners to get the skills they need to succeed.
2. **Surround yourself with people that have the right**

skills - As the lead educator, compliment your skills by surrounding yourself with an experienced team that you trust.

3. **Be passionate, engaging and authentic** - People are giving up their limited free time to learn with you, make it worth their while.
4. **Don't underestimate the time commitment** - You won't be there in person, so take the time to get it right.

We will now expand on each of these to bring our observations to life.

Think like a learner

Create an intuitive and enjoyable way for the learners to get the skills they need to succeed.

We were our own harshest critic, so we kept checking that the course we were writing was one that we would actually want to do. Questions we asked myself included, "**would this hold my interest?**" and "**was that enjoyable?**". We really wanted to create a course that people would actually want to do all the way to the end.

Once we had our step-by-step, week-by-week flow in place, we did a simple check for each stage and each week. We asked ourselves, "**what do we want them thinking or being able to do now?**" and "**what do they not need to know at this point?**". This gave us the confidence to take out any surplus material (that we may have fallen unnecessarily in love with) and to keep our content as concise as it could be.

These simple questions stopped us from writing down everything we knew, or wanted to say, instead we focused on what the learner needed to know to succeed. We reduced our original content by about 50% and we still created a course that required a 12-hour commitment to complete it.

Surround yourself with people that have the right skills

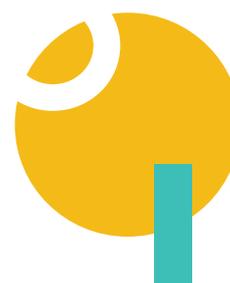
As the lead educator, compliment your skills by surrounding yourself with an experienced team that you trust.

When we started, we had never created any on-line learning courses, so we were at best enthusiastic amateurs. To overcome this, we spoke with people who had been there before.

Speaking to other Lead Educators was a real eye opener. One theme that came through again and again was, "you will have enough to do as the primary content creator, so don't take on tasks that you don't need to do. So, we surrounded ourselves with experts. We didn't get it right first-time round, but when we did, the team really clicked. Here are the 4 areas where we had invaluable help:

1. On-line learning (and the project management of course creation).

We received amazing advice from the on-line learning experts at [Woodgate Consultancy](#), they guided us to create a mix of content that focussed on learning as opposed to telling. Also, their project management skills resulted in a realistic plan that produced valuable outcomes in short timeframes.



2. Video production

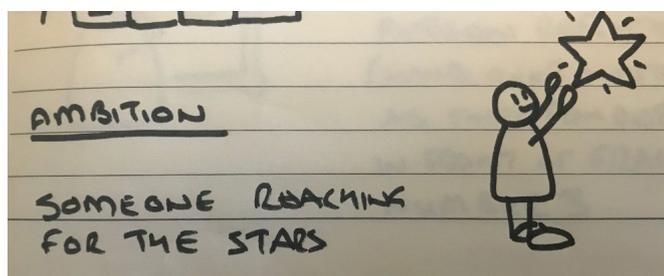
For most people video is an immediate and engaging medium. The team at [Heehaw](#) know their stuff and made everyone feel at ease during interviews. They were infinitely patient with us when we asked for video recuts to fit the narrative flow of the course, and their final cuts were perfect. Also Heriot-Watt University, Edinburgh Business School allowed us access to their lightboard video creation facilities, lightboard videos effectively look like you are writing in mid-air. These videos were a joy to make, and from course feedback, very engaging for learners.



3. Image design

Visual signposting and relevant images can really lift the way a course feels. [TwoFifths Design](#) took our very rough sketches and turned them into fresh, impactful images that helped make the course approachable and fun.

from: a rough sketch of a stick person reaching for a star.



to: A great image of a person riding a rocket to the stars.

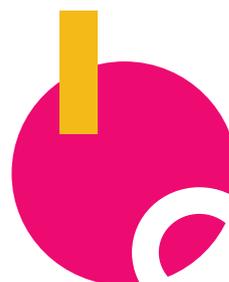


4. Testing

The patient testers of the course turned a good product into one that we could be really proud of. After a while we became word blind when we looked at the material, especially when deadlines loomed. The testers' fresh eyes caught all the typos and narrative glitches. We chose people who were both experts and novices to get a broad range of valuable feedback.

