# BRINGING MOOCs INTO THE CLASSROOM: AN INTEGRATIVE COURSE DESIGN FOR TEACHING DIGITAL DEMOCRACY

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## 1. INTRODUCTION

Since The New York Times hailed 2012 as 'the year of the MOOC' (Pappano, 2012) the massive open online format has grown exponentially both in scope and ambitions, to a point where it now offers certified, highly focused micro-degrees in fields such as data science, software development and business administration. It seems, however, that political science as a discipline has not yet taken full advantage of the format. One reason is that political science tends to lose visibility by being lumped together with other disciplines in the often chaotic 'social sciences' category of big MOOC platforms. Another is that, unlike some of its more technical counterparts, political science has not been as efficient in adapting its teaching methods to the online medium. Typically, political science MOOCs follow the same pedagogical conventions one finds in the classroom, with pre-assigned readings and lecture slides, but the notable downside of students not being able to ask questions directly or have a space for discussion outside online forums. In spite of this, the MOOC model has two major advantages the discipline would benefit from. The first is that students can easily go back and consult the same material as many times as they need in order to fully understand a problem. The second is that the format uses different ways of presenting information and may potentially improve retention and further stimulate students' interest.

In this paper, I attempt to highlight some of the problems that political science faces in the quickly evolving MOOC landscape, and to explore some practical ways in which the massive open online model can adapted in order to work around these problems. The paper is structured in three parts. In the first one, I give an overview of trends and changes that occurred recently in the MOOC landscape, with a focus on interactivity and student engagement. In the second part, I take stock of the state of political science MOOCs by examining the subject matter, regional focus and source of

currently available courses. Finally, in the third part, I discuss the benefits of integrating MOOC-specific pedagogical approaches with traditional curricula in order to address the visibility problem and encourage classroom interactivity. I do this by outlining a preliminary course design for teaching digital democracy at Master level using the flipped classroom approach in combination with the principles of connectivism.

## 2. THE CHANGING MOOC LANDSCAPE

Discussing the state of higher education in the digital age, Elkana and Klopper (2016) point out that the shift towards hybrid/online education has been a bottom-up phenomenon: online and distance education has traditionally been a feature of community colleges and less reputable higher-education institutions, while prestigious universities continued to cultivate more traditional pedagogical approaches. However, the increasingly prohibitive costs of higher education, particularly in the United States, have now forced a turn towards online platforms, where the cost of accessing MOOCs has been comparatively very small (Pursel et al., 2016). Since MOOCs, as we know them today, were introduced in 2011, there have been changes in content and applicability, but not in structure. But in order to follow these quickly shifting trends, we must first understand what makes a MOOC a MOOC.

### a. Definition, features and content

Kaplan and Haenlein (2016, p. 444) define MOOCs in terms of three main features. Firstly, they are asynchronous, meaning that the instruction and learning processes can take place at different times. Secondly, they are a form of distance learning, where contact teaching is not available. And thirdly, there are no limits imposed on the number of participants. To this definition Baturay (2015) adds that MOOCs are open (participation is free of charge and materials are publicly available), participatory (learning material is created and shared by students) and distributed across various social networks. The latter two characteristics highlight the distinction that Kaplan and Haenlein make between connectivist MOOCs (cMOOC) and MOOCs based on the traditional lecture format (xMOOC). xMOOCs do not view student interactions as essential, although in most cases they are possible via online discussion forums. xMOOCs require more passive participation. On the other hand, in cMOOCs, the massive open format is used in combination with social media to enable students to create and share content across different networks. The instructor is no longer the main source of knowledge dissemination, but takes on the role of facilitator of student interactions. These

are essential for the connectivist approach, where there is no formal curriculum and little pre-determined material, and students produce and share learning.

### b. Recent MOOC trends

A few notable trends were evident at the end of 2016 (Shah, 2016b). Firstly, there has been no fundamental change in the format of MOOCs since their introduction five years prior, but they are now promoted differently. Namely the trend of 'packaging' MOOCs as specializations (Coursera), micro-masters (EdX) and nano-degrees (Udacity) led to monetization and created a paywall limiting the open character of MOOCs - although most courses can still be audited for free provided students are not interested in earning a certificate. In relation to monetization, there has been a trend of advertising courses as opening up possibilities for career advancement by placing emphasis on their applicability. This is particularly evident in disciplines such as computer science and business studies. However, providers offer neither guarantees, nor formal credentials upon course completion.

The third trend Shah describes is a change of pace that, in practice, reduced the massive dimension of MOOCs. Originally, MOOCs were university classes made available online and, as a consequence, tied to the semester structure of the academic year. Courses were available for limited periods, which placed a barrier on accessibility. But recently there has been a shift towards self-paced courses that can be followed year-round without any time constraints. In 2016 about one third of the courses on offer were self-paced and, as a result, the 'massive' dimension was significantly diluted. The instructor is removed from the active role in the course and, as Shah observes, the MOOC format has shifted from virtual classroom towards a 'Netflix experience' for learners. Finally, another outcome of self-paced MOOCs is reduced activity on course forums and thus less student interaction. Nevertheless, the problem of low interactivity is neither new, nor has it been effectively addressed once MOOCs took off in the last couple of years. Ironically, several researchers suggest that online discussion forums may be the source of both low engagement and reduced interactivity in the massive-open course format. In the following section, I discuss this issue in connection to completion rates, engagement and students' motivation.

### c. Engagement and interactions in MOOC environments

Are course completion rates an indicator of MOOC success? If so, the picture is quite bleak. Initially, due to the massive aspect of the courses, dropout occurred in the first weeks after registration, but this trend has become more difficult to track after the shift towards self-paced

content. A study by Breslow et al. (2013) illustrates the initial dropout problem. It examines the first MOOC available on EdX in 2012, 'Circuits and Electronics', and finds that less than 5% of the 155,000 students initially registered completed the course. Furthermore, the study finds no correlation between students' motivation for enrollment and successfully completing the course.

