

## MOOCs @ Edinburgh 2013 – Report #1

---

# MOOCs @ Edinburgh 2013 – Report #1

---

*A report summarising the experience of the University of Edinburgh of offering our first 6 massive open online courses (MOOCs) in partnership with Coursera*

10 May 2013

### Summary

In January 2013, the University of Edinburgh launched six MOOCs on the Coursera virtual learning environment (VLE) platform [[www.coursera.org](http://www.coursera.org)]. These were short fully-online courses, each lasting either 5 or 7 weeks, and they had a total initial enrolment of just over 309,000 learners.

Six different subject areas were chosen, reflecting the University's diverse spread of disciplines, with two MOOCs offered by each of the three academic Colleges in the University: Humanities and Social Sciences (*Introduction to Philosophy; E-learning and Digital Cultures*); Science and Engineering (*Artificial Intelligence Planning; Astrobiology and the Search for Life on Other Planets*); Medicine and Veterinary Medicine (*Equine Nutrition; Critical Thinking in Global Challenges*). *AI Planning* was developed at Master level, the rest were at undergraduate (Bachelor) level.

Each MOOC team chose a course structure best suited for the delivery of their subject matter; as a result, six different course structures were produced, with several teams experimenting with content delivery and collaboration methods outwith the Coursera VLE.

Of the 309,628 people who registered on the Edinburgh MOOCs, 123,816 learners accessed the course sites ('active learners') during the first week of launch – an average of 40% of those enrolled - of whom 90,120 engaged with content in Week One. In total 165,158 individuals actively engaged with course content during the life span of the courses, and 36,266 learners engaged with week 5 assessments (29% average of initial active learners, with a range of 7-59% across the six courses). The MOOCs had no barriers to entry and exit, and the option existed to study without active engagement with quizzes or social media; this permits behaviour patterns distinct from those of on-campus degree courses.

A pre-launch (Entry) survey was sent to 217,512 unique email accounts one week before the courses began [22.01.13]; 45,182 individuals replied, giving a 21% response rate. (Note that enrolment continued after this survey was sent out.) 15,351 responses were gathered in the end-of-course evaluation (Exit) surveys.

Of those who responded to the Entry survey, 75% indicated this was their first experience of a MOOC, and 53% were enrolled on only one MOOC offering. 203 countries were represented, with the highest proportion of respondents living in the USA (28%) and UK (11%). 33% were between 25-34 years of age, with 'Teaching and education' (17%) and 'Student (college/university)' (15%) as the highest represented areas of current employment. Over 70% of respondents indicated completion of degree-level academic

## MOOCs @ Edinburgh 2013 – Report #1

---

achievement; a total of 40% respondents had achieved a postgraduate degree. These demographics were very similar to those of respondents in the combined Exit survey.

98% of Exit survey respondents indicated that “they felt they got out of the course(s) what they wanted”, with the great majority reporting that the length, pacing and level had been about right. The most common time spent on study per week on the MOOCs was in the range 2-4hrs.

Both Entry and Exit surveys asked respondents for their reasons for enrolling, of which the main options chosen were to learn new subject matter and find out about MOOCs/online learning. Gaining a certificate or career enhancement were less significant but more localised to specific MOOCs.

34,850 Statements of Accomplishment (SoAs) have been distributed to learners across the six courses – 21% of active learners or 12% of total enrolment, with ranges of 4-44% and 2-36%, respectively, across the individual courses.

The whole process from initial partnership discussions with Coursera to completion of all six courses and distribution of SoAs took approximately 10 months. This document provides a summary of the 10-month process, including some comparisons between the six courses and our initial reflections on the data and our experiences in offering the MOOCs.

We are currently in our second phase of data analysis and shall issue a second “MOOCs @ Edinburgh 2013 Report” in due course.

## Acknowledgements

This report is a summary of the collective achievement of a large number of University of Edinburgh colleagues – all MOOC teams, central coordinating support and many others, from a wide range of departments across the whole institution – plus a number of key external colleagues, namely within Coursera. In particular, this report would not have been possible without the input from the following people:

### **MOOC Teams –**

#### *Artificial Intelligence Planning:*

Dr Gerhard Wickler, Prof. Austin Tate, Punyanuch Borwarnginn, Miles Gould & Herry Herry

#### *Astrobiology:*

Prof. Charles Cockell, Casey Bryce & Jesse Harrison

#### *Critical Thinking:*

Prof. Mayank Dutia, Dr Celine Caquineau, Dr John Menzies, Dr Richard Milne, Dr Kim Picozzi, Ric Lander & Hayley Mablesen

#### *E-Learning and Digital Cultures:*

Dr Sian Bayne, Dr Hamish Macleod, Dr Jen Ross, Dr Christine Sinclair & Jeremy Knox

#### *Equine Nutrition:*

Dr Jo-Anne Murray, Joan Kulifay, Jayne Roberts, Anne Stevenson & Wendy Roberts

#### *Introduction to Philosophy:*

Prof. Duncan Pritchard, Dr Matthew Chrisman, Dr Allan Hazlett, Dr Jane Suilin Lavelle, Dr Michela Massimi, Dr Alasdair Richmond, Dr Dave Ward, Dr Jamie Collin, Hasse Hamalainen, Tim Kunke & Stephen Ryan

### **Coordination and central support –**

Pro. Sir Timothy O'Shea, Prof. Jeff Haywood, Amy Woodgate, Dr Louise Connelly, Sarah Gormley & Lucy Kendra

### **Coursera support team –**

Prof. Daphne Koller, Prof. Andrew Ng & Norian Caporale-Berkowitz

# MOOCs @ Edinburgh 2013 – Report #1

---

Acknowledgements .....	3
Background.....	5
Partnership with Coursera.....	5
Our objectives for developing MOOCs .....	5
Governance processes .....	6
Designing and Building MOOCs .....	8
Project structure.....	8
Courses .....	9
Curriculum Design of the MOOCs.....	10
Staff Development .....	14
Demographics of Edinburgh’s MOOC Learners .....	15
Email address analysis .....	15
Entry (pre-launch) survey results .....	16
Activity data for learners during the Edinburgh MOOCs live period .....	21
Enrolments on MOOCs .....	21
Activity of Learners vs. Number of Enrolments.....	21
Engagement with Discussion Forums.....	22
Assessment Activity.....	23
Statements of Accomplishment (SoAs) .....	24
Measuring success.....	26
Course evaluation.....	26
Exit (course evaluation) survey results.....	26
Concluding thoughts .....	31

Appendix 1 – Example entry survey questions

Appendix 2 – Example exit survey questions

## Background

### Partnership with Coursera

Massive Open Online Courses have a history with roots in Open Educational Resources and Open Courseware, coupled with the affordances of proven online communications and collaboration tools. In late 2011, a new type of MOOC – xMOOC [1] – came to public attention, initially launched with strong media coverage by a few high-ranking universities in the United States. These xMOOCs were short, structured online courses, with a strong grounding in traditional Higher Education design, and based upon the increasing popularity of video capture and replay of on-campus lectures. A template for xMOOCs quickly emerged, and many MOOCs still follow this pattern. (The earlier cMOOC were much less pre-loaded and content-focused and were based upon strong community-based cooperative learning.) We in the University of Edinburgh had been watching these developments with interest.

In early 2012, the University of Edinburgh became the first international partner of Coursera and joined a partnership of other 13 Universities. We decided that partnership with an existing MOOC provider was preferable to developing an Edinburgh-own platform, it gave us greater speed to explore new educational techniques, and it provided a better opportunity for greater reach for our courses. We also gained access to an expanding peer community of institutions which were developing these new courses.

The July 2012 announcement launched both the partnership itself and announced the University's initial MOOC offering – six courses with full course descriptions and promotional videos to inform learners who were thinking of enrolling. The Edinburgh courses all began on the same date: 28<sup>th</sup> January 2013, and will be offered a minimum of two further times over three years.

Coursera announced partnership of 17 new institutions in September 2012 and a further 29 institutions in February 2013, bringing the number of institutions partnered with Coursera to 62, offering a total of 336 MOOCs [22.02.13].

### Our objectives for developing MOOCs

In coming to our decision to offer MOOCs and to join Coursera, we concluded that the greatest opportunities lay in developing online courses within a new educational environment (fully-online, open to all regardless of prior qualifications or geographical location, with no fee), and gaining outreach to new audiences. Our Edinburgh MOOCs offered us a route to experimentation with online delivery methods at large scale, and gave us a chance to learn lessons that might be applied elsewhere in our educational portfolio. At the same time, we would reinforce our position as a leader in the use of educational technology in higher education. The University of Edinburgh did not enter the Coursera venture with monetisation as an aim, but we were open to possibilities in this area, unclear as these were in the early stages.

## MOOCs @ Edinburgh 2013 – Report #1

---

The University of Edinburgh has a strong history of online education and innovation through use of technology. For example, the £4.5M & 5 year, Principal's E-Learning Fund (PELF) between 2003 and 2009, and our current £5M & 5 year, Distance Education Initiative (DEI) established to build capacity in all academic Schools by establishing a suite of fully online MSc programmes. DEI builds on a history of over 10 years of delivery of fully online degree programmes, and in particular the School of Education's MSc in Digital Education (established in 2006 from earlier pilots) which promotes an experimental approach to course design and teaching. We felt confident that, building on this strong foundation, we could develop high quality MOOCs and try something new in online education. All the course teams involved were keen to know more about MOOCs and to research through experience rather than external observation of others. We saw the tension between our modest-enrolment, richly-tutored, taught online courses and the massive, very lightly tutored MOOCs, and wished to see what lessons we could transfer between the two modes.

We invested resources into the project as necessary to ensure success, and accepted that a lot of learning would go on during the early phase. The costs of developing MOOCs are now becoming clearer, and, as we expected, are similar to those required to develop taught online courses of comparable length.

Although initially we had expected to offer certificates to successful learners for a modest additional fee, this option was not pursued in the first iteration of our six MOOCs as the process for doing this was still evolving within the Coursera partnership. For future offerings of our MOOCs, the University is interested to explore this opportunity further, especially given the developments already in pilot for identity verification methods (Coursera's Signature Track methodology). However, irrespective of any future revenue received, we have committed to MOOCs as a not-for-profit educational venture, and shall reinvest any income directly back into the courses themselves, through offsetting the costs of part-time post-graduate teaching assistants and further content production.

One spin-off from our early engagement with MOOCs has been a lively internal debate about pedagogy, online learning and costs/benefits of university education. Designing online courses for tens of thousands of learners has been challenging but exciting, and we intend to encourage the discussions to continue.