These partners were all fantastically supportive and together we created a much richer learner experience as a result of our collective efforts.

Getting the right team around us made such a difference.



Be passionate, engaging and authentic

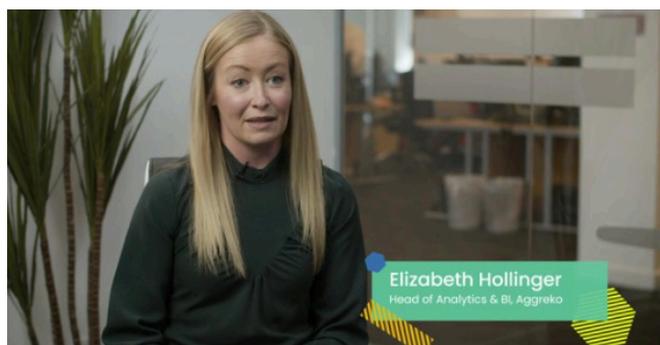
People are giving up their limited free time to learn with you, make it worth their while.

Have you ever had a teacher who was obviously not interested in the subject? Try not to be that person. People bond with people. This can be hard enough at the best of times, now try doing it when everyone is remote and you can't read their reactions.

It can be difficult to be natural when it comes to writing content and speaking on film. Our advice is don't try to be overly formal and don't try to be someone else, just be yourself. We wrote and spoke in a way that was how we would naturally communicate in person. So feel free to let your passion for the subject flow and that way you will come across as genuine.

When it comes to videos, the question is **"scripted, unscripted or partially scripted?"**. Each approach has pros and cons, so do the one that feels most natural to you. We went for partially scripted when it was us talking straight to camera. We would have key words to prompt us so that we could cover all the points without looking like we were just reading. When we filmed the lightboard videos, we did these unscripted as we found that act of drawing while we spoke meant we remembered the flow and relaxed as a result of being unaware of the camera's presence.

We would also recommend getting a mix of voices. As the lead educator you need to ensure a narrative flow, but don't hog the limelight. A variety of voices is more engaging and demonstrates that what you are saying is more than just your point of view.



3.11 video

Meaningful and achievable steps - a view from Aggreko

Finally, learners come in all shapes and size with a variety of preference and free time. We split my learners in to 3 groups with their own paths through the course:

The time poor – **"just tell me what I need to know"**.

These learners could just read the course and still come away with the key points.

The doers – **"let me learn by doing"**.

These learners could do the exercise to create something specific to them.

The deeply curious – **"give me more content"**.

These learners could use all the supporting material to get a deeper level of understanding.

We took this approach to try and add value to as many people as possible, in as natural a way as possible.

Don't underestimate the time commitment

You won't be there in person, so take the time to get it right.

Here are a few final thoughts on time commitment.

1. Take the time to translate face-to-face content to on-line content.

Presenting in-person is very different from remote learning. You won't be there to read reactions and answer questions, so you really need to have enough detail so that each section is unambiguous and digestible. It takes time to get this right.

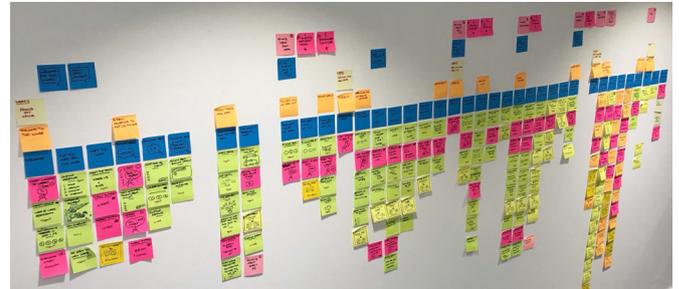
2. Invest time in variety, reinforcement and fore shadowing.

Engagement drops off on every course. Often this is for personal reasons beyond your control, but don't make it any worse than it needs to be. Variety is key to increasing completions, as are activities to reinforce learning. Also fore shadow future content so that learners have a reason to keep coming back.

