Teaching, Learning and the Profession

Remain or Leave? Reflections on the Pedagogical and Informative Value of a Massive Open Online Course on the 2016 UK Referendum on EU Membership

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Abstract

While the British electorate was asked to vote on a simple-sounding question during the UK referendum on EU membership in June 2016, the issues at play were extremely complex. In order to help potential voters make sense of the debate, the authors ran a free Massive Open Online Course (MOOC) on the referendum in the weeks leading up to the vote. The core of the MOOC featured all the common characteristics of this type of course: weekly video lectures, quizzes, question and answer sessions, forums and personal journals which participants could use to share and reflect. To date, little research has been done on the potential for this course format to improve the public's understanding of, and engagement with, EU-related politics and policy issues. Consequently, this paper proposes some initial reflections on the opportunities and challenges presented by this MOOC for fostering broad public engagement with politics in the EU. By considering issues of format, attendance and attrition, participation and power dynamics, we identify the challenges for harnessing MOOCs as a pedagogical and communicative tool for counteracting the EU knowledge deficit.

Keywords

INTRODUCTION: WHY A REFERENDUM MOOC? THE EU KNOWLEDGE DEFICIT IN BRITAIN

The UK referendum on EU membership sparked public debate over thorny policy problems, such as international trading arrangements and migration, as well as more abstract questions concerning sovereignty and national identity. That a referendum on the EU could have been a pedagogical opportunity is not in doubt as studies show that British citizens are among the least informed in Europe about how the EU works (Hix 2015; McCormick 2014). It was precisely in this context of a persistent "knowledge deficit" amongst British voters when it comes to EU matters that the authors ran a free Massive Open Online Course (MOOC) on the topic of the EU referendum in the weeks leading up to the vote. This article analyses the effectiveness of this MOOC as a pedagogical tool for counteracting the EU knowledge deficit and reflects on the wider lessons provided for citizenship education and political engagement through the use of such courses (Blair 2017).

Entitled Remain or Leave?, the objective behind the MOOC was to help those interested – not restricted to eligible UK referendum voters – make sense of the multiple issues at play. Open Education, a product offered by Blackboard as part of its software suite, was the MOOC platform host, which allowed students to register and obtain a certificate of completion at no cost. The core of the MOOC, which ran between 17 May and 22 June 2016, featured all the common characteristics of this type of course: weekly video lectures, quizzes, and question and answer sessions, as well as forums and personal journals which participants could use to share and reflect. To date, little research has been done on the potential for this course format to improve the public's understanding of, and engagement with, politics and policy issues, especially those relating to the EU. A search (September 2016) on the MOOC aggregator site mooc-list.com shows only two English-language survey courses on the EU listed.

It is certainly not easy for EU citizens to understand how and why EU rules and policies affect their lives. The legal and institutional complexity of the treaties contrasts unfavourably with the succinct principles and neater institutional design of, for example, the US constitution. However, the problem is not just one of comprehension. Citizens complain of a knowledge or information deficit based on the difficulty of obtaining reliable information on what the EU does and how exactly it constrains member states' autonomy. The European Commission's Eurobarometer survey (2011) has shown that 49% of EU citizens say they are unfamiliar with how the EU works.

The reasons behind this lack of information are manifold. Brussels has a large cohort of accredited journalists, but the media normally prefers to cover extraordinary events, such as emergency summits and crisis talks, not the everyday business of the Ordinary Legislative Procedure or the jurisprudence of the Court of Justice. The problem of media coverage of the EU is particularly acute in the UK. Whereas in the 1975 referendum on EEC membership the print media was overwhelming in its support (with the exception of The Morning Star, a communist paper) for the EEC, by 2016 Euroscepticism became deeply engrained in the fabric of tabloid and even broadsheet reporting (McCormick 2014). This hostility to the EU, unlike in comparable European countries, is nurtured by a neoliberal elite with influential media ties (Cathcart 2016).

Equally, national political parties have proved poor at relaying how they participate in EU decision-making through their MEPs and ministers sitting in the Council of the EU (Mair 2007). When in government, national politicians may find it convenient to blame the EU for unpopular rules and, when in opposition, claim they would get a better deal for their country. This attitude creates a climate where biased and erroneous claims about the EU flourish. In many countries, the presence of populist anti-EU parties – from both the extreme left and right – further undermines citizens' ability to stay reliably informed about the EU (Hakhverdian et al. 2013: 525). An additional peculiarity of the UK context is that the pro-EU constituency could not count on the unwavering support of the political elite. In line with what political scientists define as a growing pan-EU "constraining dissensus" (Hooghe and Marks 2009), the British political establishment, as with the media, were divided over the merits of integration.