One explanation for the dismal completion rates is suggested by Xing et al. (2016) who point out that the consequences of failing a MOOC are minimal, since it is not usually attached to a formal credit system. They show that dropout could be reduced through instructor intervention if students who show some initial level of engagement but are nevertheless at risk of dropping out can be identified and prioritized. Another explanation for the low completion rates seems to come from the failure of MOOCs to provide effective interactivity, thus further reducing the already small level of student engagement. Moore (1989; 1993) describes three types of interactions in the learning process: student to student, student to instructor, and student to material. In the case of MOOCs, Khalil and Ebner (2013) show that these types of interactions happen in specific ways. Student to student interactions are the most frequent, and the use of social media is prevalent: Twitter for quick interactions, Facebook for sharing resources and blogs used by students to develop a social presence. Although discussion forums are the direct method of communication used by most MOOCs, they are not very effective, as we will see below. Student to instructor interactions usually happen in the form of announcements, guides and online 'office hours' where students can ask questions directly. Announcements are the most frequently used form of disseminating information, while the other types of interactions are significantly limited. Finally, student to content interactions consists of graded homework, quizzes and projects. Successful course completion depends on this type of interaction.

In general, the number of students registering in the beginning drops dramatically as the course progresses, while students whose motivation can be observed through the grades they receive tend to be more active on forums. Manning (2013) looks at data from 23 Stanford courses offered on Coursera in 2012-2013 and finds surprisingly low activity on discussion forums. In some cases, fewer than 10% of registered students made any posts, but in most the number was below 5%. 'Non-engagers', defined as individuals whose overall course grade was below 10%, accounted for 86% of the total registered participants. Omitting these from forum activity produces only a small change in the traffic: the median percentage of students making at least one post was 12.3%. In the case of students who were engaged enough to work towards grades of 60% and above, the median percentage was 19.3%. For high achievers with course grades above 90% the percentage was 21.7%.

This shows that, out of the total number of participants who registered initially, the percentage of students who are both significantly engaged and interactive is quite small.

While interactivity is not a good indicator of completion rates, student engagement is. Trowler (2010) defines student engagement as participation in educational activities in and out of the classroom, which are related to intended and measurable learning outcomes. She describes engagement as an '[i]nteraction between the time, effort and other relevant resources invested by both students and their institutions intended to optimize the student experience and enhance the learning outcomes and development of student and the performance, and the reputation of the institution' (p.2). Trowler further differentiates between styles of student engagement (p. 12-13) across an academic and a social dimension. Intense engagement entails a high level of involvement with academic studies in a responsive environment. Independent engagement is more academic and less social in nature. Collaborative engagement favors social aspects of the learning process. Passive engagers rarely participate in productive learning and are usually not active in the academic community.

In the case of MOOCs, these aspects are somewhat different. On the one hand, since MOOCs have become increasingly self-paced, there are fewer time restrictions, at least in terms of access to course material. On the other hand, self-pacing also means that the responsibility for organizing the learning process falls entirely on the student, and in cases where motivation is low, this can compromise course completion. Looking at Manning's (2013) findings for the link between interactivity and course completion, it becomes clear that the majority of MOOC participants fall into three categories: non-engagers, passive engagers and independent engagers. Collaborative and intense engagement is either very much reduced, or entirely absent. There are, however, some remedies for MOOCs' failure to create a sense of community through discussion forums. McGuire (2013) suggests that a complementary approach that facilitates more direct interaction between students, such as the use of social media, webinar types of events or live meetings where students are able to engage with instructors, may encourage active participation and boost course completion.

### d. Three challenges for the future of MOOCs.

Looking at the current state of the MOOC landscape, especially in the context of trends emerging as recently as 2016, three interrelated challenges can be identified. The first, and perhaps most urgent, is to shift student engagement from individual and passive towards a more collaborative

style. The second is addressing the high dropout rates, which could be reduced if students find motivation to stay with the course, in a context where formal credentials for completing the course are still the exception. Finally, current teaching methods should be adapted in response to these issues. This may affect the overall structure of MOOCs - particularly the massive dimension - but the payoff is worthwhile, especially since there is already a trend towards more diffuse participation through self-pacing.

### 3. THE VISIBILITY PROBLEM OF POLITICAL SCIENCE MOOCs

In addition to confronting the challenges highlighted in the previous section, political science MOOCs have a notable visibility problem. Three factors lead to low visibility: the absence of a dedicated 'political science' category on all major MOOC platforms, the failure to 'package' and monetize these courses efficiently, and the lack of interactivity in teaching methods for a discipline with a notable theoretical bias over practical application. In this section I briefly outline each of these problems and discuss potential solutions.

#### a. The 'Social sciences' category

On every major platform political science MOOCs are lumped together with other loosely related subjects, such as sociology and economics, under a generic 'social science' category. As a consequence, political science MOOCs make up a small fraction of an already relatively small category within the MOOC landscape. According to Shah (2016a) the subject distribution of MOOCs places social sciences in the fourth place as of 2016, with 9.82% of the total 6,850 courses on offer. This is relatively close to the number of science MOOCs (10.4%) but considerably lower than the two most popular categories, computer science and programming (17.4%) and business and management (19.3%). On top of this, the proportion of clearly identifiable political science MOOCs taught in English in the social science categories is consistently very small: 6.1% on EdX, 5.9% on Coursera and 4.1% on Udemy (see Appendix 1 and part 3 of this paper for more details)

#### b. Monetization

Political science has fallen behind the growing trend of MOOC monetization. While all political science MOOCs available on Coursera, and several of those available on EdX offer a paid certificate option, with prices ranging between $41 and $99, the 'packaging' approach that dominates the computer science and business categories is absent. No structured specializations or micro-degrees

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could be identified. The closest related specialization available on Coursera is 'Methods and statistics in social sciences': a 5-course module that covers mainly quantitative methods, with no specific focus on political science[1]. Although no data is currently available to support this, it is a reasonable assumption that the main explanation for the absence of 'packaging' for political science MOOCs is due to the small overall size of the category, a lack of interest from students, or a low connection to the career advancement prospects that drive the recent proliferation of computer science and business specializations.