### Governance processes

We put in place a suitably robust but nevertheless agile governance process to ensure that we had good oversight and risk management of our venture into partnership with Coursera and subsequent offer of MOOCs. At the outset, the invitation to join Coursera was considered by members of the senior management team (SMT), and a presentation on the subject was given to the University Court (i.e. the governing body with lay members). Views were strongly positive, although the reputational risks were recognised. We had full confidence in our ability to produce and run fully online courses, but the novelty of minimal direct learner support plus the potential scale of enrolments offered new pedagogical challenges even for experienced academic teams. We also were aware of some risks in joining with a for-profit, US-based company, even though we knew and respected its founders. The presence of several peer universities in the partnership, plus the proposal for form an academic board with university membership to give a strong guiding hand to Coursera gave us confidence in the ethical and operational areas. The recent policy

## MOOCs @ Edinburgh 2013 – Report #1

---

discussions at the Coursera conference at the University of Pennsylvania confirmed our confidence in the partnership.

An SMT member, a Vice Principal, was assigned to lead the project, as this aligned the MOOC development work with the expanding range of taught, online Masters programmes that he was also leading, and gave budgetary underpinning. Reports and updates go to the University Court, Senatus, and the senior management of the University.

Great care was applied to the legal aspect of the partnership with Coursera to ensure that it was acceptable to the University, and the Edinburgh legal team with the Vice Principal and his admin team worked with their Coursera opposite numbers to agree on the contract. In the arrangement, Coursera manages enrolment of learners, provides and develops the scalable MOOC platform, provides the space to mount and advertise the MOOCs, sets high quality standards, and gives us access to admin data and learner data for the Edinburgh MOOCs. We agree any monetisation and learner identification mechanisms on a MOOC-by-MOOC basis.

We decided that, as a matter of principle, we would approve the curricula of all our MOOCs, pre-launch, and would carry out formal quality assurance on them post-delivery. This was done through a light but robust process in which our top level Senatus Curriculum & Student Progressions Committee and Senatus Quality Assurance Committee had the opportunity to discuss MOOCs so that they were aware of the similarities with, and differences to, taught online programmes, and they then approve the curricula and review the data from the MOOCs after each offering.

In January 2013, the SMT discussed options for the next set of MOOCs, to be developed in 2013-14, and approved a cautious way forward. A Senatus review is currently exploring options for the University with respect to MOOCs, and will report in the early autumn.

## Designing and Building MOOCs

### Project structure

The Edinburgh MOOC Project was led out of Information Services, as a Special Project located within the Vice Principal's Office (Prof Jeff Haywood – VP Knowledge Management) with the Vice Principal as strategic lead. The project was collocated with the University's Distance Education Initiative (DEI) Special Project Team for synergy between the two initiatives.

We decided to coordinate the design and development of all six Edinburgh MOOCs to get consistency and peer-support for academic and support staff venturing into new territory. We were aware that the initiative had significant risk associated with it, and high external interest so we wished to ensure high quality courses, with appropriate media handling. The coordination was led by a small team of IS Corporate Special Project staff, with specific tasks assigned to specialists sourced in other teams around the institution, e.g. copyright librarians, communications and press.

Two email communication channels were established: one internal, which included all MOOC team members; and one external, the main communication channel with Coursera for course specific enquiries, which comprised the Edinburgh coordinating team and dedicated Coursera team members. This enabled efficient communication between the teams themselves and Coursera – all MOOC communications included the central support team, which aided in quality assurance oversight and ensured course developments could be informed by cross-team insight.

In addition to email correspondence, regular, frequent, meetings were held between all six teams and central support to share course ideas and progress, and to facilitate community learning. Inter-team community building was identified as crucial from the start of the project – as a new initiative, everyone was learning, so the more good practice that could be shared, and teams enabled to learn from each other's experiences, the better. These meetings also provided an opportunity to discuss institution-wide developments and MOOC strategy, and discuss developments beyond Edinburgh.

Responsibility for course content creation was devolved to the academic teams, with quality assurance oversight facilitated by the central support team. Media production support was provided centrally through a dedicated media producer who worked with the teams during the full video production process, academic developers were available to help shape course design, and copyright librarians advised on appropriate content sourcing and copyright clearance of all materials.

All courses were reviewed through University course validation channels at the senior committee level, and post-course quality assurance was put in place to ensure institutional standards were adhered to. These processes were 'lighter' than those for credit-bearing courses, but nevertheless allowed the University to be confident that its MOOCs were of appropriate high quality. These academic processes were led by Prof Haywood and supported via the MOOCs central support team.



## MOOCs @ Edinburgh 2013 – Report #1

---

The central team had ultimate responsibility for content publishing – before content went live, e.g. landing pages or week-by-week content, it was proofed by the central team to ensure consistency and to spot any potential issues or errors. Once live, each team was responsible for course delivery with support available throughout the duration of the session. Responsibility for storage and archiving course materials also fell to the central team.

### Courses

In June 2012, the University announced its intention to offer six MOOCs on the Coursera platform. These courses showcased a diverse offering from six different academic Schools of the University, spanning all three academic Colleges.

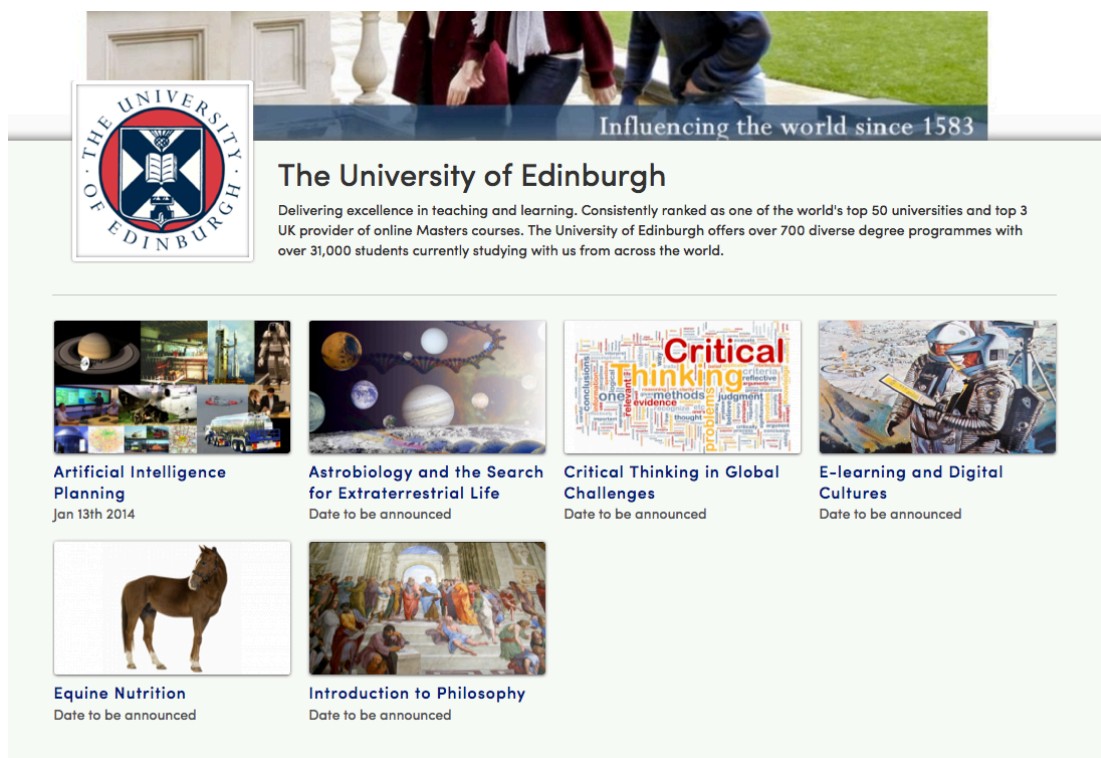
The six Edinburgh MOOCs and their School location:

- Artificial Intelligence Planning (School of Informatics)
- Astrobiology and the Search for Extraterrestrial Life (School of Physics & Astronomy)
- Critical Thinking in Global Challenges (School of Biomedical Sciences)
- E-Learning and Digital Cultures (School of Education)
- Equine Nutrition (School of Veterinary Medicine)
- Introduction to Philosophy (School of Philosophy, Psychology and Language Sciences)

Each course was chosen by a combination of identification of potential academic interest through Heads of Schools and previous team experience with online delivery. The spread of two courses per College occurred by chance and was not determined by a quota.

It was considered important that the first MOOCs were led by teams who were enthusiastic for the initiative and that amongst the teams there was a collective experience of online education. We recognised that the expected scale of enrolment on these courses and the likely publicity surrounding them posed an institutional risk and so academic experience and commitment was vital. Of the teams involved, five out of six had direct experience with delivering taught online courses, with the sixth team interested in developing online programmes in the near future.

Based on local experience with taught online courses and participation in early MOOCs, we decided to develop only short duration courses, 5-7 weeks in length. We expected this to aid retention of participants by giving them an easily manageable timeframe for their learning commitment. Also as a pilot project, we were unsure of the academic and support staff time that would be required to create the six MOOCs and wanted to ensure that this was not unreasonably high. In the event, we estimate that around 30 days of academic (faculty) time is required for a 5-6 week MOOC, plus support and coordination time and direct costs (mainly video production and copyright clearance).



**The University of Edinburgh**  
Delivering excellence in teaching and learning. Consistently ranked as one of the world's top 50 universities and top 3 UK provider of online Masters courses. The University of Edinburgh offers over 700 diverse degree programmes with over 31,000 students currently studying with us from across the world.

Course Title	Date
Artificial Intelligence Planning	Jan 13th 2014
Astrobiology and the Search for Extraterrestrial Life	Date to be announced
Critical Thinking in Global Challenges	Date to be announced
E-learning and Digital Cultures	Date to be announced
Equine Nutrition	Date to be announced
Introduction to Philosophy	Date to be announced

Figure 1 – Screenshot of Edinburgh MOOC offering - [www.coursera.org/edinburgh](http://www.coursera.org/edinburgh)

### Curriculum Design of the MOOCs

We devolved responsibility for course design to the academic teams to empower them to develop an appropriate structure for their subject matter, but with oversight from the whole MOOC development group and curriculum and QA processes in place to ensure high quality. It was clear that a set template for every MOOC would neither be appropriate nor desirable from an institutional perspective.

Each team took ownership of their course, which included choosing a delivery structure and method they felt best reflected their course objectives, and that they as a team were comfortable leading. Some teams decided to follow a 'typical' Coursera video-centred structure, whilst others wished to experiment with a design incorporating substantial learner-generated content. As a result, six different structures and course designs emerged.