Consequently, Remain or Leave? offers a unique insight into the potential that the MOOC format has to improve citizens' understanding of, and engagement with, EU politics and policy issues. To date, there is little research on the pedagogical value of MOOCs when it comes to counteracting the EU knowledge deficit or to contributing to active citizenship more generally, including the "post-truth" pathology of contemporary politics (cf. Hudson et al. 2016). The article is structured as follows. It first examines the literature on MOOC design and how this guided the development of Remain or Leave? Drawing on content analysis of users' contributions and an exit survey of course completers, it then considers issues of format, attendance and attrition, online participation and power dynamics that emerged during the running of the course. Finally, it concludes by reflecting on expectations and potential best practice surrounding the use of MOOCs for active citizenship.

DESIGNING REMAIN OR LEAVE?

The first MOOC was delivered in 2008 in Canada. This course allowed 2200 members of the general public to join 25 fee-paying students from the University of Manitoba in learning about 'Connectivism and Connective Knowledge' (cf. Downes 2008). Since then, the number of courses offered online has grown exponentially. Today's MOOCs resemble more traditional courses, with their hallmark features – instructional lectures, question and answer sessions, assessment, and

certificates of completion – simply delivered online rather than face-to-face. In order to differentiate between these different types of MOOCs, those based on connectivist theories of learning are sometimes referred to as cMOOCs, while those that reproduce traditional class-room pedagogies are termed xMOOCs.

The growing popularity of MOOCs has led to debates over the value, challenges, and impact they may present for education. In particular, most of the debate centres on the quality of the free online courses with mega-enrolment figures offered by the providers such as Coursera, Udacity, edX, FutureLearn, and OpenupEd . MOOCs elicit a double-edged fear: either that they are too dumbed-down to justify the hype or that they might be successful enough to revolutionise the whole sector as have other so-called disruptive technologies in various fields. In this context it is not surprising that MOOCs were at first backed primarily by premier and best-funded institutions, although the availability of free MOOC hosting platforms has subsequently significantly lowered barriers to entry.

MOOCs hinge on the scalability of knowledge dissemination that ICT makes possible beyond a classroom setting. That explains the insistence on the adjective Massive, for, as Glance et al. (2013:) define it, "the participation at any point during the running of the [MOOC] should be large enough that it couldn't be run in a conventional face-to-face manner". Online survey courses with gigantic student numbers are particularly attractive for STEM subjects where individual critique and feedback are less pertinent than in discursive subjects as illustrated by the first xMOOC: the graduate course on Artificial Intelligence delivered by Stanford Professors Sebastian Thrun and Peter Norvig, which has had an enrolment as high as 160,000.

MOOCs, especially in STEM subjects, have a high international following. However, completion numbers are as a rule rather low, with Korn and Levitz (2013) finding only 5-15% of initial enrolees complete the course. These numbers are in themselves unsurprising as the nature of MOOCs is that they have low entrance and exit costs and very little by way of external feedback to help retention. Consequently, the ability to complete a course is dependent on a high-level of motivation and self-regulation. The student population for MOOCs is nevertheless not as diverse as may be expected from a supposedly disruptive technology based on expanding access to university education. Results from an analysis of modules offered by the University of Pennsylvania on the Coursera platform show that 83% of enrolees had a post-secondary degree (Christensen et al. 2013).

While traditionally structured xMOOCs are now the norm, the value of the participatory elements of cMOOCs is hard to overstate. It is these joint learning exercises that mean online study is not just an isolating experience. Hence Remain or Leave? was designed to combine elements of both formats with the intention of using online discussion forums to generate peer assistance. Responses in the forums, moreover, were analysed and integrated into a series of weekly recap webinars, which drew on specific comments and queries submitted by course participants to explore themes surrounding the UK's referendum on EU membership. This included a final post-Brexit webinar that examined the state of play a month after the momentous vote.

The possibilities opened up by ICT for peer assistance in a MOOC mirror those now available for citizen participation using a number of e-participation platforms that have been introduced in various countries. Similar to the initial hype surrounding MOOCs, e-democracy has had to address an unrealistic burden of expectations regarding the ability of online platforms to disrupt politics and public policy (Schulman 2003). Prophets of technological determinism thus have had to lower their expectations of how far e-participation can empower citizens and acknowledge that technology is 'constitutive of social life' (MacKenzie and Wajcman 1999: 23).

