

MOOCs Offer Students Opportunity to Grow as Writers

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ABSTRACT

At this juncture, most MOOCs emerge from disciplines that rely primarily on lectures for content delivery and multiple-choice exams for student assessments. As such, disciplines in the natural sciences and social sciences can develop and adapt course content for MOOCs in a manner that parallels, at least to some degree, their main pedagogy in residential classrooms. Less transportable toward MOOCs, it seems, are humanities-based disciplines and the more student-centered, humanistic elements of pedagogy and assessment across disciplines, such as team-based learning, student-driven discussion and presentations, and writing. However, the latter of these—writing—is central to learning. It enables students to think critically, apply, synthesize, and analyze ideas, compare ideas, connect more personally with course material, conduct ethical reasoning, and engage with, retain, and carry forward course material on deeper levels. Using my own experience teaching a writing-based MOOC through Coursera in spring 2013—which had an enrollment of 81,000 students—this paper explores the following questions: How might writing be integrated into MOOCs across disciplines? What are some of the challenges to doing so? What might be some of the advantages? Ultimately, I argue that writing offers MOOC learners an important opportunity to grow as writers.

Keywords: MOOCs, Writing, Learning Outcomes, E-Learning, Technology.

1. INTRODUCTION

Massive Open Online Courses (MOOCs) are among the latest and fastest-growing approaches to e-learning. The first MOOC was offered in 2008: “George Siemens and Stephen Downes co-taught ... ‘Connectivism and Connective Knowledge’ ... to 25 tuition-paying students at the University of Manitoba and offered [it] at the same time to around 2,300 students from the general public who took the online class at no cost” [1]. However, it was not until the past year that MOOCs gained incredible traction. 2012, dubbed by the *New York Times* as “The Year of the MOOC” [2], saw an incredible expansion in MOOC offerings through such platforms as Coursera, Udacity, and EdX.

At the time of this publication, most MOOCs emerge from disciplines that rely primarily on lectures for content delivery and multiple-choice exams for student assessments. As such, disciplines in the natural sciences and social sciences can develop and adapt course content for MOOCs in a manner that parallels, at least to some degree, their main pedagogy in residential classrooms. Less transportable toward MOOCs, it seems, are humanities-based disciplines and the more student-centered, humanistic elements of pedagogy and assessment across disciplines, such as team-based learning, student-driven discussion and presentations, and writing.

However, the latter of these—writing—provides a particularly compelling frame for considering the learning goals and potential of MOOCs. The Association of American Colleges and Universities (AACU) 2008 LEAP report identified writing as one of a select group of “high-impact educational practices” that improve “essential learning outcomes” key to twenty-first-century learning [3]. Writing enables students to think critically, apply, synthesize, and analyze ideas, compare ideas, connect more personally with course material, conduct ethical reasoning, and engage with, retain, and carry forward course material on deeper levels.

Given what writing can accomplish for students, then, it is important to consider how writing might function in MOOCs. Using my own experience teaching a writing-based MOOC through Coursera in spring 2013—which had an enrollment of 81,000 students—this paper explores the following questions: How might writing be integrated into MOOCs across disciplines? What are some of the challenges to doing so? What might be some of the advantages?

2. WRITING IN MOOCs 2012-13

Writing occupies a somewhat paradoxical position in MOOCs right now. In many ways, writing is a cornerstone of MOOCs in that it is the medium upon which the discussion forums function. MOOC learners use writing in these discussion forums for all sorts of purposes: to comment on lectures; to discuss course materials; to ask questions; to signal difficulties or confusion; to form and maintain learning communities or friendships; and to otherwise communicate with one another and staff members. Writing, then, is the largely basis through which

MOOC learners communicate and, arguably, a key mode of learning as they process course content.

Even as writing is central, however, writing does not yet have an explicit role in many MOOCs as part of their stated learning objectives or as part of student assessments. In November 2012, for instance, Coursera was offering 195 courses, only one of which involved writing in a sustained way: “Writing in the Sciences” by Stanford Professor Kristin Sainani. Sainani outlined for her MOOC learners the following goals: “principles of good writing, tricks for writing faster and with less anxiety, the format of a scientific manuscript, and issues in publication and peer review” [4]. Thus, at the same time as writing in MOOCs is highly visible through the discussion forums, it is also as of yet much less visible as an element of MOOC pedagogy. Even less visible are MOOCs that are centered entirely on writing.

The dearth of writing as a focal point in MOOCs is in some ways understandable given what are agreed-upon tenets of effective writing pedagogy: cultivating a community of writers, positioning student writing as central to the work of the course, facilitating ample space for revision and reflection, and providing and facilitating substantive, effective tailored feedback on student writing from faculty and peers. A group of 30,000 or more learners viewing five- to-seven-minute videos about writing from their separate places around the world, with widely divergent experiences and capabilities as writers, makes it challenging to implement these cornerstones of effective writing pedagogy. And this does not even broach additional hurdles to writing MOOCs such as plagiarism, multilingualism, calibrated peer review, and the overall time, energy, and motivation it takes to develop one’s writing and improve as a writer.