There was also a desire to explore applications and services outwith the Coursera platform. Examples included:

- *AI Planning* held meet-up sessions in Second Life;
- *Equine Nutrition* and *Education & Digital Culture* held synchronous Google Hangout sessions with the academic team in which they responded to issues and questions raised by learners. They embedded the video resources for later viewing on demand;
- *Introduction to Philosophy* produced short end-of-week 'reflection and response' videos;
- Twitter was used generally for community building and question collation.

## MOOCs @ Edinburgh 2013 – Report #1

---

We were keen to ensure both learners and academic team members felt supported throughout the duration of each course, so we provided each team with financial support to employ a number of PhD teaching assistants to watch for problems, to monitor forum discussions when the courses were live, and to help with general course administration. Each team identified the number of TAs required (2-5 per course) and how they would use them in course delivery. This resulted in six different approaches to tutor oversight of the MOOCs. In general, we were seeking for TAs to spend a small amount of time online every day that the MOOCs were live.

**Table 1- Comparison of course structures employed across Edinburgh MOOCs**

Course structure	Equine Nutrition	AI Planning	Astrobiology	E-learning*	Critical Thinking	Philosophy
Number of academics	1	2	1	5	5	7
Number of teaching assistants	4	3 (+ 20 Community TAs)	2		2	4
Total team	5	6	3	5	7	11
Length of course (weeks)	5	5	5	5	5	7
Total number of videos	14	80	32		15	36
Total length of videos (minutes)	211	674	326		109	239
Average length (minutes)	15	8	10		7	7

- *E-learning & Digital Cultures used a novel curriculum design, which is outlined in ref. [2]*

All Edinburgh MOOCs were designed from scratch, drawing where appropriate on existing academic programmes but in the main being created expressly to be new MOOCs rather adaptations of existing courses. In general, where pre-existing digital content was available, for example from recorded lectures and PowerPoint slides, significant modification had to be made and a stricter check carried out on copyright due to the for-profit nature of Coursera and its rules. We regarded the development of the Edinburgh MOOCs as an opportunity to develop new content, which would enrich the institution's online resources offering. As one objective for investing in MOOCs was to gain a place to carry out educational R&D, we encouraged pedagogical innovation.

# MOOCs @ Edinburgh 2013 – Report #1

Table 2 - Course designs 2013

	AI Planning	Astrobiology
Academics involved	2	1
Summary of structure	5 weeks, video content each week, linear route with optional non-quiz-based programming sand creative assessments, optional feature videos and supplementary materials. Levels of learning attainment acknowledged: SoA awarded to all awareness level attainment (37%), foundation level attainment (65%) and SoA w/distinction awarded (75%).	5 weeks, video content each week, linear route through content. SoAs offered for 50% overall pass mark.
Assessment (main form)	Quizzes, Programming Assignments, Digital Artifact Creative Challenge	Quizzes
Academic presence (up-front video content)	2 academics throughout	1 academic throughout
Average length of video content per week	2hrs 15 mins	1hr 05 mins
Google hangouts	No	No
Video responses to forum topics	No	No
Wiki used	Yes	No
Academic presence on forums	Yes	Yes
Social media platforms used	Second Life, Twitter, YouTube	

	Critical Thinking	EDC
Academics involved	5	5
Summary of structure	5 weeks, video content each week: weeks 1-2 provide introduction to concepts, weeks 3-4 provide application through 4 different contexts (participants choose to follow 1-4 themes), week 5 applies skills learnt for assessment. SoA awarded for 50% overall pass mark.	5 weeks, learner-community oriented design with user generated content and user defined learning path. Open access video content and readings offered each week as topics for class discussion. High use of social media and aggregated blog feeds. Peer assessment used for both formative and summative assignments. SoA awarded for 50% pass mark in final peer assessment.
Assessment (main form)	Quizzes	Peer Assessments
Academic presence (up-front video content)	2 academics: weeks 1, 2 & 5. 3 further academics (4 total): weeks 3 & 4	No purpose-recorded video content - open access content used
Average length of video content per week	22 mins	26 mins

## MOOCs @ Edinburgh 2013 – Report #1

Google hangouts	No	Yes: every two weeks
Video responses to forum topics	No	No: covered in GH sessions
Wiki used	No	No
Academic presence on forums	Yes	Yes
Social media platforms used		Twitter, blogs, YouTube, Google+ (and user driven social media activity)

	<b>Equine</b>	<b>Philosophy</b>
Academics involved	1	7
Summary of structure	5 weeks, video content each week, linear route through content with optional formative assessments. SoAs offered for 60% overall pass mark.	7 weeks, video content each week: each week a different topic/academic lead, as stand-alone elements. Optional peer-assessment essay. SoAs offered for 50% pass mark achieved across each individual week/topic.
Assessment (main form)	Quizzes	Quizzes
Academic presence (up-front video content)	1 academic throughout	7 academics: 1 academic each week.
Average length of video content per week	42 mins	34 mins
Google hangouts	Yes: every two weeks	No
Video responses to forum topics	Yes: two videos	Yes: one video
Wiki used	No	No
Academic presence on forums	Yes	Yes
Social media platforms used		

## Staff Development

All academic staff and doctoral student TAs were supported through professional development opportunities in preparation for the MOOC launch in January 2013. Although several teams had prior experience of offering online education, this was a new domain for the majority of TAs. Additionally, not all academic staff involved had been required to deliver learning materials via video capture. As a result, a number of training sessions were created to meet the teams' needs, for example Media Training sessions, and online tutoring support and guidance. A support network for the TAs was also established, facilitated through the University's Institute for Academic Development (IAD). IAD had also supported several members of the course teams to take some or all of the MSc in Digital Education online programme during the previous 3 years.

## Demographics of Edinburgh’s MOOC Learners

In order to minimise any barriers to sign-up, Coursera do not currently require any demographic information from learners when they create an account, and as a result, all demographic information had to be captured separately.

On Tuesday 22<sup>nd</sup> January, one week prior to courses going live, a standardised pre-session survey was distributed to all those enrolled on each of the six Edinburgh MOOCs. The survey was open for a 14 day period and closed during Week 2 of the courses. It was disseminated through the course site communication channels with a standardised email message. The survey was created through the Bristol Online Survey tool. *(The two surveys that we used – Entry and Exit – are provided as appendices to this Report)*

Coursera had indicated that the average member of their site enrolls on 2 or 3 courses. This increased the likelihood that some enrollees may have signed up to multiple Edinburgh courses in order to browse a wider offering. To capture this demographic concisely without the need for multiple survey responses at a course-level, one Edinburgh MOOC survey was established which included the question: Which Edinburgh MOOC(s) have you signed up for? – *tick all that apply* (Q2). The standardised email message highlighted that the survey should only be responded to once, irrespective of the number of Edinburgh courses enrolled on.

The survey consisted of 10 questions, which could be answered within a few minutes. It was kept short to reduce time-associated barriers and to encourage a high response rate, and inevitably did not contain many questions that we would have wished to ask.

### Email address analysis

At the launch of survey, there were 266,213 total sign-ups for the Edinburgh courses. Participation on more than one course had been identified as likely, so an analysis of email addresses was undertaken which identified 217,512 unique email addresses (27.01.13). Approximately 40,000 further enrolments took place after the survey was sent out.

The majority of participants (95.9%) had enrolled on either one or two Edinburgh MOOCs, with only a small minority enrolling on more than two (Table 3).

**Table 3 - Number of individuals, identified by unique email addresses, who enrolled on one or more Edinburgh MOOCs – data collected 27.01.13**

No. courses enrolled per individual	No. of individuals	% total individuals
1	182258	83.8%
2	26315	12.1%
3	5983	2.8%
4	1843	0.8%
5	674	0.3%
6	439	0.2%
Total	217512	100%

# MOOCs @ Edinburgh 2013 – Report #1

---

## Entry (pre-launch) survey results

45,182 individuals completed the pre-launch survey, a 20.8% response rate from unique email address sign-ups, and approximately 15% of the maximum enrolment.

75.1% of respondents indicated this was their first participation in a MOOC [Table 4] and 90.5% of respondents had enrolled on a single Edinburgh course [Table 5]. 16% of respondents indicated they were enrolled on 3 or more MOOCs in total from any source, whereas the majority (53%) indicated enrolment on only the one MOOC (i.e. an Edinburgh MOOC) at that time [Table 6].

The data in Table 5 correspond approximately with those determined from the email address analysis, showing the majority of enrolments are on a single MOOC [Table 3].

Table 4 - Number of responses to Q1 'Have you enrolled on any MOOCs before this one?'

Participated in MOOCs previously?	No. of responses	%
Yes	11231	24.9%
No	33951	75.1%
Total	45182	100%

Table 5 - Number of responses to Q2 'Which Edinburgh MOOC(s) have you signed up for?'

No. Edinburgh MOOCs enrolled on?	No. of responses	%
1	40882	90.5%
2	3479	7.7%
3	636	1.4%
4	142	0.3%
5	23	0.1%
6	19	0.0%
Total	45181	100%

Table 6 - Number of responses to Q4 'Total number of MOOCs currently enrolled on (including Edinburgh MOOCs)'

Total no. MOOCs from all sources enrolled on?	No. of responses	%
1	23799	53%
2	9314	21%
3	5052	11%
more than 3	7016	16%



## MOOCs @ Edinburgh 2013 – Report #1

---

There were respondents from all age categories, with the highest proportion aged 25-34 years old (33%) [Figure 2]. This pattern is in agreement with responses to the highest level of academic study achieved (Q10) which indicates 70.3% of respondents had achieved degree-level study: undergraduate 30.1% and postgraduate 40.2% [Figure 3]. There were individual cases brought to our attention of very young learners (12 years old for example) who succeeded in completing a MOOC through to Statement of Accomplishment.

A high number of respondents indicated that they were currently employed within the education sector – 16.8% ‘teaching and education’ (n 7570) – or in full time HE/FE study – 14.8% ‘student (college/university)’ (n 6705). 9.5% (n 4308) indicated employment in IT services. The proportion was particularly high on the *E-learning* MOOC, at 51% in teaching and education.

The majority of respondents (54%) were female. Not too much should be read into this gender difference, as it is most likely an artefact of the particular portfolio of courses that Edinburgh offered. When we break respondents down according to the courses upon which they were enrolled we see that 80% on Artificial Intelligence Planning were male, while 87% on Equine Nutrition were female.