### c. Teaching methods

Although not specific to political science MOOCs, the lack of interactivity in teaching exacerbates the already serious shortcomings described above. In practice, political science MOOCs translate the classroom experience online, but leave out the benefit of student to teacher interaction. Of course, this may differ on a case by case basis, based on the number of participants and individual instructors' approaches, but in the larger context of typical MOOC features, where student to student and student to content interactions dominate, instructors' diminished presence can lower engagement and lead to smaller completion rates. Furthermore, the format and subject matter of political science MOOCs anchor them firmly in the more traditionally academic area of the MOOC landscape, compared to categories that have more practical, career-enhancing applications.

### d. Potential solutions to the visibility problem

It is difficult to pinpoint individual solutions to these three issues. Due to the small proportion occupied by political science among other social science subjects, it is not realistic to expect that any of the major MOOC platform would provide a special category to enhance visibility. On a similar note, monetization is already in place formally, but reduced interest and career applicability result in the absence of 'packaging' political science MOOCs in specializations or micro-degrees. Visibility could, however, benefit from integrating MOOCs with university curricula by taking a complementary approach in combining offline and online teaching. Surprisingly, this practice has only been introduced very recently, with students of Georgia Tech and the Massachusetts Institute of Technology being able to earn credits for participating in computer science and education MOOCs.

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[1]  https://www.coursera.org/specializations/social-science

A slightly different approach to integrating online and offline learning is used in the 'Introduction to Social Research Methods' MOOC offered by the University of Edinburgh via EdX. Students enrolling in this course work in parallel with on-site students who are taking the course in order to earn credits. In the introductory video, lead instructor Dr. Jeremy Knox assures students that 'we'll be together as one learning community. If you join us, this will give you a sense of what it's like to study here at the University of Edinburgh'[2]. This approach reflects the argument McGuire (2013) makes, that creating a sense of community in MOOCs requires a hybrid approach, since the massive aspect in particular creates isolation. However, relevant data is not currently available from the Social Research Methods MOOC to determine if the approach has been successful thus far.

The advantage of integrating political science MOOCs with academic curricula is twofold. On the one hand, it can increase the online visibility of courses that are otherwise 'buried' in a somewhat chaotic general category that is rarely highlighted on MOOC platforms. On the other hand, complementing teaching in classroom settings with online teaching gives students access to more diverse material and learning methods.

## 4. A CURRENT OVERVIEW OF POLITICAL SCIENCE MOOCS

### a. Typology

Political science courses are currently available online in two forms: the first consists of video and audio recordings of traditionally taught courses made available on platforms such as Youtube and iTunes; the second consists of courses following a typical xMOOC structure. The first type of courses openly available online has certain advantages from a teaching perspective. The fact that they are not designed as interactive, connectivist MOOCs means that individual lectures may be taken out of the larger context and used in the classroom. This is further facilitated by the fact that these lectures are individually available online through Youtube or iTunes and can be accessed directly, without the requirement of enrolling in a full course. This provides instructors with the freedom to introduce such lectures in the syllabus together with other types of learning material and goes well together with the flipped classroom model (The Flipped Learning Network, 2014) which allows time for discussion in the classroom rather than conventional lecturing. In the absence of the structure that MOOCs provide, it falls to the instructor to provide guidelines for students to

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[2] https://www.edx.org/course/introduction-social-research-methods-edinburghx-socrmx

get the most out of this type of material. In effect, this is not so much a case of bringing MOOCs into the classroom as using different kinds of materials in regular teaching environments.

The advantage of the second type, following the xMOOC model, is that it helps structure the learning process without much instructor input in the classroom. Students can access the material beforehand, which leaves time for classroom for all types of interactions described by Moore (1989; 1993). On the other hand, due to its structured nature, material from xMOOCs cannot easily be integrated in individual lectures. Access is conditioned by registration to the entire course, which may be cumbersome. A further disadvantage, that may affect both types, is long-term availability. While MOOC platforms may archive past courses for further access, there is no guarantee that the material will be publicly available in the future. This is even more of a problem for lectures accessible through YouTube and iTunes, where files can be deleted without notice.

b. **Availability and coverage of current political science MOOCs**

60 courses were identified on three major MOOC platforms (Coursera, EdX and Udemy) as well as different sources like Youtube and iTunes. The latter were found through a list curated by the Open Culture website (Open Culture, accessed 15 September 2017 - see Appendix 1). Out of these, a little over a third of the courses (22) were based on YouTube and iTunes as free and open (accessible without registration).

Coursera is the largest provider of political science MOOCs, with 23 courses (38.3%), followed by EdX with 14 (23.3%). On Udemy it was possible to identify only one political science course out of the 24 courses available in the social sciences category. In terms of accessibility, all Coursera courses require students register on the website and formally enroll. They can then either audit for free, or earn a certificate costing a fixed amount of $41. On EdX the majority of the courses are free, although they also require registration and enrollment. Four of the courses offer certificates with prices ranging between $49 and $99. These were provided by Harvard University, Massachusetts Institute of Technology, Tsinghua University and Delft University of Technology.

Despite the small overall number of courses, the subject focus is quite diverse. As Figure 1 below shows, the majority of courses covered multiple topics, followed by political philosophy and political science. Democracy and political institutions share the third position, while participation and elections make up a little under 10% of all courses. Notably, the more practically oriented policy-making subject is also the least represented.