For example, data from the Estonian Parliament's e-legislation proposal platform revealed that despite the unprecedented possibilities offered to ordinary citizens for proposing ideas for legislation directly to policy-makers, citizen mobilization was poor. Use of the online platform was dominated by a few mega-users (Glencross 2009). Reasons cited for a lack of wider engagement – despite the unique opportunities afforded citizens to voice their opinions – were platform functionality and the absence of incentives.

In anticipation of similar problems, the participatory element of Remain or Leave? was designed to incentivise as much student engagement as possible. The online discussion forums centred on two weekly questions posed in the online lecture component of the course. These were open-ended questions designed to draw out opinions and arguments based on the topic under discussion. For instance, the week five questions were as follows:

1. When considering how to vote, are you more concerned by short-term instability as compared to the long term consequences of this decision?

2. Knowing the risks associated with such a referendum, do you think it is a good idea?

To give expression to other ideas, there was also an open thread that allowed any participant to create their own discussion topic. In all cases, the incentive for posting was – as explained in regular email announcements – that the forums would be monitored and integrated into the webinars. Similarly, the webinars were interactive in that students could submit written questions in real time using the chat box function of Blackboard Collaborate. In addition, the MOOC offered 5 freely-accessible, multimedia lectures that were posted on a weekly basis, alongside readings, and quizzes associated with the following themes: sovereignty, the single market, immigration, divides among British voters, and risks of staying in the EU and of leaving it.

Lectures were recorded using Camtasia Studio and were scripted in a way that cut through partisan rhetoric and the mass of competing, often contradictory information. Each lecture consisted of 3 videos averaging under 10 minutes, which is slightly longer than the six minutes considered optimal in research on MOOCs (Guo et al. 2014). The emphasis throughout the lecturing was on examining the validity of pro- and anti-EU arguments in an even- handed fashion. No prior knowledge of the EU was required and great care was taken to avoid technical, policy jargon. IT support was available for users thanks to the support of a dedicated IT specialist responsible for resolving functionality issues relating to the MOOC.

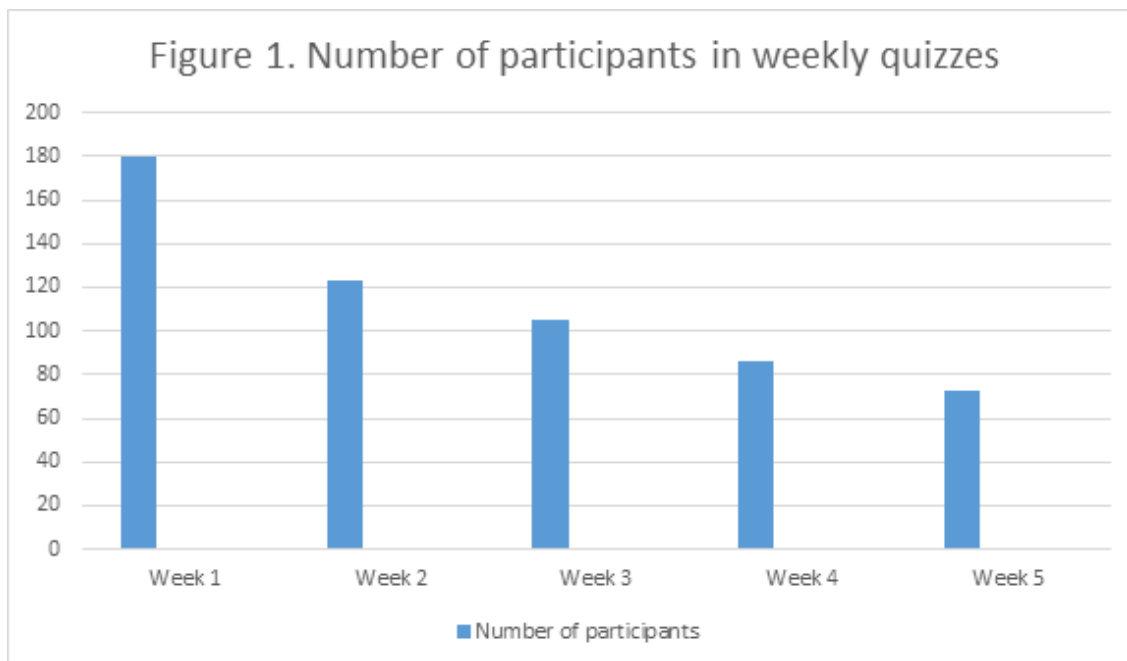**ANALYZING THE DATA**

Overview of participation

551 individuals signed up to participate in the course. The gender of participants was not systematically collected as part of the enrolment procedure. Consequently, instead of declared gender identity, we coded the gender identity projected by users' chosen enrolment name. For the sake of brevity, the paper will use the term 'gender' as shorthand for 'projected gender identity' (PGI). Overall, women constituted a majority of those enrolled: 291 compared with 235 men and 25 of unknown gender. Students spent a total of 1922.69 hours on the course – an average of 3.5 hours per student. In reality, however, users did not spend equal amounts of time engaging with course activities, and a small minority of particularly active participants account for the majority of online activity. The most active 5% (32 students) each spent an average of 34.27 hours engaging with course material and activities, accounting for over 57% of the total time spent on the MOOC