The most popular course, in terms of the number of initial enrolments, was Introduction to Philosophy which had almost exactly the same number of men and women responding. E-Learning and Digital Cultures had a majority (59%) of women. So it is clear that had there been a different range of courses offered by Edinburgh, the overall gender ratio would have been different [see Table 7 – gender distribution by course].

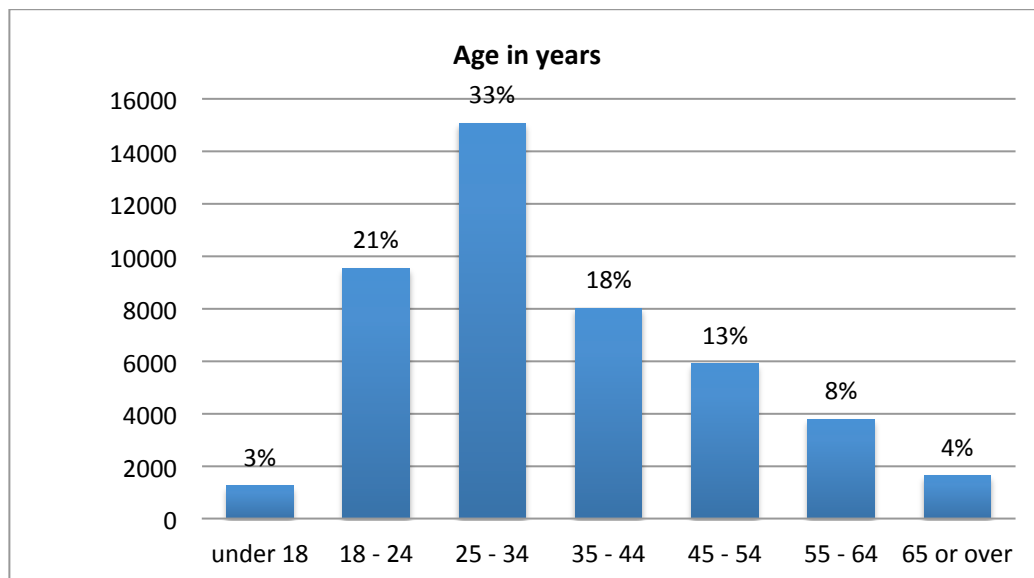


Figure 2 - The distribution of responses to Q8 'What is your age? (in years)' with percentage of total shown

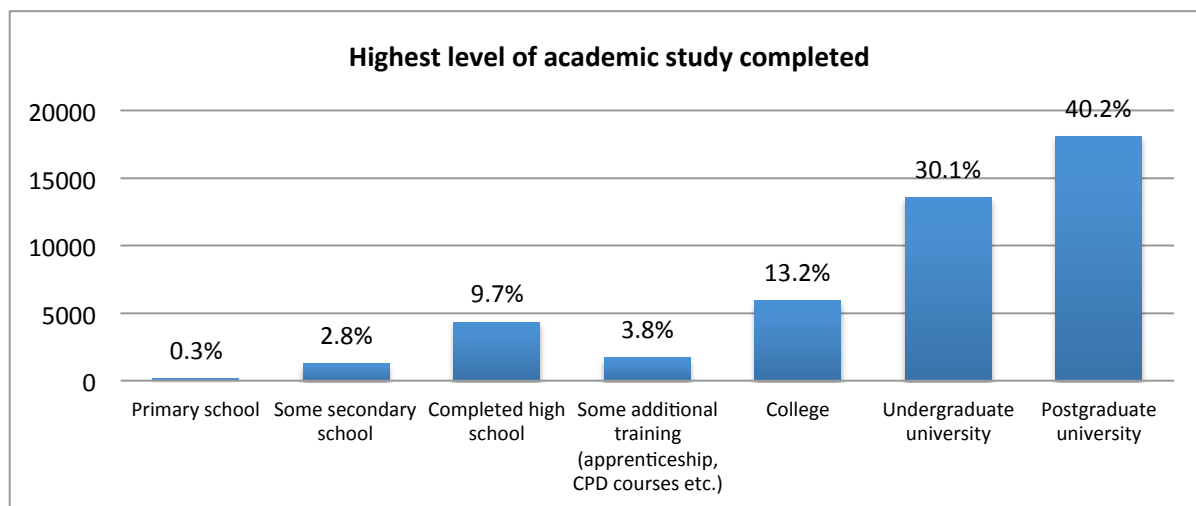


Figure 3 - The distribution of responses to Q10 'What is the highest level of academic study you have completed?' with percentage of total shown

Table 7 – The distribution of responses (shown as a percentage) to Q7 'What is your gender?' separated by course

Course Name	Female	Male
<i>Artificial Intelligence Planning</i>	19%	80%
<i>Astrobiology and the Search for Extraterrestrial Life</i>	44%	54%
<i>Critical Thinking in Global Challenges</i>	54%	45%
<i>E-Learning and Digital Cultures</i>	59%	39%
<i>Equine Nutrition</i>	87%	13%
<i>Introduction to Philosophy</i>	49%	50%

It surprised us that so many of our learners appeared to be very well educated despite the undergraduate entry-level of five of the MOOCs<sup>1</sup>, and this reinforced the implications of 'open' for us as educational providers. Open is often seen from a learner's viewpoint, but as course designers, we generally have a clear idea of who our target audience is, and why they are there – open-ness in the form presented to us by Coursera MOOCs made gaining a sense of probable audience problematic for many of the MOOCs. The upside of these advanced learners might be that they provide an essential core of the peer-support network; and downside might be that they are insufficiently challenged and interested, with resultant demands for change.

It also made us very aware that if we wished to reach out to audiences with specific characteristics (age, educational level, country or region of residence) we should need to think about how that might be achieved. As our MOOCs are re-offered we expect to gain better understanding of who enrolls and why.

<sup>1</sup> AI Planning was aimed at a higher, postgraduate level of stud.

## MOOCs @ Edinburgh 2013 – Report #1

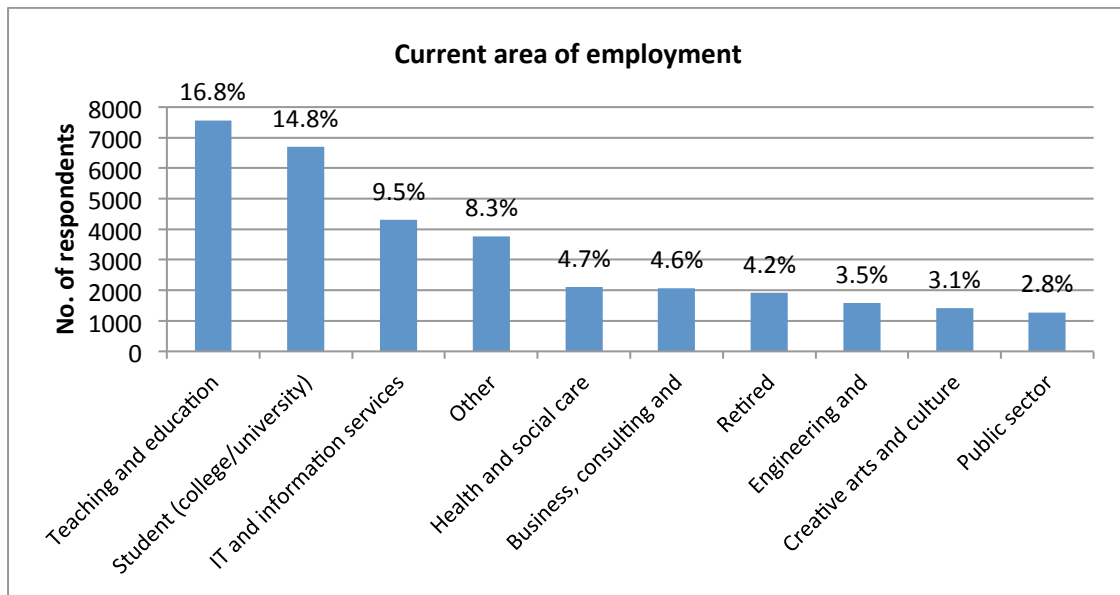


Figure 4 - The highest 10 responses to Q9 'What is your current area of employment?' with percentage of total responses shown

The largest numbers of respondents, not surprisingly, reported coming from the USA (28.0%) and the UK (11.0%). This largely correlates with the volume of Coursera advertising directed to these markets. Next came India (4.6%), Brazil (4.5%), Canada (4.0%), Spain (3.9%) and Australia (3.5%) [see figure 5].

*Equine Nutrition* deviated from this pattern by recruiting its largest group (37.6%) from the UK and *Critical Thinking* seemed to have a slightly broader international recruitment, drawing only 21.6% of respondents from the USA, and 4.8% from the UK. A similar pattern was seen in *AI Planning* with only 16.7% from the USA and 4.2% from the UK. Although still not large, this course recruited larger proportions from China (1.3%), Iran (1.5%), Pakistan (1.7%), and Russian (3.8%). Notable was the proportion from India (10.5%) comparing with the average for all Edinburgh MOOCs of 4.6% respondents from that sub-continent. *Astrobiology* recruited a slightly higher proportion of members from the USA (35.7%).