Figure 1. MOOC subject focus



Figure 1. MOOC subject focus
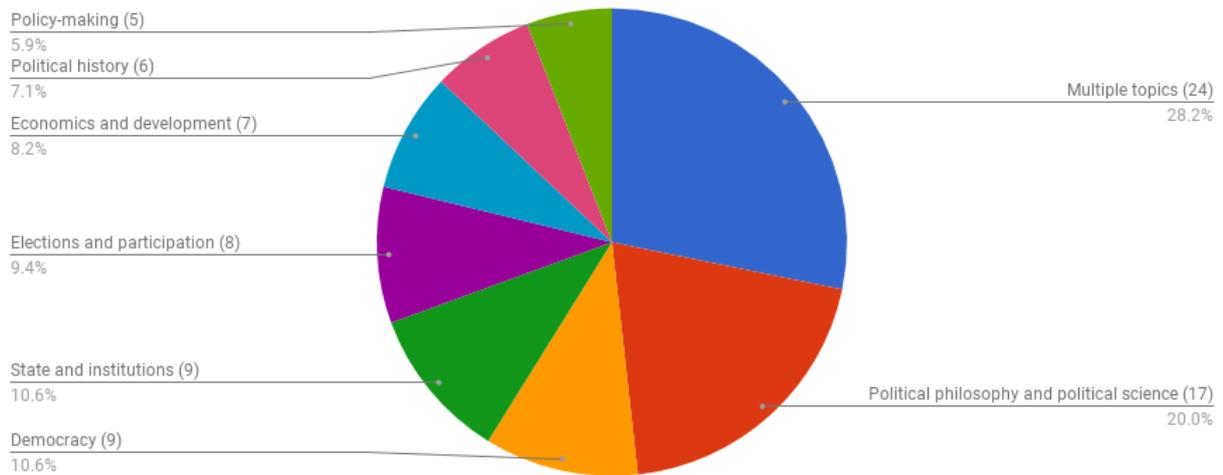
The regional focus (Figure 2) is similarly diverse, but notably dominated by the United States, with almost a quarter of the total. They are followed at a considerable distance by China, Africa and Europe. Only a few courses have either a worldwide focus, or deal with more than one region. The majority, however, have no regional focus at all, mostly corresponding to the political philosophy courses mentioned above.

Figure 2. MOOC regional focus
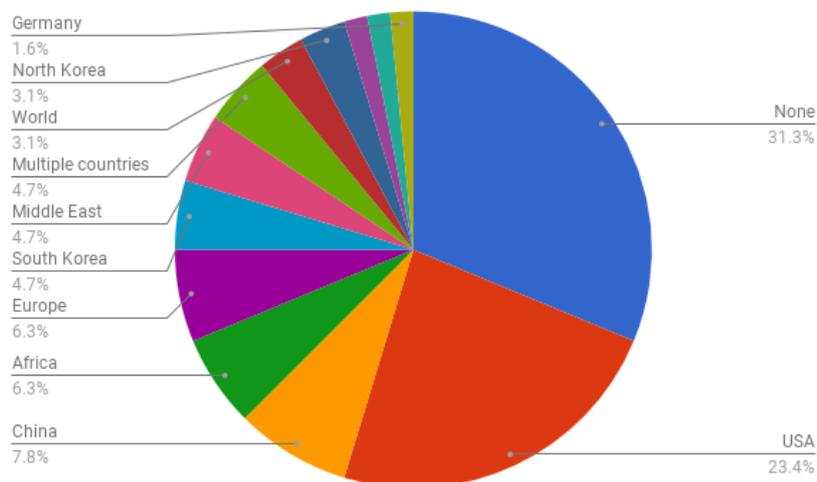


The strong regional focus on the United States can be explained by the fact that more than half of the universities across all platforms are American (Figure 3). One quarter of MOOCs are provided by European Universities, while the rest is covered by Asian and Australian Universities.

**Figure 3. MOOC providers**



Australian Universities (2)
3.3%
Asian Universities (10)
16.7%
American Universities (33)
55.0%
European Universities (15)
25.0%
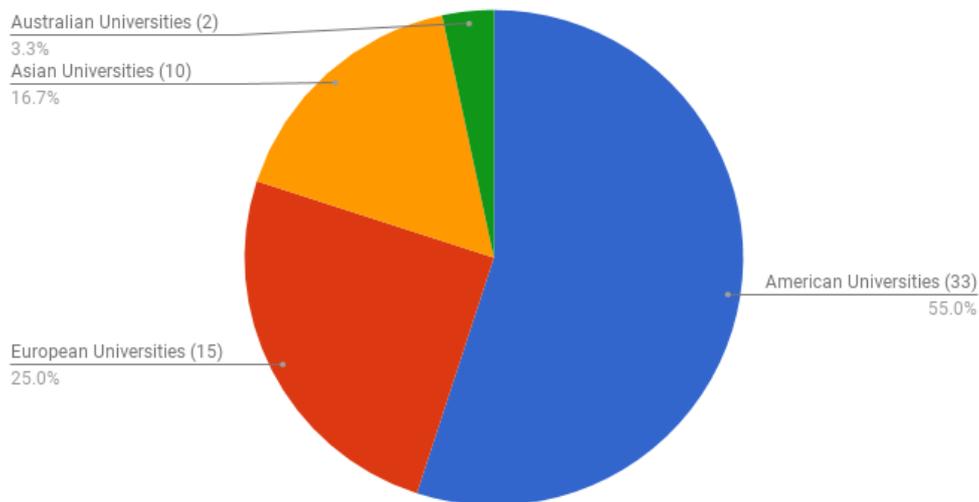
On the topic of MOOC providers, it is also worth noting that 10 out of 60 courses are offered by top 10 universities according to the QS 2017 ranking. Four courses are provided by Harvard, three by Stanford, and one by Cambridge, Oxford and Princeton each. The subject focus of these courses covers elections, democracy, political philosophy and political institutions.