Still, the draw of integrating writing into MOOCs in some way, or experimenting with writing-intensive disciplinary based MOOCs, remains alluring. And, indeed, several MOOCs across disciplines include writing projects and/or short answer quizzes. These MOOCs, to varying degrees, might be seen as ranging from those that include writing on a cursory level to those that integrate it a bit more decisively, perhaps through a small writing assignment as part of the coursework. Roger Barr, for instance, includes a writing assignment in his Engineering MOOC, “Bioelectricity: A Quantitative Approach.” Barr asks students to write a brief analysis and description of a bioelectric signal of interest to the student [5]. Some integrate writing to such a degree that they are approaching writing-intensive, such as Peter Struck’s “Greek and Roman Mythology.” In Struck’s course, students are asked to write two 300-word essays throughout the course on such aspects of course content as analysis of parts of The Odyssey or application of theoretical ideas to texts. [6]

Even more compelling (from my perspective) is the very small but growing number of writing MOOCs. Sainani’s

sole writing MOOC was followed in spring 2013 by a cohort of four other writing MOOCs, the first of which (one I taught through Coursera and Duke University) launched in March 2013, all through Coursera: English Composition I: Achieving Expertise. The other three writing MOOCs were: “Writing II: Rhetorical Composing” (Delagrange et al, Ohio State University); “First-Year Composition 2.0” (Karen Head, Georgia Institute of Technology); and “Crafting an Effective Writer: Tools of the Trade” (Lawrence Barkley, Ted Blake, and Lorrie Ross; Mt. St. Jacinto Community College). [7]

These four writing MOOCs were funded through a Bill & Melinda Gates Foundation grant as part of their Postsecondary Success initiative. The RFP was designed to stimulate development of gateway college courses so that “a broad range of students [would have the chance of] successfully advancing their general and developmental education” [8]. As a response to what at the time was a prevalence of MOOCs designed for upper-division college learners, the Gates Foundation invited proposals in September 2012 that would develop introductory-level MOOCs such as developmental arithmetic, first-year writing, introductory psychology, and general chemistry. In this RFP, the Gates Foundation expressed a commitment to helping “make high-quality, affordable learning content and experiences for the full sequence of high-demand general education and developmental education courses available to all students” [9]. Because MOOCs are free and have unlimited enrollment globally, MOOCs have the potential to provide unprecedented educational access to historically underserved and/or under-represented students in higher education.

Since MOOCs have such a far reach and writing has such a high impact on learners, and because writing already operates so systemically in MOOCs, even in those that do not explicitly include writing, it seems important to consider strategies for more deliberately integrating writing into MOOCs in more sustained and meaningful ways. The following section outlines several such strategies.

3. STRATEGIES FOR INTEGRATING WRITING INTO MOOCs

Faculty teaching MOOCs—as with residential courses—have a variety of options for how much or how little to integrate writing, for what purposes, and which kinds of writing they might value. To help faculty think through these options in residential courses, writing-studies scholars often describe writing assignments as operating along a continuum of high-stakes or low-stakes. According to Peter Elbow, this continuum asks faculty to decide how much weight they will place on a particular writing assignment, making it higher or lower stakes in terms of a student’s grade and in terms of the level of response given to a writing project [10]. A major final essay would be high-stakes, whereas an informal in-class quickwrite would be

low-stakes.

Another continuum along which writing-studies scholars often position possible writing assignments involves “writing to learn,” which entails using writing to think through ideas, and “learning to write,” which entails learning to write from within a particular disciplinary context or discourse community [11].

As in residential classes, MOOCs offer a full range of options for integrating writing: high stakes, low stakes, writing to learn, and learning to write. Decisions about which ways to proceed with writing integration depend on what the learning goals are of a particular MOOC and faculty priorities.

Some of the more prevalent examples of how MOOC faculty can design writing assignments and integrate writing are as follows:

Student-Initiated Discussion Forums. These are the discussion forums that emerge each week during a course as students create learning communities and communicate with one another. In the MOOC that I just taught, some examples of discussion thread titles initiated by students include: “I am a happy latecomer.”; “Where will this course take me?”; “Why I Took the Course”; “Reflecting on My Words” [12]. These student-initiated discussion forums can serve an important purpose in terms of helping students to clarify course content, work together to understand concepts more deeply, or otherwise collaborate with one another. These informal, student-initiated and maintained forums are one of the mainstays of MOOC pedagogy across nearly all disciplines. Students form communities with one another and have ongoing conversations that sometimes last the entire course. Forum contributions range in length from brief comments to longer, more sustained thought pieces or exchanges. The forums are searchable so people can enter search terms and follow an idea or individual throughout a course.