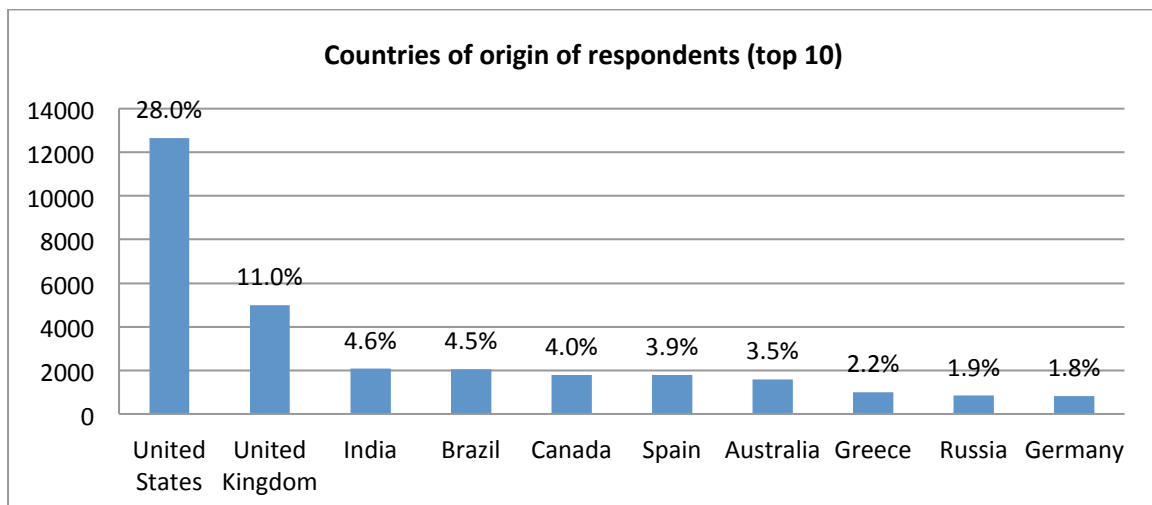


Figure 5 - The highest 10 responses to Q6 'Where do you live?' with percentage of total responses shown

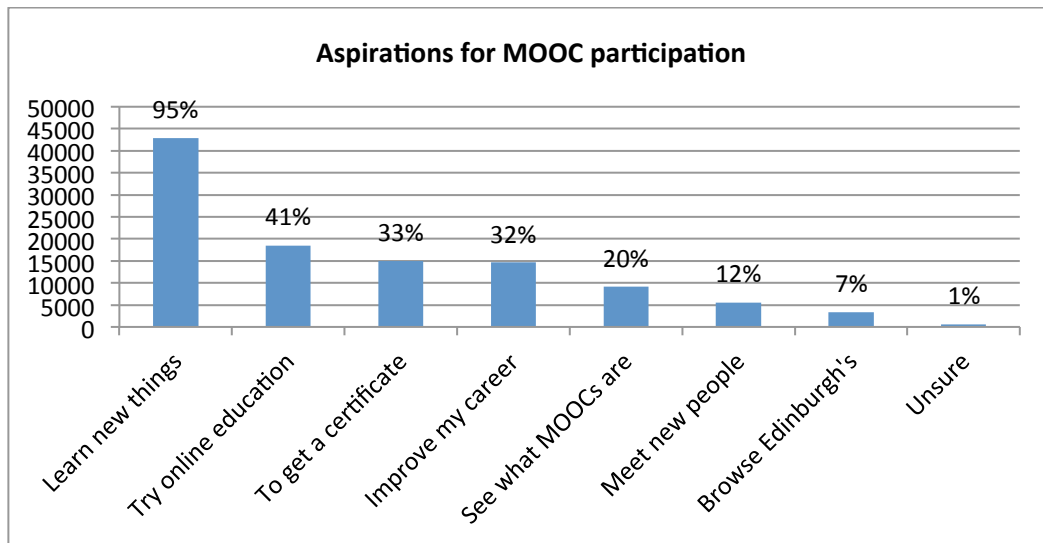


Figure 6 – The distribution of responses to Q5 'What do you hope to get out of the MOOCs you are enrolled on? (tick all that apply)', shown as a percentage of the total number of entry survey responses received

## Activity data for learners during the Edinburgh MOOCs live period

### Enrolments on MOOCs

All the MOOC course teams agreed that registration should remain open for the duration of the course, or at least until the first assessment hard-deadline was reached, to encourage flexibility for participants and to ensure that all those who participated had the chance to achieve a Statement of Accomplishment. Deadlines were also largely set with respect to the end of the course content delivery phase, to ensure that learners were not disadvantaged by hard deadlines, as there was an appreciation most learners would be balancing study around existing commitments.

As a result, participant numbers fluctuated through the duration of the live course period.<sup>2</sup>

At peak, enrolments on the six Edinburgh MOOCs enrolments reached 309,628 (data at 08.02.13) with the following breakdown by course:

Table 8 - Overall peak enrolment with breakdown of enrolment by course

<b>Course</b>	<b>Enrolments</b>
<i>Introduction to Philosophy</i>	98,128
<i>Critical Thinking</i>	75,884
<i>E-Learning &amp; Digital Cultures</i>	42,844
<i>Astrobiology</i>	39,556
<i>AI Planning</i>	29,894
<i>Equine Nutrition</i>	23,322
<b>Total</b>	<b>309,628</b>

### Activity of Learners vs. Number of Enrolments

Within the Coursera platform, an active learner is any individual who accesses a given MOOC course site. This requires them to sign a Coursera course 'Honor Code' – declaration of fair use and agreement to Coursera user policy.

Within the first week of launching the Edinburgh MOOCs, 127,229 enrollees (42% of enrolments at date) had signed the Honor Code and entered their chosen MOOC, with a range of 34-65% across the six courses (data at 04.02.13).

Active participation across the courses rose to a total 165,158 learners across Edinburgh MOOCs by course close (23.03.13). Conversion from peak enrolment to total active participation was 53%, with a range of 46-81% across the individual courses.

---

<sup>2</sup> In instances where data from course sites is used for analysis, download dates will be provided with the data.

# MOOCs @ Edinburgh 2013 – Report #1

Table 9 - Conversion trends between enrolment and course participant activity

Course	Enrolments (04.02.13)	Active in first week	Conversion	Enrolment at peak (08.02.13)	Total active participants	Conversion
<i>Introduction to Philosophy</i>	96,717	41,528	43%	98,128	53,255	54%
<i>Critical Thinking</i>	74,006	26,320	36%	75,884	35,084	46%
<i>E-Learning &amp; Digital Cultures</i>	42,091	16,250	39%	42,844	21,862	51%
<i>Astrobiology</i>	40,048	18,323	46%	39,556	20,413	52%
<i>AI Planning</i>	29,586	10,181	34%	29,894	15,546	52%
<i>Equine Nutrition</i>	22,605	15,100	65%	23,322	18,998	81%
<b>Total</b>	<b>305,053</b>	<b>127,229</b>	<b>42%</b>	<b>309,628</b>	<b>165,158</b>	<b>53%</b>

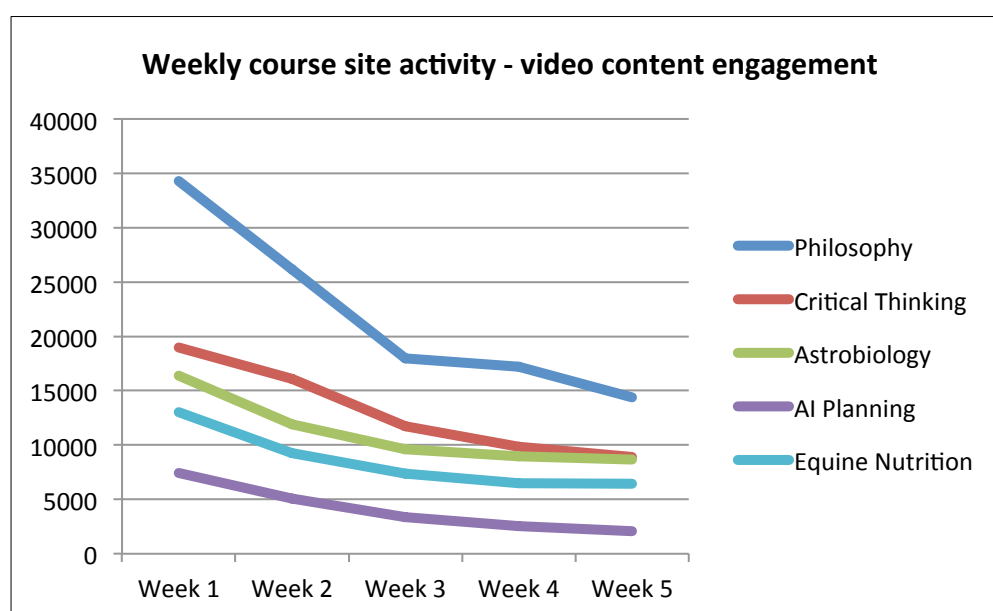


Figure 7 - Week-by-week activity tracking of the number of unique course participants engaging with video content – viewed and downloaded combined results – during the first 5 weeks (applicable to 5 courses in total)

## Engagement with Discussion Forums

By default of the platform design, all Coursera sites have forum areas to facilitate course discussion. Although participation on the forums may be used to contribute towards overall assessment, all Edinburgh MOOCs chose to retain the optional quality of the forums, noting that forum discussions are not necessarily comfortable activities for all participants, especially if they are new to online learning environments.

Variable uptake of the forums by the individual communities was seen across the courses, with an average of 15% of active users engaging with forum discussions, i.e. making postings.

## MOOCs @ Edinburgh 2013 – Report #1

**Table 10 - The total number of individuals posting on each course site forum, and shown as a percentage of the total number of active learners**

Course	No. of individuals making a posting	% of active learners
<i>Introduction to Philosophy</i>	7,206	14%
<i>Critical Thinking</i>	4,783	14%
<i>E-Learning &amp; Digital Cultures</i>	2,623	12%
<i>Astrobiology</i>	3,961	19%
<i>AI Planning</i>	638	4%
<i>Equine Nutrition</i>	6,031	32%
<b>Total</b>	<b>25,242</b>	<b>15%</b>

As expected, a smaller number of active learners engaged in additional forum activities, such as voting on posts (average 10% of total course participants) and commenting on posts (6%).

There was no direct correlation seen between overt presence of the course team (academics and TAs) on the forums and overall forum activity. *AI Planning* and *Equine Nutrition* both had high academic presence on the forums (as measured by number of postings) but the volume of participant presence differed considerably, 4% vs. 32%, respectively.

Only learner activity in the data has been analysed – browsing or passive reading in forums and other areas of the course sites was not observable in the data we used. It is very likely that a larger proportion of the total learner cohort will have engaged in less active ways.

A total of 73,038 posts were created in the six course forums by 25,242 course participants; an average of 2.9 posts per forum per active learner, with a range of 2.3 – 3.4 posts by course breakdown. An average of 7.9 votes were cast per active voting forum participant, a total of 126,957 votes by 16,058 participants across the six forums.

**Table 11 - Forum activity by course, with the average number of posts, comments, and votes cast by each active participant per activity**

	Total no. participants (posting)	Average no. posts	Total no. participants (commenting)	Average no. comments	Total no. participants (voting)	Average no. votes
AI Planning	638	2.88	201	3.47	476	4.50
Astrobiology	3961	3.24	1861	4.79	3546	12.34
Critical Thinking	4783	2.32	1512	2.35	2728	4.16
E-learning	2623	3.41	1453	3.64	1763	5.24
Equine Nutrition	6031	3.11	1778	3.71	1761	6.17
Philosophy	7206	2.71	3265	5.24	5784	8.58

### Assessment Activity

## MOOCs @ Edinburgh 2013 – Report #1

---

Each course had at least two assessment opportunities during the live period, although the assessment type chosen differed between the courses. Some courses featured in-video quizzes (e.g. *Astrobiology* and *Introduction to Philosophy*) and complementary weekly content reflection quizzes, the latter of which counted toward the final grade, whilst others opted for purely peer assessed methods (i.e. *E-Learning and Digital Cultures*).