(1096.66 hours). Even within this very active cohort, the amount of time dedicated to the course varies greatly: the most active account spent 246.75 hours logged on; and the top 6 most active accounts spent as much time as the next 26 accounts combined. Forum data suggests that this cohort of active users was relatively gender balanced (17 women and 15 men).

Assessment

Student engagement with, and understanding of, the course material was regularly monitored using optional online tests. Assessment was carried out by means of five tests, one covering each of the weekly topics. 180 individuals took at least one quiz. Figure 1 shows the number of participants in each weekly quiz.

Figure 1 number of participants in weekly quiz

Participation in, or completion of, tests clearly suggests attrition over the course of the MOOC. The most significant attrition took place between weeks one, when 180 participants took a test, and week two, when that number went down to 123. Participation over the last three weeks was more stable, with an average of 16.5 fewer people attempting a test each consecutive week.

Certificates were issued to participants who completed all five tests and received a minimum of 50% on each. 68 students completed all five tests, and all of them received the required passing grades. A total of 68 certificates of completion were therefore issued. Overall, more women than men completed the course assessment: 39 compared with 28 men and 1 of unknown gender.

Forum participation

One of the most important components of the course was the use of online forums to stimulate discussion among participants, and identify areas of interest or uncertainty that were then used to inform the content of lectures and question and answer sessions. In total, 12 forums were created: two for each of the weekly themes, plus one 'open' forum in which students were free to discuss

anything they wanted, and one forum created after the referendum to accommodate reflections on the outcome.

Every themed forum except the 'open' one had a core question prompting discussion. For example, 'Immigration and border control forum 1' asked participants: "Which campaign do you trust when it comes to claims about immigration?"; while 'Immigration and border control forum 2' asked: "Would you prefer the UK to be able to control immigration instead of being in the single market?" In the process of debating these issues, students initiated 93 different discussion threads, in which they posted 408 comments. 228 posts were written by men, 150 by women, and 30 were

Type of participation	Level of participation
Forums	12
Discussion threads by students (total)	93
Threads initiated by moderator	2
Threads initiated by men	47
Threads initiated by women	36
Threads anonymously initiated	8
Comments (total)	408
Comments by men	228
Comments by women	150
Anonymous comments	30

anonymous as shown in Table 1.

Table 1: Type and level of forum participation

Quality of the referendum debate

One of the key motivations for designing and running a course on the EU referendum was to help individuals make sense of the debate: the issues, facts, and implications raised in the discussion about whether or not the UK would be better off outside the EU. As such, we were interested in analyzing the MOOC participants' perception of the debate itself.

Overall, the view of the quality of the information, and of the role played by politicians and the media in relaying information to voters, was overwhelmingly negative, regardless of whether or not they were aligned with participants' preferences or voting intentions. In particular, the campaigns were equally singled out as a source of unreliable or misleading information. Even pro-EU members of the cohort recurrently expressed strong reservations about the quality, efficacy and truthfulness of the information and arguments put forth by the 'Remain' campaigns.

Participants did not distinguish between different campaigns on either side of the debate (eg. Vote Leave and Leave.EU), and conflated them in discussion. Concerning the grassroots elements of the campaign, the 'Leave' camp was broadly agreed to be more present and effective at disseminating its core message and reaching voters. Those with a preference for staying in the EU often criticized the 'Remain' camp for being too meek and lagging behind the 'Leave' campaign. The bigger focus in forums, however, was not the grassroots campaigns but the involvement of high-profile political spokespeople, such as Boris Johnson, Nigel Farage, and David Cameron. In general, politicians were depicted as 'con artists' seeking to score political points rather than tackle issues of substance. Politicians associated with a vote to remain (eg. Jeremy Corbyn, Gordon Brown, Sarah Wollaston) were associated with positive statements slightly more frequently than those campaigning for a

leave vote, which is congruent with the cohort's overall preferences regarding the outcome of the referendum. More often, however, politicians of all parties and camps were presented as damaging to the quality of the democratic debate because of their perceived penchant for partisan exaggeration and distracting ad hominem attacks.