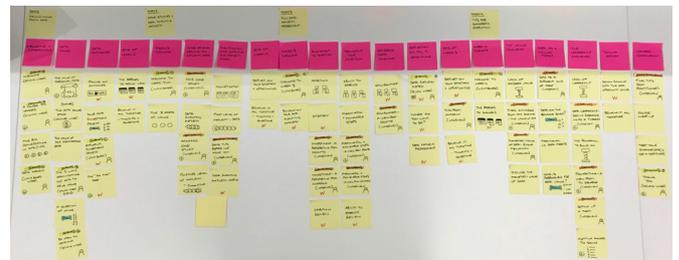
3. Design time is critical – I found Post-it notes great here

You have finished design when you have a fully written course, the build phase should just be for uploading onto the platform. We found using post-it notes, one for each step of the course, a simple visual way to track what we were creating. This allowed us to “see” the course in its entirety and it gave us the flexibility to move things around quickly before committing to the platform. This was time well spent.

Before: Different coloured post-its for different types of activities.



After: Cut down course with coding on post for interactions and supporting materials.



4. Make the right amount of time to engage during the course run.

Interactions during the course is critical. How would you feel if your comments were ignored and your question left unanswered? Where possible recognise and encourage high quality interactions. If you can cross reference learners' comments so that they build a cohort that supports each other then you will have less to do. So, don't ignore them, but also don't overdo it, if you like everything then there is no reason for learners to write quality comments.

Good luck and have fun

We are delighted to say that the 1st run of the course went down well with the learners and our statistics were above average for:

Active Learners	those who have completed at least one step at anytime in any course week.	71.8%
Social Learners	those who have posted at least one comment on any step.	20.3%
Learners with $\geq 90\%$ step completion	users who have successfully completed 90% or more of the steps contained within the course	20.5%
Run Retention Index	a measure of how the population of learners moves through the entire course.	41.4%

One final comment on platform selection. After a paper based evaluation and a pilot (which was a very worthwhile learning experience) we selected FutureLearn as our platform provider. When we were inexperienced in MOOC development, all platforms looked much the same, but in the end we selected FutureLearn based upon:

1. Their elegantly simple learners' user-interface.
2. The fact that our target audience was most likely to be users of FutureLearn.
3. Their intuitive build tools.

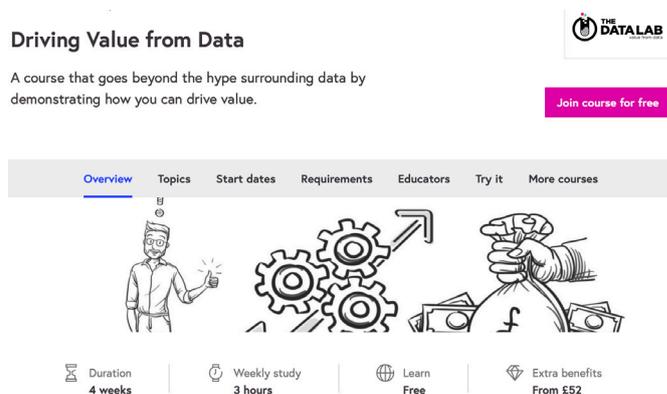
FutureLearn also have an excellent support model that we can't praise highly enough for their speedy responses and excellent hands-on support.

We hope that these insights increase the likelihood of you having a great experience as you create your on-line learning course. It was a long journey from idea to delivery but in the end it was worth it. We got to work with some fantastic people, with a special shout out to all the people who appeared in our interviews.

Our Course

Here's the course on FutureLearn'

<https://www.futurelearn.com/courses/driving-value-from-data>



Driving Value from Data

A course that goes beyond the hype surrounding data by demonstrating how you can drive value.

[Join course for free](#)

Navigation: Overview | Topics | Start dates | Requirements | Educators | Try it | More courses

Duration: 4 weeks | Weekly study: 3 hours | Learn: Free | Extra benefits: From £52





THE DATA LAB

value from data



Innovation
Centres

Supported by The Scottish Funding Council,
Highlands and Islands Enterprise and
Scottish Enterprise.

CONTACT DETAILS

T: +44 (0) 1316514905
E: info@thedatalab.com

ABERDEEN HUB

ONE CodeBase
ONE Tech Hub
Schoolhill
Aberdeen
AB10 1FQ

EDINBURGH HUB

The Bayes Centre
47 Potterrow
Edinburgh
EH8 9BT

GLASGOW HUB

Inovo Building
121 George St
Glasgow
G1 1RD

INVERNESS HUB

An Lòchran
Inverness Campus
Inverness
IV2 5NB