*Introduction to Philosophy* provided an optional assessment to enrich learner understanding, e.g. through a peer-graded essay – this element did not contribute towards the overall final grade of the learner.

Across all courses, submission in Week 5 was a requirement to obtain a Statement of Accomplishment (SoA); only *Introduction to Philosophy* delivered content for a 7-week period, thus required submission beyond Week 5.

**Table 12 - Total number of course participant assessment submissions during weeks 3, 5 & 7 of the MOOC period**

Course	No. of Week 3 assessments submitted	No. of Week 5 (or final) assessments submitted	No. of Week 7 assessments submitted
<i>Introduction to Philosophy</i>	13,928	11,439	9,937
<i>Critical Thinking</i>	5,301	7,286	
<i>E-Learning &amp; Digital Cultures</i>	1,811	1,728	
<i>Astrobiology</i>	8,564	7,916	
<i>AI Planning</i>	739	743	
<i>Equine Nutrition</i>	9,513	8,897	
<b>Total</b>	<b>39,856</b>	<b>38,009</b>	<b>9,937</b>

In total, 24% of active learners submitted assessment material in Week 3, and 23% submitted assessment material in Week 5. 36,507 total submissions were made that fulfilled course grading policy criteria, and therefore eligible for consideration for a Statement of Accomplishment.

The optional peer-graded essay developed by the *Introduction to Philosophy* team received 631 submissions, and 583 individuals engaged with the evaluation process.

### Statements of Accomplishment (SoAs)

We collectively agreed that the threshold for obtaining a SoA should be set at a realistic level for all those learners who engaged with the weekly content. These were to be non-credit bearing courses, intended for outreach purposes, and so we wished the SoAs to be reasonably accessible.

The minimum pass grade was set at between 40% and 65%, depending upon the assessment criteria and the grading policy implemented.



## MOOCs @ Edinburgh 2013 – Report #1

---

A total of 34,850 SoAs were awarded across the six courses; 21% of the total number of active learners on the Edinburgh MOOCs [Table 13].

**Table 13 - Total number of SoAs distributed by each course and as a percentage of active learners**

Course	Total SoAs awarded	% of active learners
<i>Introduction to Philosophy</i>	9,445	18%
<i>Critical Thinking</i>	6,909	20%
<i>E-Learning &amp; Digital Cultures</i>	1,719	8%
<i>Astrobiology</i>	7,707	38%
<i>AI Planning</i>	654	4%
<i>Equine Nutrition</i>	8,416	44%
<b>Total</b>	<b>34,850</b>	<b>21%</b>

## Measuring success

### Course evaluation

Individual course evaluation ('exit') surveys were developed and sent by email, after the set period of content delivery had elapsed, to all those still enrolled on each Edinburgh MOOC. In total 6 exit surveys were developed, one per course, and each survey comprised of 15 standardised questions with course specific additions. 'Section 2: About you' (questions 6-10) from the entry survey were incorporated in the standardised questions to compare demographic information of survey respondents.

The surveys were distributed by course teams at a time that was most appropriate to their MOOC (date range 3<sup>rd</sup>-29<sup>th</sup> March), and were open for a one-month period. In total across the 6 surveys, 15,210 responses were received – approximately 4.9% of total enrolment on the MOOCs, and 9.2% of active learners.

### Exit (course evaluation) survey results

Very few respondents said that they had not logged on to the MOOC site once the course had started (<5%), and the main reason given by them was 'Too busy'. It seems likely that the respondents are (or at least report themselves to be) active learners, as will be seen in the data to follow.

The great majority found the courses 'Excellent', 'Very Good' or 'Good' (average 95%; range 83-98%), and said that the courses had 'Met' or 'Exceeded their expectations', regardless of the reason for studying them; only 2% on average (2-8% range) felt that the MOOC taken had 'Fallen below expectations'.

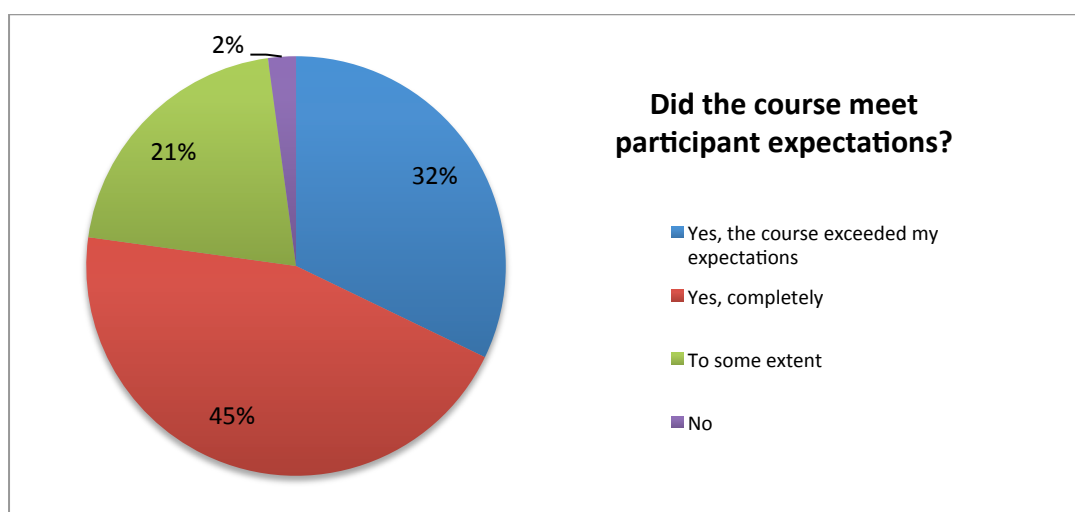


Figure 8 - Combined responses to Q5 'Did you feel you got what you wanted from the course?' shown as a percentage of total responses

## MOOCs @ Edinburgh 2013 – Report #1

Then reasons given for taking that particular MOOC are shown in Figure 9 (multiple reasons were allowed), and exploratory (a,c,d) rather than instrumental (e,f,g) reasons dominate the replies – interestingly, the trend curve is less marked than seen in corresponding Entry survey responses [figure 6]:

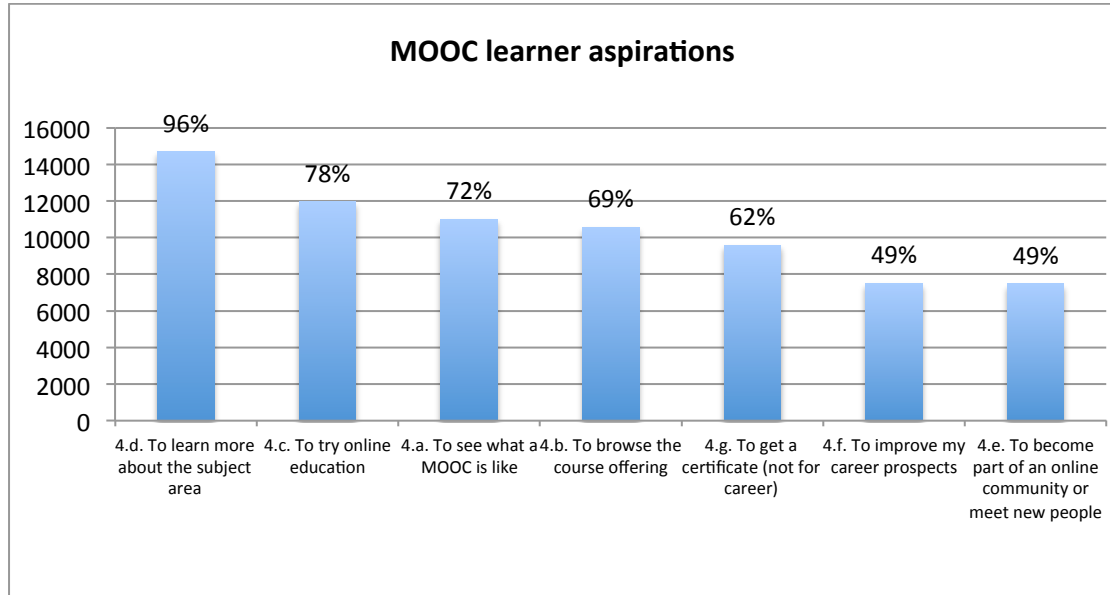


Figure 9 - Combined exit survey responses to Q4 'What did you hope to get out of the course and did it meet your expectations?' – calculated as a sum of *exceeded expectations*, *met expectations*, and *fell below expectations* responses – with percentage shown of total exit survey respondents

The entry survey also asked respondents about their reasons for enrolling on an Edinburgh MOOC [Figure 6], and, comparing the patterns of the reasons given in the two surveys, there is a shift from a clear main reason on entry ('to learn new things') to a more even distribution of reasons. This may reflect different respondents or perhaps a change in their reported reasons in the light of their experience of the MOOC.

It also seems likely that their previous education may not have been in the field they were studying on the MOOC, as the main reason given was 'to learn more about the subject', the learners were generally well-educated (see below), and most found the MOOC met or exceeded their expectations. This is clearly a question to be asked in later surveys.

The formats of the six MOOCs varied and so some questions about the learners' engagement with course components cannot be compared. However, for some components where there was a high degree of commonality, interesting patterns of learner engagement emerged [Figure 10].