Finally, the role of the media was also the topic of strong criticism. National newspapers, especially tabloids and conservative broadsheets, were accused of being the driving force behind the propagation of inflammatory 'misrepresentation' – especially on the issue of immigration. Mistrust of the media was linked to the belief that commercial relationships between publications and politicians entailed their content was corrupt: bought and paid for by politicians in return for favours to media moguls. Participants drew a causal connection between the political debate, as it played out in the media and among politicians, and the public debate held among voters. There was broad consensus that, as a result of the over-abundance of false, misleading, and partisan information, the public debate quickly degenerated into a 'vile' and 'uncivilized' argument between groups with fundamentally different beliefs.

Ultimately, the negative sentiment associated with different aspects of the political debate further crystallized after the vote, when participants aired their discontent over the role they believed the media, politicians, and campaigns had had on the outcome. 'What concerns me was not having the referendum but the divisiveness of the campaigning methods, particularly on the issue of immigration', said M.H., while an anonymous participant stated: 'It's 5 days now and I'm still furious at the lies that swung a referendum that should never have been called.'

Topics of interest

Faced with what they perceived to be a low-quality political debate, users appeared to use the forums as a platform for discussing or clarifying issues they would have wished to hear more about in the media or from the political elite. As a result, forum discussions were rich and complex. In order to make sense of the issues and topics of interest to participants, the forums were systematically coded using grounded theory (cf. Glaser and Strauss 1967: 37). This method involves exploring data and developing conceptual codes in three phases. First, during 'open' or 'initial' coding, conceptual labels were inductively generated and assigned to the patterns and salient elements that emerged from the forum discussions. These categories were then refined in an iterative process between the data and the issues and themes generated by our research questions. Finally, clusters of codes were selectively combined by grouping categories according to their analytical focus. In total, the data fell into 23 thematic codes divided into five clusters.

The first thematic cluster comprised contributions on specific policy issues. Topics discussed under the 'policy' theme included employment, the environment, constitutional issues, foreign policy, immigration/border control, regulation, security, the economy, trade, and welfare. Analysis of this cluster reveals that three topics stand out as a primary source of discussion: (in order of importance) immigration/border control; the economy; and trade. Together, these topics account for nearly 65% of all discussions. Conversely, the environment and constitutional issues were discussed the least. In fact, references to constitutional issues, for example questions concerning a second vote on Scottish independence or the border between Northern Ireland and the Republic of Ireland, only began to emerge after the referendum.

The second thematic cluster to emerge from discussions concerned contributions featuring values and beliefs about the purpose and organisation of government. This 'principles' theme covered burden sharing, democracy, intergenerational justice, sovereignty, and solidarity. Under this theme,

those students who made favourable comments concerning the influence of the EU on different policy issues were most likely to value principles such as burden sharing, solidarity and inter-generational justice. As a result, they portrayed the EU as a means to: solve complex and border-spanning policy issues more effectively than if the UK were to try on its own; a means of making policies that takes better into account issues of long-term sustainability; and a mechanism for holding the UK government to account when it attempts to place short-term profit before long-term socio-economic goals. Conversely, students who most frequently highlighted the EU's shortcomings were the most likely to raise the issue of sovereignty. In these accounts, the EU was seen as an ill-functioning institution that burdened the UK with the outcomes of its bad decisions and must be cast aside in order to allow for social, political, but mostly economic progress.

The third thematic cluster concerned 'processes': contributions predicting or appraising political and institutional procedures. Discussions in this category primarily involved evaluations of the current functioning of the EU, and predictions of how the process of the UK leaving the EU would unfold. Analysis of students' references to issues of political and institutional process finds that, while there was a wealth of understanding of how the EU functions (from its trade agreements to its very organisation), students found it very hard to predict what would happen if the UK left. On the one hand, this is to be expected, considering the UK would be the first state to withdraw, leaving us without a prior example of what such a process would entail. On the other hand, this difficulty very clearly appears to be linked to a lack of meaningful or consensual information concerning what 'Brexit' meant and how it might be enacted. As a result, students speculated considerably but struggled to find a robust evidentiary basis for their ideas of what might happen in the event of a 'leave' vote.

The fourth thematic cluster to appear from participant discussions concerned 'politics' and comprised contributions regarding the referendum debate and the factors that influence it, and those about the purpose of politics in this context. Topics under this theme include the media, politicians, the purpose of politics, and the referendum. What stands out from this aspect of the discussion is the overwhelming sense of anti-politics. While students gave very sophisticated accounts of what they considered to be the role of the political, and discussed the many forms government can and ought to take, they almost unanimously dismissed the existing political system – from those who populate it, to the institutions (media, electoral system) that support it – as corrupt and untrustworthy. Nevertheless, this negative view of British politics remained in perpetual tension with the Burkean view of the majority of participants that the referendum should never have been called, and that it was the role of elected representatives (MPs) to discuss and decide on these issues, rather than the 'uninformed' electorate.