In sum, the political science MOOC landscape, although small, has three distinct features. Firstly, there is a clear theoretical bias towards political philosophy, democracy and institutions, while subjects with higher degrees of applicability make up only a small proportion. Secondly, as a consequence, most courses do not have a clear regional focus. Where such a focus is present, it disproportionately represents the United States, in part because most providers of political science MOOCs are American universities. Finally, only a small number of courses (16.6%) is offered by top 10 universities.

Two practical lessons can be derived from this picture. The first is that there is plenty of room for developing courses with a higher degree of applicability, for instance on policy-making. This would not only enrich a poorly represented niche, but also bring political science closer to the 'career development' aspect of MOOCs and potentially increase the chance of packaging and more efficient monetization. The second lesson is that the strong regional focus on the United States is a consequence of the over-representation of American universities among providers. Thus, there is room for expanding coverage, for instance, to current regional hotspots, such as the MENA region or North Korea.

## 5.  BRINGING MOOCS INTO THE CLASSROOM

The idea of bringing MOOCs into the classroom is not simply equivalent to using a more diverse range of audio-video and online materials to enhance teaching in a traditional classroom setting. In the previous parts of this paper I highlighted the challenges that MOOCs, and political science MOOCs in particular, are currently confronting: low completion rates, lack of student engagement and unadaptable teaching methods. All these problems can find potential solutions in the classroom: students are more motivated to complete courses thanks to formal credentials being provided, teachers can easily identify non- or passive engagers and motivate them, and increased student-to-teacher interactions can encourage more flexible teaching methods, depending on the needs of course participants.

At the same time, cMOOCs, the typology this paper focuses on from this point, have their own advantages over classroom settings. Most notably, they are collaborative and encourage students to produce and share their own learning material across different types of networks. Secondly, they encourage more continuity in learning which, typically for MOOCs, happens outside the classroom. And thirdly, combining collaboration with a problem-solving approach to learning can open up more opportunities for practical applications, which political science MOOCs fall short of. Table 1 below summarizes some of the strengths and weaknesses of both settings.

A hybrid approach would bring together the good practices of cMOOCs and the flipped classroom model (Flipped Learning Network, 2014; Berret, 2012). Flipped learning transfers direct instruction from the instructor to the student. Course participants familiarize themselves with the material in advance, and the classroom setting is used for interactive discussions and group activities. MOOCs and the flipped classroom model are based on the same kind of student to content interaction, so the process of creating a hybrid approach could use this similarity as a point of departure. From here, integrating the connectivist principle central to cMOOCs into the classroom setting could be done by encouraging students to find and share learning material themselves, based on a few clear guidelines provided by the instructor. In the classroom, a useful focus for political science courses could be a problem-solving approach which provides students with more practical, applicable skills, rather than predominantly theoretical orientation.

**Table 1. Strengths and weaknesses of cMOOCs and classroom setting**

| TYPE | STRENGTHS | WEAKNESSES |
|---|---|---|
| Traditional classroom setting | Student to teacher interaction, small groups, formal credentials for course completion | learning process limited to course schedule, individual or passive types of student engagement |
| cMOOCs | Collaborative, learning can happen outside the classroom, more opportunities for practical applications through problem-solving approaches | Massive, teachers play significantly reduced role |

This hybrid model faces two challenges. The first is placing an even greater emphasis on students' efforts compared to both MOOCs and flipped learning. In addition to reading or viewing the material in advance of the course, students are also responsible for finding and sharing content. Thus, the success of this approach depends on cultivating high levels of motivation among students and encouraging collaborative engagement. The second challenge is somewhat related and has to do with the course level: the hybrid approach may not be as suitable for basic or introductory courses as for more advanced ones where students already have a similar level of basic knowledge and may feel more confident in creating and sharing learning material by themselves. In the following section, I give a short example of course design using the hybrid approach where I also try to address these two challenges in a practical way.

## 6. A COURSE DESIGN IDEA: DIGITAL DEMOCRACY

### a. Curriculum integration and prerequisites

This course is proposed as part of the 'Democracy Research' module currently available for two political science Master's programs at the University of Helsinki: Global Politics and Communication, and European and Nordic Studies. Starting in 2018, this module will have a total of 10 ECTS, divided into a 10-session contact teaching course called 'The Practice of Research on Democracy' and a literature exam, consisting of 5 ECTS each. I have previously taught the 'Practice of Research on

Democracy' course twice, using the flipped classroom model with good results in terms of student engagement and course completion. The goal of proposing a course on digital democracy is to replace the literature exam with a more practical course that builds on the previous teaching in the module, where students become familiar with the main theories and debates in the field of democracy, as well as how to formulate and address different kinds of research question. Thus, the 'Practice of Research on Democracy' is a prerequisite for the more advanced 'Digital Democracy' course.

### b. Course design principles and learning objectives

Three features of flipped learning are maintained in this course design: there is a small number of participants (maximum 20), students familiarize themselves with the material in advance, and classroom time is reserved for interactive work. Principles from the cMOOC format apply to the way learning material is produced and shared. The first session of the course should be reserved for students engaging in group work to define the learning objectives with support from the teacher (e.g. guidelines on how to formulate learning objectives using active verbs). Since in this approach there is no fixed curriculum from the beginning, students build an informal curriculum based on the most common learning objectives. From this point on, the remaining nine sessions will follow this curriculum. The teacher's role at this stage is to act as a guide and ensure that by the end of the session the learning objectives and curriculum are established, then to gather all the information in a single place, ideally a course blog that can also be used later in a collaborative way by the students.