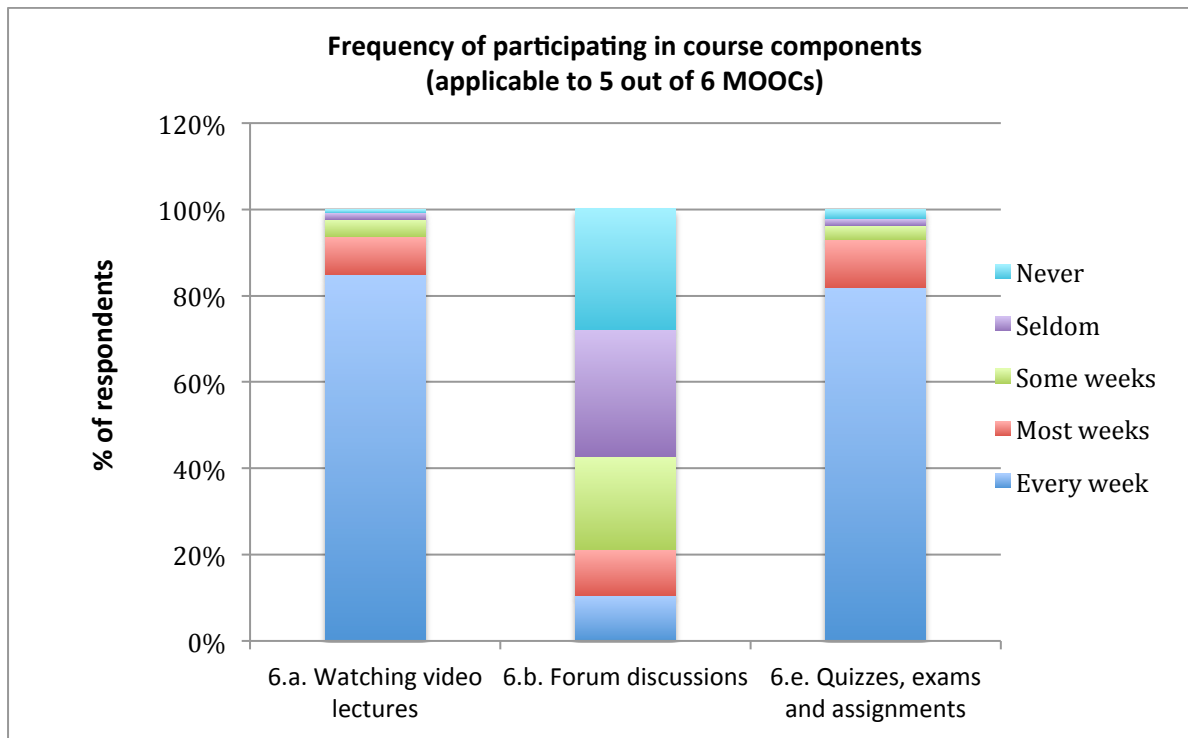


Figure 10 - Combined exit survey responses to Q6 'How much of the course content did you engage with?' shown as a percentage of total responses per course component

Solitary interactions were dominant over social engagements, and the level of reported engagement with assessments was high, including the final assessment where an average of 83% said that they had completed this (although the range was greater than in many other measures, from 56.3% to 95.8%). “Meet new people” was also the lowest reported reason given for enrolling on the MOOCs in both the Entry and Exit surveys (12% and 49% respectively).

The MOOCs were designed to be of short duration and to require only a few hours of study per week, and respondents reported that this balance was about right. Time spent per week was reported to be in the 2-5 hours range, generally towards the lower end of this spectrum [Figure 11] and respondents also felt that the MOOCs were ‘Just right’ or ‘Slightly too short’ in duration (average 64.2% and 27.4% respectively).

The level of difficulty was also reported to be generally ‘Just right’ (average 66.4%), with a minority view that they were ‘Slightly too easy’ (average 22.8%), although the more demanding and advanced MOOC, AI Planning was found by some to be ‘Slightly too difficult’ (24.5%). The pace of the MOOCs followed a very similar pattern.

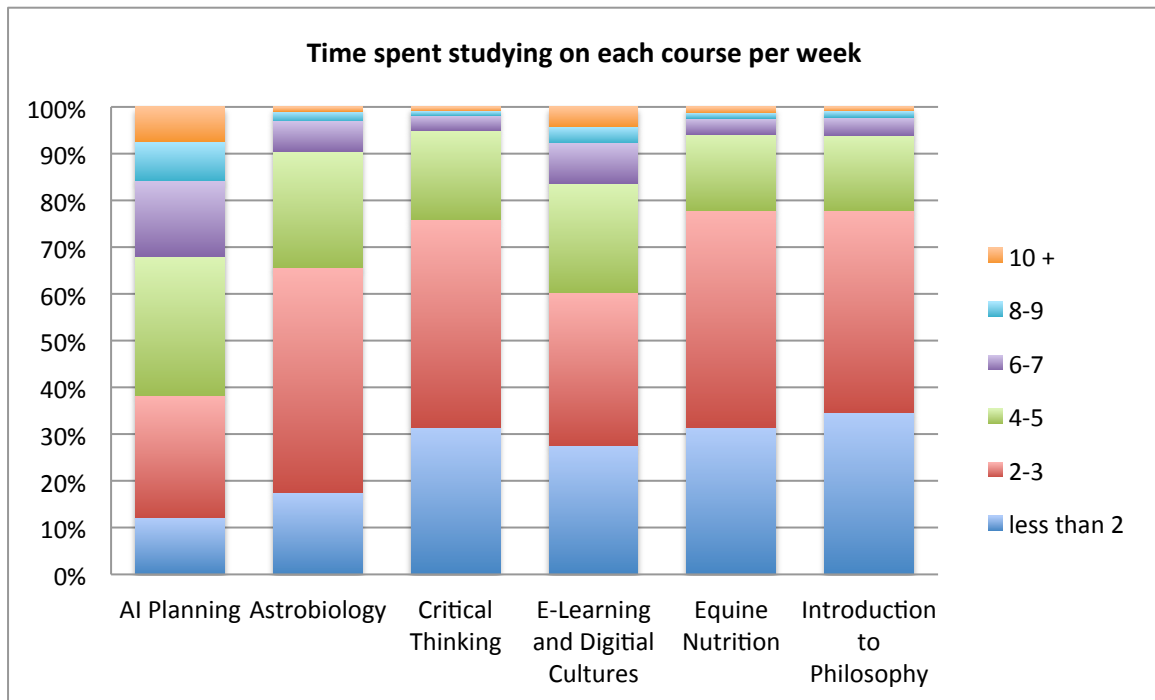


Figure 11 - Comparison by course of exit survey responses to Q8 'How many hours per week on average did you spend on this course?' shown as a percentage of total course-level respondents

The demographic of the respondents was similar to that of those responding to the entry survey, with a mean gender ratio of 58.1% to 40.9% (F:M; 1% gave no data) and the age distribution, highest educational attainment, and employment all with a very similar profile to that of the entry survey.

The main countries of residence of the respondents was similar to those of the entry survey respondents [Figure 12], with the US and UK providing the largest number of replies and with the same group of 6-8 countries providing around a third of the learners, with a total of 176 countries represented.

These data indicate that very similar populations responded to both surveys, with the likelihood that those who responded on entry were mainly intending learners and those who were only wishing to 'window-shop' may not have responded to the surveys at all. We know that many people remained enrolled on the MOOCs despite their low to zero rate of engagement (to de-enrol is a positive action); the very small number of respondents to the exit survey who said that 'they had never logged onto the course once live' suggests that this significant group were passive in all respects.

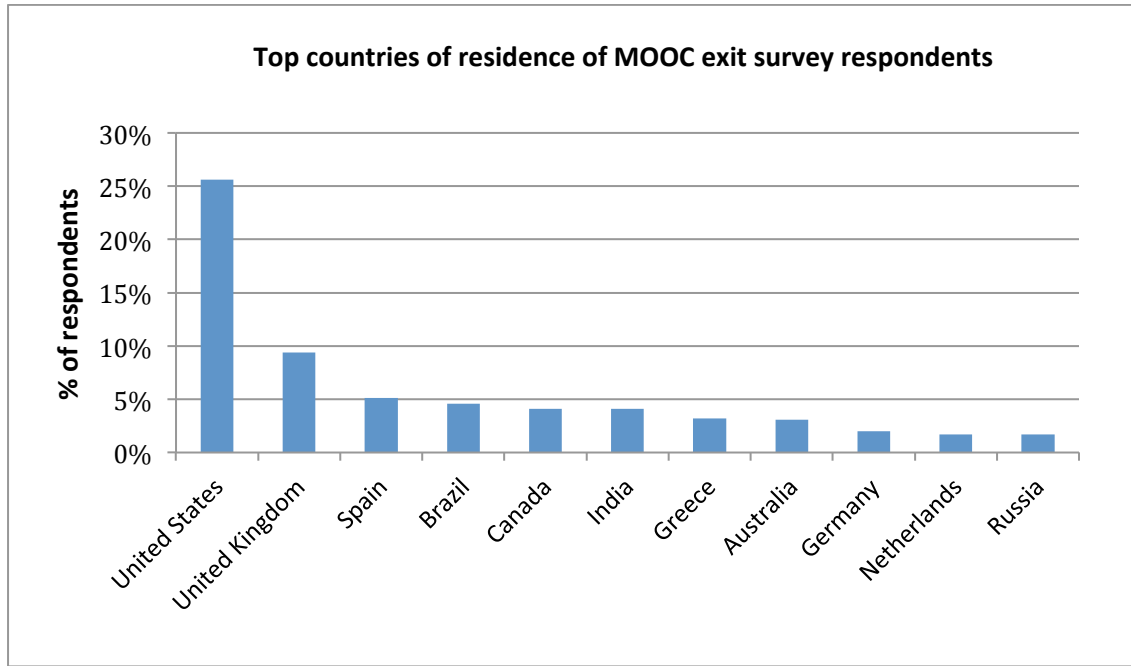


Figure 12 - Combined exit survey results to Q17 'Where do you live?' shown as a percentage of total respondents

## Concluding thoughts

We have been very pleased with the interest that our six Edinburgh MOOCs have attracted, and the enrolment on them of over three hundred thousand people. Even more satisfying for us, as course designers and teachers, has been the enthusiasm of our learners, and their level of active participation and support for fellow learners. This has been complete vindication of our decision to participate in the early days of MOOCs. The support of Coursera as an organisation, at all levels, has been responsive and of excellent quality.

The learner activity data we have presented in this report are reliable and reflect all positive actions in terms of log-ons, video viewings/downloads, quizzes and assessments taken, and postings to forums within the Coursera digital learning environment. Activities of a more passive nature, such as browsing or navigating the site and reading forums, are not included, although this type of analysis is underway, as well as work towards more questions about patterns of engagement.

The Entry and Exit surveys had substantial combined responses in terms of numbers of respondents, especially when compared to data generally gathered in student course surveys. However, the 'technical' response rates and the 'effective' response rates are not high, and so we have strict limits to the conclusions we can draw from them with good confidence. This is substantially more limiting for MOOCs than for traditional university courses where 'reasonable extrapolations' can be made from the sample to the rest of the population because one has knowledge about many aspects of the entire population. With the Coursera MOOCs, the non-responders in both Entry and Exit populations are really unknown, although we can make some guesses.

As the characteristics of the respondents to the Entry and Exit surveys were very similar, we may have recorded data from a single population. The Exit respondents define themselves as active on the courses, and so are probably our learner group, with very few non-learners present, especially as this survey was run at the end of the MOOCs. Those who wished only to browse the MOOCs at the start ('window-shoppers') therefore appear not to have completed the survey, or else they had very similar characteristics to the learner population, but without more data we cannot draw a conclusion about this.