Finally, the fifth thematic cluster centred on society and its composition. This 'polity' theme included discussions on societal divides, especially cultural, electoral, and socio-demographic divisions, and national distinctions across the UK. Overall, students depicted the UK as a deeply divided country. In general, they mapped the borders of different groups onto the borders of the different home nations that make up the UK. Thus, the Welsh, Scottish, English, and Northern Irish were discussed as having diverging opportunities and challenges, which was used to explain why their population reported different levels of dis/approval with the EU. In terms of demographics and electoral divides, the primary focus was on a broad and amorphous group of socio-economically deprived voters who were recurrently identified as those most likely to express concern about immigration and free movement. Other socio-demographic factors, such as gender, age, or educational background, were rarely raised, if ever.

Sentiments regarding the EU

In addition to studying the themes discussed in the forums, we also sought to assess participants' sentiments concerning the EU. This was done by coding all explicit references to users intending to vote either remain or leave, as well as all comments containing an appraisal of the EU or its constituent institutions.

Concerning the clearest indicator of Euroscepticism (voting intentions), the cohort revealed itself to be primarily in favour of remaining in the EU. Comments to this effect outnumbered those in support of leaving 6 to 1. In terms of appraisals of the EU, however, the trend was reversed: there were marginally more negative appraisals (27 statements) concerning the EU than positive ones (25 statements). When looking at who wrote these comments, it became apparent that few people made Eurosceptic comments but tended to make them more often (9 people each averaging three statements), compared to a bigger group of quieter 23 'Europhiles' each making an average 1.13 comments in support of the EU. In both cases, men were more likely than women to make Eurosceptic comments, and women more likely to make positive comments about the EU or explicitly indicate an intention to vote 'remain'.

Some of those planning to vote 'remain' were sceptical about certain aspects of the EU and its functioning. This is borne out in the comments themselves. For example, 'Anonymous' explained:

> '[…] I take the view that we cannot have both the free movement of people and a first class welfare system, unless numbers of immigrants can be managed. […] Where I disagree with the 'out' campaign however, is where they assert (and it is not more than an assertion) that numbers can only be managed by leaving the EU. My own view is that the principle of the free movement of people will be reformed in any event within the next five to ten years. To influence that reform, it is essential that Britain retains its membership.'

Ultimately, the common thread shared by sceptical advocates of remaining was the belief that aspects of the EU needed to – and could – be reformed or improved. The case for remaining part of the EU was therefore often linked to the UK's capacity to act as a progressive force in the transformation of the EU and its institutions. Conversely, those who expressed an unwaveringly positive view of the EU argued that it was the EU, in fact, that forced the UK to adopt more progressive and egalitarian policies, especially in areas such as employment rights and the environment.

Head or heart?

The final aspect of the forum discussions that we explored concerned how participants represented their decision-making process. This involved recording what students said about the type of information they believed they needed to make their decision in the referendum, as well as the justifications and mechanisms they used to find and evaluate data. We used these to ascertain whether the cohort was planning to base their vote more on cost-benefit considerations or on the basis of affinity with normative values.

There was an active effort, on behalf of most participants, to actively present themselves as pragmatic rational agents seeking high-quality data, which they would then assess and use to form an evidence-based decision. As a result, the issue of the reliability and validity of information was often discussed. For many, the difficulty of finding relevant information on which to base their

decisions was compounded by their mistrust of the main sources in the debate (i.e. politicians, the media, and the campaigns). Consequently, participants prided themselves on using information from 'independent' sources, but even then often resorted to printing disclaimers, for example: 'I was interested to find this article, showing the results of a recent Ipsos Mori poll (I know – how believable are polls? – approach with caution!)' (L.R.).

Reflecting the premium they and their peers placed on 'objective' and 'reliable' data, forum participants near-systematically deployed two strategies to increase the validity of their claims: explicit referencing and triangulation. In total, users shared 86 referenced sources, of which 75 were made in a way that allowed other users to verify information for themselves (by sharing a link or adequate bibliographical information). Furthermore, participants often presented multiple sources to corroborate their point, a technique known as 'triangulation'. An analysis of personal engagement among users in the forum shows that the sharing of sources was often explicitly praised, perhaps contributing to a greater normalisation of the practice over time. The breakdown of the sources used by participants is shown in Table 2.