### c. Classroom activities and learning materials

Outside the classroom, students look for and share learning materials they find relevant for the following sessions. The teacher can also contribute to this, but it should be made clear that the materials distributed by them are not compulsory or more important than those students share with eachother. During classroom sessions students work in groups to address a practical issue pertaining to digital democracy and related to the course objectives. For example, they can observe the social media activity of a certain politician over a period of time, examine the fake news phenomenon or follow the online evolution of a citizen initiative. They can also take a more creative approach in which they suggest, for instance, how online tools can be used to solve an existing problem.

Ideally, classroom work should follow a sort of hackathon format where students work continuously throughout the course to define their problem, describe its background, find suitable methods to solve it and present the results to their colleagues in the last session. If students are open to this, they can also share their progress on the course blog, but depending on their expressed interest, the teacher should decide in the beginning whether this is optional or will be a course practice for all participants. The teacher maintains a moderately active role as a guide, and is available for responding to students' questions and concerns.

### d. Student participation and evaluation

Unlike the usual contact learning approach there is no compulsory attendance, but due to the group-work format described above students should be encouraged to participate in classroom sessions. If this is not possible, they should nevertheless have some equivalent input for missed sessions using the course's social media channels. In the final evaluation students present the results of their collaborative project in a format of their own choice.

### e. Course feedback

Course feedback is collected in a similar way to the feedback given in traditional classroom settings, but the teacher should pay special attention to comments about the course workload and adjust their approach accordingly in the future. There is also the option of collecting feedback continuously during the course through less formal communication if students seem responsive to the idea.

## 7. CONCLUSIONS

The aim of this paper was to describe the current MOOC landscape with regards to political science and point out some of the challenges the discipline faces in trying to take integrate online tools in its teaching and learning approaches. I have shown that, while the current number of political science courses on offer is small, it is quite diverse in terms of topics, although with a noticeable theoretical bias. Therefore, there is room for more diversity, particularly in developing the more applicable subjects, which could also help bring more visibility to political science in the social sciences category. Similarly, there are opportunities for developing regional focus to cover more diverse, politically relevant cases. Right now the main geographic focus of MOOCs is the United States and, to a significantly lesser degree, China and Europe.

Aside from visibility, the other challenge political science MOOCs should address is the failure, thus far, to adapt teaching methods in order to take better advantage of online media. I suggest that bringing MOOCs into the classroom is not simply a matter of importing different kinds of learning materials to complement traditional lectures and course readings, but one of adapting a few useful principles from connectivist MOOCs to enhance the flipped learning model. Students who already have a reasonable grasp on a certain subject would benefit from exploring it further from a more active position, which can help develop practical skills and reorient the discipline's theoretical bias. Combining the two methods does not, however, solve the problems that political science MOOCs currently face – in particular that of visibility. This approach is still very much applied in the classroom, with small groups and the possibility of student to teacher interactions. Adapting online teaching methods to enhance the interactivity of political science MOOCs is somewhat more complicated. Paradoxically, it may be their current lack of visibility that allows for better direct interactions, although this is still nevertheless dependent on stimulating collaborative student engagement over individual and passive one. Adapting teaching methods to focus on student engagement could therefore be a good starting point for course developers.

# APPENDIX 1: POLITICAL SCIENCE MOOCs

| # | COURSE NAME | STATUS | COST | SUBJECT FOCUS | REGIONAL FOCUS | UNIVERSITY | PLATFORM |
|---|---|---|---|---|---|---|---|
| 1 | Introduction to Political Philosophy | Open | Free | Political Philosophy | None | Yale | Youtube/iTunes |
| 2 | Marxism | Open | Free | Political Philosophy | None | Cambridge University | Youtube |
| 3 | Modern Political Philosophy | Open | Free | Political Philosophy | None | Harvard University | Youtube |
| 4 | Political Philosophy: Ideas of the 20th Century | Open | Free | Political Philosophy | None | UT Austin | Youtube |
| 5 | Social and Political Philosophy | Open | Free | Political Philosophy | None | Rochester Institute of Technology | Youtube |
| 6 | Social and Political Philosophy (Economy) | Open | Free | Political Philosophy | None | University of Georgia | Audio |
| 7 | African American Studies: Intro to African American Political Throught | Open | Free | Political Philosophy | USA | UCLA | Youtube |
| 8 | American Democracy and Citizenship | Open | Free | Political institutions, democracy | USA | Missouri State | iTunes |
| 9 | British Government | Open | Free | Political institutions | UK | LSE | Youtube |
| 10 | Conceptual Foundations of International Politics | Open | Free | International relations | World | Columbia University | Youtube |
| 11 | Elections 2012 | Open | Free | Elections | USA | Stanford University | Youtube |
| 12 | Environmental Politics and Law | Open | Free | Environment, policy | None | Yale | Youtube |
| 13 | Geography of United States Elections | Open | Free | Elections | USA | Stanford University | Youtube |
| 14 | Resistance School' | Open | Free | Democracy, civil society | USA | Harvard University | Youtube |
| 15 | International Political Economy | Open | Free | Economics, Globalization | World | Middlebury College | iTunes |
| 16 | German Politics: An Introduction | Open | Free | Political institutions, elections | Germany | University of Oxford | iTunes |
| 17 | Politics and Strategy | Open | Free | Game theory | None | UCLA | Youtube |
| 18 | 2nd Amendment | Open | Free | Constitution, democracy | USA | University of Oklahoma | iTunes |