We have very little information on the 'window-shoppers', e.g. age, educational attainment, reasons for enrolling, reasons for not studying, likelihood of a later return. Those who browse the offerings are certainly not to be dismissed as of no interest – they just didn't engage this time around. We wish everyone to feel that their engagement, in their own way, was profitable.

In general we attracted adults with high educational attainment. This was more pronounced than we had expected, although clearly much of the publicity was through educational media channels (Times Higher Education, Education Guardian, Inside Higher Ed, The Chronicle of Higher Education, etc). The general public publicity (BBC, CNN, NY Times, Fortune etc) appears to be been less broadening in its delivery of enrolments than one might have expected from the headlines about the 'end of higher education as we know it'. One possible explanation is that the wider, curious public aimed for very highly recognised

## MOOCs @ Edinburgh 2013 – Report #1

---

university names, including those outside Coursera, and another is that these individuals had no interest in responding to surveys being 'nosey' about them!

Different rates of decline in active learners occurred across the durations of the six courses. The declines were most dramatic from enrolment to Week 1 (the 'no-show' population), but of those who started, more maintained that presence on some MOOCs than others. Some MOOCs may attract (or be capable of attracting with the right awareness-raising) more dedicated learners than others, with short-term payoff being one plausible reason.

The largest sources of respondents were the US and UK (almost certainly a strong publicity effect) but 176 countries were represented which shows the degree of worldwide interest stimulated by MOOCs. There were gaps; close to zero from China given its size, even by limiting this judgement to the south-eastern China population. This suggests that reaching widely with MOOCs to gather many more learners from non-US/UK/Europe sources is not an unreasonable goal, but also not a simple goal.

The main reasons given by survey respondents for enrolling were curiosity about MOOCs and online learning, and a desire to learn new subject matter. The instrumental reasons of career advancement and obtaining a certificate were less important. The dominance of new learning as a reason was less in the Exit than Entry survey perhaps because the respondents realised that short, mostly entry level, courses could only deliver so much new content. It seems less economical to argue that many of the other reasons had gained in importance although not implausible.

However, despite that, the quality of the courses, their duration and pacing was felt to be very good, and that reinforced our view from the design stage when we chose the short format MOOC. There was evidence that some respondents of the Exit survey felt the MOOCs were a little light on content for them. This takes us back to the issues of designing open courses with learners in mind but with no control of the characteristics of the learners who enrol.

It is probably reasonable to view these MOOC learners as more akin to lifelong learning students in traditional universities than to students on degree programmes, which is a common comparison being made. Comprehensive universities often have substantial enrolments from broadly well-educated individuals on what are variously named Lifelong Learning, Continuing Education, Extension offerings, characterised by a very wide range of short, low study hours (mainly) open courses. From a governance, quality and responsibility viewpoint this might provide a more reasonable model, and perhaps also bring some realism to overly ambitious expectations of MOOCs.

There was some evidence that the respondents of the Exit survey were more independent than social learners, with high self-reported time spent on videos and quizzes and less on online social activities. This perhaps unsurprising given the form of many of the MOOCs which were not designed to insist upon online interactions but offered mechanisms and a guiding framework (ie helpful educational activities) for those who wished to do so. Indeed, positively supporting degrees of engagement, and finding ways to maximise it, is likely to be one of the skills in MOOC course design. Our AI Planning MOOC offered recognition of 'levels of accomplishment' which learners selected for themselves as their goal.



## MOOCs @ Edinburgh 2013 – Report #1

---

These data are from the first offerings of the MOOCs. Very little data is available from other sources as to what changes took place between offerings as so few MOOCs have reached that stage.

We can see different possibilities in terms of potential enrolments on our MOOCs:

- a) if nothing else changes significantly then we would expect to lose window-shoppers ('been there, seen that') BUT hold learners OR gain learners ('good MOOC' rating);
- b) if media interest worldwide rises (for whatever reason), then we might continue to have high window-shoppers alongside rising learners, both because they come with the publicity AND because we get (hopefully) good reviews;
- c) if the number of MOOCs available rises significantly, as new platform providers appear and bring with them even more MOOCs to add to those already in planning, then we would expect our overall enrolments to fall unless we are very active to compensate. The hardest challenge will be from MOOC platforms with strong local brands that are able to capture substantial publicity and audiences in their regions. If that happened on a significant scale, MOOCs might become more university-like in their audiences, and international intake would not be a taken-for-granted attribute, but an essential attribute, which we would have to work to maintain in our Edinburgh MOOCs.

We are currently in our second phase of data analysis and shall issue a second "MOOCs @ Edinburgh 2013 Report" in due course.



## References

[1] George Siemens (July 2012).  
<http://www.elearnspace.org/blog/2012/07/25/moocs-are-really-a-platform/>

[2] E-learning and Digital Cultures (EDC) design

The EDC MOOC was the most exploratory Edinburgh course using many external social media platforms. Based on collaborative and experimental pedagogy, the EDC course encouraged content development largely from the learners, rather than as front-loaded video content, encouraging participants to navigate around existing online resources and engage with peers in online discussion of their learning journey.

The course was made even more unique in its parallel launch and interweaving design with a module of the MSc Digital Education – “E-Learning and Digital Cultures”. University of Edinburgh MSc students taking the EDC (credit-bearing) module were asked to engage with the MOOC as TAs as part of their course structure during week two of the EDC MOOC and invited to continue as TAs throughout the duration of the MOOC. Engagement activities included monitoring and facilitation of online community discussions, and involvement with the questions during the live end-of week-Google Hangout sessions, feeding information back to the academic team.

This course generated a very large amount of social media activity. By the end of the course, for example, there were:

4,820 in the learner-led Facebook group  
1,945 in the learner-led Google+ group  
Approximately 700 #edcmooc tweets a day  
1,416 #edcmchat tweets in the learner-run course Twitter chats  
915 blogs being pulled into the EDCMOOC News blog aggregator

## Appendix 1 –

University of Edinburgh - Entry survey questions

## MOOCs entry



### Edinburgh MOOCs survey

**Thank you for taking the time to complete this survey by the University of Edinburgh.**

MOOCs form a new part of the University's commitment to knowledge exchange and this small data gathering initiative will help inform these and future course developments.

Please answer the following questions to help us better understand our MOOC student demographic, with an aim to improve your experience whilst studying with us. The survey should take no more than 2 minutes to complete.

-- -- --

*N.B. All data collected in this survey will be held anonymously and securely.*

#### About MOOCs

**1.** Have you enrolled on any MOOCs before this one?

Yes  No

**2.** Which Edinburgh MOOC(s) have you signed up for?  
(select all that apply)

- Artificial Intelligence Planning
- Astrobiology and the Search for Extraterrestrial Life
- Critical Thinking in Global Challenges
- E-Learning and Digital Cultures
- Equine Nutrition
- Introduction to Philosophy

**3.** How did you hear about this MOOC? (Optional)  
(select all that apply)

- News articles/press coverage
- Coursera website
- University of Edinburgh website
- Search engines
- Blogs

- From friends/social networks
- Other

**4.** Total number of MOOCs currently enrolled upon? (including Edinburgh MOOCs)

- 1  2  3  more than 3

**5.** What do you hope to get out of the MOOCs you are enrolled on? (*Optional*)  
(select all that apply)

- To get a certificate
- Learn new things
- Improve my career prospects
- Meet new people
- Try online education
- See what MOOCs are
- Browse Edinburgh's offering
- Unsure

## About you

**6.** Where do you live?

Select an answer

**7.** What is your gender?

- Female  Male  Prefer not to say

**8.** What is your age? (in years)

- under 18
- 18 - 24
- 25 - 34
- 35 - 44
- 45 - 54
- 55 - 64
- 65 or over

**9.** What is your current area of employment?

Select an answer

**10.** What is the highest level of academic study you have completed? (*Optional*)

Select an answer

## Appendix 2 –

University of Edinburgh - Exit survey (standardized) questions

## MOOCs evaluation



### Edinburgh MOOCs survey

Thank you for taking the time to complete this survey by the University of Edinburgh.

\*\* Insert course specific introduction \*\*

-----

*N.B. All data collected in this survey will be held anonymously and securely.*

#### Introduction

1. Once the course started (28.01.13) did you log in to the course site?

- Yes  
 No

---

If YES, please continue onto Q3

---

If NO, please complete Q2 then move onto the 'About You' section

2. If no, why did you not log in to the course site?  
(select all that apply)

- Too busy  
 Lost interest  
 Took part in another course instead  
 Never intended to take the course - was just curious  
 Never intended to take the course - incorrect sign-up  
 Unable to access the site  
 Other (please specify):

#### About the course

3. Please rate your overall experience with this course

1 (Poor)  2  3  4  5 (Excellent)

4. What did you hope to get out of the course and did it meet your expectations?

	Exceeded expectations	Met expectations	Fell below expectations	Not applicable
a. To see what a MOOC is like	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
b. To browse the course offering	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
c. To try online education	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
d. To learn more about the subject area	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
e. To become part of an online community or meet new people	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
f. To improve my career prospects	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
g. To get a certificate (not for career)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

5. Overall, did you get what you wanted from the course?

- Yes, the course exceeded my expectations  
 Yes, completely  
 To some extent  
 No

6. How much of the course content did you engage with?

Every week	Most weeks	Some weeks	Seldom	Never
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>



<b>a.</b> Watching video lectures	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<b>b.</b> Forum discussions	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<b>c.</b> Readings	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<b>d.</b> In-video quizzes	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<b>e.</b> Quizzes, exams and assignments	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<b>f.</b> Virtual Meeting Spaces (Hangout+, Second Life, etc)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

**7.** Did you participate in the final assessment?

- Yes  
 No

**8.** How many hours per week on average did you spend on this course?

- less than 2  
 2-3  
 4-5  
 6-7  
 8-9  
 10 +

**9.** How would you rate the pacing of this course?

- Much too slow    Slightly too slow    About right    Slightly too fast    Much too fast

**10.** How would you rate the difficulty of this course?

- Much too difficult    Slightly too difficult    Just right    Slightly too easy    Much too easy

**11.** How would you rate the length of this course?

- Much too long    Slightly too long    Just right    Slightly too short    Much too short

**12.** Any other comments on the course:

About you

**13.** Which country do you live in?

Select an answer

**14.** What is your gender?

Female  Male  Prefer not to say

**15.** What is your age? (in years)

- under 18
- 18 - 24
- 25 - 34
- 35 - 44
- 45 - 54
- 55 - 64
- 65 or over

**16.** What is your current area of employment?

Select an answer

**17.** What is the highest level of academic study you have completed?

Select an answer