Table 2: Nature of sources shared by participants

Source type	Number of sources
News (article)	22
Blog post	16
News (editorial)	6
Academic (non peer-reviewed)	5
Party document or politician's editorial	5
Video (lecture)	5
Video (news)	5
Website	3
Think tank and third sector report	3
Survey	3
Podcast	1
Academic (peer-reviewed)	1
Total	75

Ultimately, students using the forums often viewed themselves as more capable of seeing through the mis- or disinformation of the campaign than the bulk of the electorate. They talked about the 'regular' electorate as a separate group more likely to 'fall' for reductive and misleading arguments and base their vote on 'mere' emotions rather than reason: 'It will be an emotive choice for most people, regardless of the arguments for and/or against' (M.D.). This was also used to explain why anybody would vote differently than them: 'They don't seem to understand what they are voting for really' (J.H.). Taking a course, such as this MOOC, was therefore seen as a way for the responsible minority to learn more about the issues and bypass the low-quality political debate. S.R., for instance, argues:

> 'I'm a fan of direct democracy in certain situations, but to participate in such a process requires fully informed debate with broad public access to facts, as far as they're known. I see this MOOC as a good example of how that can be done, but of course not everyone will choose to spend time to learn more about the subject and to go beyond the media campaigns.'

Perceptions that the majority of voters were ill-informed or unable to make rational decisions were also sometimes used to buttress claims the referendum – and referenda in general – should not be used to determine the future of the nation. Quoting the BBC's Laura Kuenssberg, an anonymous post summarizes this sentiment: 'Like (sic) in the Scottish referendum, campaigns that are not just about policies or personalities but about identity can unleash feelings that can't be put back in the bottle. […] Prompting the question: are referenda, given the emotional price they exact, even worth the candle, within a British context?', and M.D. asks: 'What are we doing, holding a referendum on something which will affect us for generations, when most people don't really feel it is high on their list of concerns?' This is congruent with the tendency for participants to depict an ideal polity as operating according to the Burkean 'trustee' model of representation, where enlightened individuals are elected to make decisions on the behalf of the public.

Ultimately, while participants overwhelmingly expressed a preference for putatively 'objective' information on the issues at stake, many of them recognized that none of the information on which predictions of what the future may hold for the UK, in or out of the EU, could be considered definitive and irrefutable – especially economic forecasting. Some even engaged with their own confirmation bias: 'we each discard the "facts" that don't fit with how we wish the world to be. After all, everyone has bias as their default position from a young age' (G.S.). Consequently, a small number of them made space for values and norms in the narrative of their decision-making process: 'Economic uncertainty is probably at the bottom of my list of reasons for voting. […] there's economic uncertainty with "Remain" or "Leave". What is more important is deciding values and voting in accordance with them" (G.D.).

A SURVEY OF COURSE COMPLETERS

User engagement during the course of Remain or Leave? is very much in line with the average 10% completion figure demonstrated in various studies of MOOCs and the tendency for active engagement via discussion forums to be the preserve of a minority of extremely active students. An exit survey was conducted with the 68 students who had completed the MOOC in order to better understand what had motivated them, and what they had valued or found needed improvement. The response rate to the survey was 41% (n = 28). Without being representative of the whole cohort of 'completers', let alone all 551 students enrolled on Remain or Leave?, the survey offers a useful snapshot of who is likely to show sustained interest in a MOOC on a topical political issue and why.

First, survey results suggest that many of those who completed the course share two characteristics: most (18/27) had enrolled and completed a MOOC before, and most (46.5%) reported good or very good prior knowledge of the EU and related issues, while none reported 'very poor' prior knowledge. This suggests an already interested group of individuals who are used to seeking learning opportunities to further their understanding on issues of their choice. Nevertheless, despite an existing understanding of the topic, most respondents found that the MOOC had improved their knowledge of the six core themes explored in the course. Perception that the MOOC had 'somewhat' to 'strongly' improved their knowledge and understanding of key issues ranged from 81% for issues like the single market and sovereignty to 59% for UK politics. Only a minority (between 4% and 15%, depending on the issue) found that the MOOC had failed to improve their knowledge and understanding of issues.

Second, while the extent to which members of this cohort engaged with course material is uniformly high, the manner in which they chose to participate is highly differentiated. A majority (81%) of respondents reported engaging with the MOOC, either by following a lecture or logging into a

forum, at least once a week, with 31% of these students logging into the course more than once a week and 8% engaging with the MOOC at least once a day. The group is fairly evenly split between those who made use of the MOOC's deliberative and participative features, with 48% saying they had regularly used discussion forums to talk to each other. Other modes of deliberative participation, via social media such as Twitter, for example, had very low and infrequent uptake. Few respondents reported having been strongly motivated to finish the course as a result of engaging with their peers. This suggests that the cohort comprised individuals with strong personal motivation to participate and complete the course. Moreover, few participants reported having been somewhat persuaded to vote differently as a result of talking to their peers (2 out of 28). Nevertheless, the cohort reported having gained from peer engagement in different ways: 61.5% stated that engaging with their peers helped them learn something new and 58% said it make them rethink ideas or beliefs they had previously held.