| 19 | Science Fiction and Politics | Open | Free | Politics, fiction | None | Emory University | iTunes |
|----|-----------------------------|------|------|-------------------|------|-------------------|--------|
| 20 | State of the Union 2014 | Open | Free | Democracy | USA | Stanford University | Youtube/iTunes |
| 21 | The European Union in the New Millenium | Open | Free | EU | Europe | LaTrobe University | iTunes |
| 22 | The Moral Foundations of Politics | Open | Free | Political Philosophy | None | Yale | Youtube/iTunes/Coursera |
| 23 | Political Economy of Institutions and Development | Enrol/Free + Paid certificate | 41 Euro | Economics, development | World | Universiteit Leiden | Coursera |
| 24 | Chinese Politics I: China and Political Science | Enrol/Free + Paid certificate | 41 Euro | Political science | China | The Hong Kong University of Science and Technology | Coursera |
| 25 | Chinese Politics II: China and the World | Enrol/Free + Paid certificate | 41 Euro | International relations | China | The Hong Kong University of Science and Technology | Coursera |
| 26 | Geopolitics of Europe | Enrol/Free + Paid certificate | 41 Euro | History, geopolitics, economics, political science | Europe | Sciences Po | Coursera |
| 27 | Public Policy Challenges of the 21st Century | Enrol/Free + Paid certificate | 41 Euro | Public policy | None | University of Virginia | Coursera |
| 28 | After the Arab Spring: Democratic Aspirations and State Failure | Enrol/Free + Paid certificate | 41 Euro | Democracy | Middle East | University of Copenhagen | Coursera |
| 29 | Constitutional Struggles in the Muslim World | Enrol/Free + Paid certificate | 41 Euro | Politics, participation, religion | Middle East, Africa | University of Copenhagen | Coursera |
| 30 | The Emergence of the Modern Middle-East I | Enrol/Free + Paid certificate | 41 Euro | Politics, state, religion | Middle East | Tel Aviv University | Coursera |
| 31 | The Emergence of the Modern Middle-East II | Enrol/Free + Paid certificate | 41 Euro | Politics, state, religion, security | Middle East | Tel Aviv University | Coursera |
| 32 | Chemerinsky on Constitutional Law - The Structure of the Government | Enrol/Free + Paid certificate | 41 Euro | Constitution, democracy | USA | University of California | Coursera |

| 33 | Israel State and Society | Enrol/Free + Paid certificate | 50 Euro | State, society, geopolitics, history | Israel | Hebrew University of Jerusalem | Coursera |
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| 34 | Revolutionary Ideas: Utility, Justice, Equality, Freedom | Enrol/Free + Paid certificate | 41 Euro | Political Philosophy | None | University of Pennsylvania | Coursera |
| 35 | Federalism and Decentralization: Evaluating Africa's Track Record | Enrol/Free + Paid certificate | 41 Euro | Political science, case studies | Africa | Universiteit Leiden | Coursera |
| 36 | Understanding Korean Politics | Enrol/Free + Paid certificate | 41 Euro | Politics, society, political culture, history | South Korea | Yonsei University | Coursera |
| 37 | The Politics of Skepticism | Enrol/Free + Paid certificate | 41 Euro | Political Philosophy | None | Erasmus University Rotterdam | Coursera |
| 38 | Act on Climate: Steps to Individual, Community and Political Action | Enrol/Free + Paid certificate | 41 Euro | Environment, policy, participation | None | University of Michigan | Coursera |
| 39 | Global Diplomacy - Diplomacy in the Modern World | Enrol/Free + Paid certificate | 41 Euro | Diplomacy | None | University of London, SOAS University of London | Coursera |
| 40 | Politics and Economics of International Energy | Enrol/Free + Paid certificate | 41 Euro | Energy policy | None/covers EU | Sciences Po | Coursera |
| 41 | International Cyber Conflicts | Enrol/Free + Paid certificate | 41 Euro | Conflict management, cyber crime, international cooperation | None | The State University of New York | Coursera |
| 42 | Understanding Europe: Why It Matters and What It Can Offer You | Enrol/Free + Paid certificate | 41 Euro | EU legislation/work, travel etc. | EU | HEC Paris | Coursera |
| 43 | Planning for Climate Change in African Cities | Enrol/Free + Paid certificate | 41 Euro | Climate change, urban planning, local administration | Africa | Erasmus University Rotterdam | Coursera |
| 44 | The Making of the US President: A Short History of Five Elections | Enrol/Free + Paid certificate | No info | Elections, case study | USA | The University of Edinburgh | Coursera |

| 45 | Contemporary India | Enrol/Free + Paid certificate | No info | Political change, socio-economic issues | India | The University of Melbourne | Coursera |
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| 46 | Framing: How Politicians Debate | Enrol/Free + Paid certificate | 50 Euro | Political communication | None | Delft University of Technology | EdX |
| 47 | American Government | Enrol/Free + Paid certificate | 99 USD | Political institutions | USA | Harvard University | EdX |
| 48 | Democracy and Development: Perspectives from Africa | Enrol/Free + Paid certificate | 49 USD | Democracy, development | Africa | Massachusetts Institute of Technology | EdX |
| 49 | Introduction to Mao Zedong Thought | Enrol/Free + Paid certificate | 49 USD | Political Philosophy | China | Tsinghua University | EdX |
| 50 | US Government - Foundations, Democracy and Politics | Open | Free | Political institutions | USA | Purdue University | EdX |
| 51 | Psychology of Political Activism: Women Changing the World | Open | Free | Activism, feminism | USA | Smith College | EdX |
| 52 | Democratic to Authoritarian Rule | Open | Free | Democracy, authoritarianism | None | University of Michigan | EdX |
| 53 | International Politics in the Korean Peninsula 1 | Open | Free | History, political philosophy | South Korea, North Korea | Seoul National University | EdX |
| 54 | International Politics in the Korean Peninsula 2 | Open | Free | History, political philosophy | South Korea, North Korea, China, Japan | Seoul National University | EdX |
| 55 | Will China Rise as a Disruptive Force? The Insiders' Perspective | Open | Free | History, political processes | China | Tsinghua University | EdX |
| 56 | Making Government Work in Hard Places | Open | Free | Political institutions, political economy | None | Princeton University | EdX |
| 57 | US Voting Access and Fraud | Open | Free | Elections | USA | Davidson College | EdX |
| 58 | Freedom of Expression in the Age of Globalization | Open | Free | Rights and freedoms, globalization | None | Columbia University | EdX |
| 59 | Central Challenges of American National | Open | Free | Policy making, security | USA | Harvard University | EdX |

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|----|----------------------------------------------------------|------|------|-----------|-----|------------------------------------------------|-------|
| | Security, Strategy and the Press | | | | | | |
| 60 | Is American Democracy Broken? Perspectives and Debates | Open | Free | Democracy | USA | Jeb Barnes/University of Southern California | Udemy |

**BIBLIOGRAPHY**

Baturay, M.H. (2015). An overview of the world of MOOCs. Procedia - Social and Behavioral Sciences 174, p. 427-433

Berret, D. (2012). How 'Flipping' the Classroom Can Improve the Traditional Lecture. The Chronicle of Higher Education. Retrieved from: http://www.chronicle.com/article/How-Flipping-the-Classroom/130857/

Breslow, L., Pritchard, D., DeBoer, J., Stump, G. and Seaton, D. (2013). Studying Learning in the Worldwide Classroom. Research into EdX's First MOOC. Research and Practice in Assessment, 8, p. 13-25

Easton, S. (2003). Clarifying the instructor's role in online distance learning. Communication Education, 52(2), p. I87-105.

Elkana, Y. and Klopper, H. (2016). The University in the 21st Century. Teaching the New Enlightenment at the Dawn of the Digital Age. Budapest: Central European University Press

Flipped Learning Network (2014). Definition of Flipped Learning. Retrieved from https://flippedlearning.org/definition-of-flipped-learning/

Hill, P. (2013). MOOC Discussion Forums: barrier to engagement? Retrieved from http://mfeldstein.com/mooc-discussion-forums-barriers-engagement/, retrieved 17 September 2017

Kaplan, A.M and Haenlein, M. (2016). Higher education and the digital revolution: About MOOCs, SPOCs, social media and the Cookie Monster. Business Horizons 59(4), p. 441-450

Khalil, H., Ebner, M. (2013). Interaction Possibilities in MOOCs – How Do They Actually Happen?, International Conference on Higher Education Development, p. 1-24, Mansoura University, Egypt

Lewin, T. and Markoff, J. (2013). California to Give Web Courses a Big Trial, The New York Times. Retrieved 17 September 2017, Retrieved from http://www.nytimes.com/2013/01/15/technology/california-to-give-web-courses-a-big-trial.html

Manning, J. (2013). How widely used are MOOC forums? A first look. Stanford Teaching Commons. Retrieved from https://teachingcommons.stanford.edu/teaching-talk/how-widely-used-are-mooc-forums-first-look, accessed 17 September 2017

Markoff, J. (2013). Measuring the Success of Online Education, The New York Times. Retrieved 17 September 2017, Retrieved from http://bits.blogs.nytimes.com/2013/01/17/measuring-the-success-of-online-education

McGuire, R. (2013). Building a Sense of Community in MOOCs, Campus Technology, Retrieved from https://campustechnology.com/Articles/2013/09/03/Building-a-Sense-of-Community-in-MOOCs.aspx?m=1&Page=1 retrieved 17 September 2017

Moore, M. G. (1989). Editorial: Three types of interaction. The American Journal of Distance Education, 3(2), p. 1-6.

Moore, M. J. (1993). Three types of interaction. In Harry, K., John, M., & Keegan, D. (Eds.), Distance education theory, New York: Routledge

Pappano, L. (2012). The Year of the MOOC. The New York Times. Retrieved from: http://www.nytimes.com/2012/11/04/education/edlife/massive-open-online-courses-are-multiplying-at-a-rapid-pace.html

Pattillo, G. (2005). Teaching online: A time comparison. College and Research Libraries News, 66(6), p.500

Pursel, B.K., Zhang, L., Jablokov, K.W., Choi, G.W. and Velegol, D. (2016). Understanding MOOC students: motivations and behaviours indicative of MOOC completion. Journal of Computer Assisted Learning, 32(3), p. 202-217

Shah, D. (2016a). By the Numbers: MOOCs in 2016. Class Central. Retrieved from: https://www.class-central.com/report/mooc-stats-2016/, accessed 17 September 2017

Shah, D. (2016b). MOOC Trends in 2016: MOOCs No Longer Massive. Class Central. Retrieved from: https://www.class-central.com/report/moocs-no-longer-massive/, accessed 17 September 2017

Shah, D. (2017a). MOOC Course Report: October 2017. Class Central. Retrieved from: https://www.class-central.com/report/mooc-course-report-october-2017/, accessed 11 October 2017

Shah, D. (2017b). At MIT and Georgia Tech, MOOCs Are Showing Up on Campus. Class Central. Retrieved from: https://www.class-central.com/report/mit-georgia-tech-moocs-show-up-on-campus/, accessed 17 September 2017

Sharma, P. and Xie, Y. (2008). Student Experiences of Using Weblogs: An Exploratory Study. Journal of Asynchronous Learning Networks, 12(3-4), p. 137-156

Su, B., Bonk, C.J., Magjuka R.J., Liu, X. and Lee, S. (2005). The Importance of Interaction in Web-Based Education: A Program-level Case Study of Online MBA Courses, Journal of Interactive Online Learning, 4(1), p. 1-19.

Trowler, V. (2010). Student engagement literature review. The Higher Education Academy, 11. P. 1-70

Xing, W., Chen, X., Stein, J. and Marcinkowski, M. (2016) Temporal predication of dropouts in MOOCs: Reaching the low hanging fruit through stacking generalization. Computers in Human Behavior, 58, p. 119-129