Finally, most (89%) of those who completed the course found that the subject matter lent itself very well to the MOOC format, despite the complexity of the issue and uncertainty linked to learning about an unfolding debate. 100% of respondents said they were 'somewhat' or 'very' likely to enrol in a similar course in the future if it were offered. Feedback on the course format and content highlighted the fact that participants valued the MOOC as an impartial source of information. The course's perceived 'neutrality' was associated with efforts to discuss 'both sides of the argument' in a way that contrasted with 'the mainstream media' and 'untrustworthy politicians'. Moreover, the way that the course information was delivered was found to have facilitated sustained participation: respondents valued the jargon-free discussion of complicated issues and the comprehensive coverage of key issues. The overall sense was one of increased confidence in making and justifying opinions and arguments concerning the EU and the UK's relationship with it.

CONCLUDING DISCUSSION

Ultimately, the course's unsurprisingly low participation and completion rates imply that neither the hybrid design, combining traditional pedagogy with collective deliberation and peer-learning, nor the topicality of the subject matter altered the major structural constraints facing MOOCs. This suggests the ability of free online learning to counteract the EU knowledge deficit is limited, which is something to consider in light of the EU's increasing financial support for developing the European MOOC sector. By extension, hopes that MOOCs can play a leading role in counteracting the 'alternative facts' employed by populist politicians may also be wide of the mark. In particular, the dominance of users already knowledgeable about the debate and engaging with multiple sources of information suggests the user cohort that engages with a politically-sensitive MOOC is not representative of the electorate as a whole.

The course was purposefully designed to foster peer engagement and learning, primarily by means of the online forums. Analysis of participation in the discussions suggests that the course met this goal, at least with regards to the core cohort of active 'mega-users'. Not only did students engage with each other, building on each other's comments, thanking and encouraging each other, but they also sought to support each other's learning, by sharing relevant references, clarifying areas of uncertainty, and challenging each other in a courteous and respectful manner.

One interesting aspect of the Remain or Leave? cohort concerns the considerable participation of female students. The little research done on who enrolls on MOOCs has tended to highlight the overrepresentation of young educated male participants (eg. Christensen et al. 2013; Emanuel 2013; Kizilcec et al., 2013). In contrast, this course featured more women enrolled than men, an equal

number of women and men in the most active cohort, and sustained engagement on behalf of female participants in the discussion forums. The sensitivity to the issue of gender and 'voice', and to the power dynamics that often prevent women from speaking up in public forums, were embedded in the course from the beginning. As a result, for example, engagement with the students by means of the weekly live Q&A sessions was designed to respond to equal numbers of queries posted by women and men. More work needs to be done to explore why different groups enroll and whether or not gender plays a role in structuring the type of engagement between users. Nevertheless, despite their association with white-collar men, this course suggests that MOOCs may yet offer an opportunity for redressing certain demographic inequalities when it comes to accessing structured learning opportunities.

Moreover, the Euro-positive bent of participants' forum contributions is obviously not reflective of the distribution of votes cast in the UK referendum. Although no specific user profile data is available to corroborate this claim, studies of MOOCs have shown that there is a preponderance of users who already have an undergraduate degree taking the courses (Christensen et al., 2013; Heywood et al., 2015). This could certainly help explain the ideological position of average users in Remain or Leave? as Goodwin and Heath (2016) have found that support for leaving the EU was 30% higher amongst voters with only GSCE-level education or lower.

Significantly, the online forum contributions did not discuss the potential causal connection between educational achievement and attitudes to the EU. What did manifest itself, after the referendum result, was a focus on the age divide in British politics over whether EU membership is considered a good thing. This narrative of "blaming" older voters for Brexit can potentially be connected with a more general anti-system/anti-politics sentiment expressed by users in the forums. Indeed, the manifestation of such attitudes is a very telling indication of public frustration with the processes and personalities surrounding British politics. Such dissatisfaction amongst a politically engaged and well-informed cohort of MOOC users who were generally positive about the EU, or at least acknowledged its benefits, is suggestive of a broader gap between citizens and politicians which online learning itself is not equipped to resolve.

ACKNOWLEDGEMENTS

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