Teacher-Initiated Discussion Forums. Like the student-initiated discussion forums, these teacher-initiated discussion forums are not weighted as student assessments, but, unlike their student-initiated counterparts, they are work of the course in a more deliberate way. These involve specific forums where instructors have asked students to write in response to a certain prompt or activity. In my class, for instance, I had several of these kinds of teacher initiated discussion forums: “I am a writer”; a rhetorical reading of a course text; a crowdsourced annotated bibliography; pre-writing activities such as brainstorming; reflections on writing workshops; reflections on writing transfer at the end of the course.

Short- and Long-Answer Quizzes: MOOCs have a quiz function that can be used to assess student learning, and/or as part of learning engagement during videos. During videos, MOOCs offer pop-up quizzes designed to assess

student learning and foster student engagement during the middle of a video stream. These are not technically included in the course grade, but can include short-answer questions and might be seen as “writing-to-learn” moments. Official quizzes, which are included in the course grade, can be multiple-choice, short answer or long answer. If they are qualitative long answer, however, there is currently no functionality to grade them other than credit/no credit. In my course, I asked students to complete an open-ended long reflection at the end of our course on what writing-related practices, skills, and knowledge they can transfer to other writing occasions after this course. I also asked students to complete shorter reflections throughout the course on learning goals after each writing project, offering them a chance to evaluate their own progress as writers and make choices about what they will continue to work on for subsequent writing projects.

Writing Projects: The more formal writing projects in MOOCs are those that students create and submit through the Peer Review tab on the MOOC. A student writes and submits his or her paper by a deadline. The course platform then randomly assigns that paper to a specified number of peers. Peers have one week to respond to and/or evaluate (grade) that writing project. The writing project, with the peer feedback and grade, is then returned to the writer. Major writing projects can be submitted as pdf attachments or pasted directly into an assignments box. In my course we had several 600-800 word essays that went through a draft phase and a revision phase. Students’ grades on writing projects are determined by dropping the lowest peer grade and averaging together the remaining peer grades. The MOOC faculty member decides how many peers will respond to and/or evaluate each project.

Peer Feedback: Reading and responding to others’ writing improves one’s own writing. In this way, the peer feedback that occurs in MOOCs is another important dimension of writing integration. MOOC faculty can ask students to give primarily quantitative rubric evaluations, with an open-ended question or two at the end of the rubric; or they can ask students to give substantive qualitative peer review. Students in English Composition I responded to peers’ drafts by offering suggestions for revision as they answered such questions as the following: “Summarize in a sentence or two what the writer is arguing, if you can. If you cannot, say what the writer might do to make the argument more clear.”; “What did you like best about this essay?”; and “What did you learn about your own writing/your own project based on responding to this writer’s project?” [13]

4. CHALLENGES TO INTEGRATING WRITING IN MOOCS

Even in residential courses, it can be difficult to integrate writing effectively. MOOCs generate some of the same challenges, as well as several others. The following are key challenges involved with integrating writing effectively in

MOOCs:

Feedback: What is the impact of having a solely peer-driven system of responding to student writing? Although peer review is a staple component of writing pedagogy, and is crucial to learning how to write, most students are accustomed to eventually receiving teacher feedback. Writing in MOOCs, on the other hand, is driven by peer review. As such, students may have more resilience and autonomy, and learn more about responding, but that there might also be uneven peer feedback and evaluation. Since faculty cannot monitor the peer feedback, this also leaves a possible slippage of response. This challenge, however, assumes that faculty response to student writing is even and meaningful, which is not always the case. Machine grading is currently under exploration as an alternative or supplement to instructor or peer response. This initiative, however, has several key difficulties and, according to many, may not be viable or effective [14].

Diversity of Students: English Composition I had over 81,000 learners enrolled from all over the world. According to a pre-course survey, 75% of them were from countries outside the U.S. [15]. Some learners had Ph.D.s, while others had no high school diploma. Ages of learners ranged from as young as 12 to people in their 80s. With learners who carry such diverse experiences, educations, and backgrounds, it becomes difficult to create writing assignments that meet students where they are as learners.

Massiveness of the MOOC Community: The notion of community is central to effective writing pedagogy. Since writers need to have confidence and a safe space to experiment, writing faculty work hard to create a trusting and collegial writing community. Learners in MOOCs do create communities. One student in English Composition I formed a writing group that persisted throughout the course; she referred to them as her MFF (MOOC Friends Forever) [16]. Still, MOOC communities are student initiated and maintained. Some students might be less effective at or inclined toward forming communities in this context. Other students can inadvertently become silenced on the forums, or unheard. It should also be said that some people on the forums might be not be inclined to be civil towards classmates, and there might be some unproductive forms of response happening that then might alienate other learners.

Pacing: Because MOOCs are organized on a weekly basis rather than a class basis, the process for writing can be time consuming. Going through a full cycle of the writing process (pre-writing, drafting, feedback, revision, evaluation) can take as many as five weeks or more in a MOOC. This pacing limits the number and kind of writing projects one can ask of students.

Rubric and Assignment Development: The MOOC environment also demands the creation of valid rubrics and assignments which can be easily understood and used by

thousands of people. MOOC faculty should pay heightened attention to elements of document design, write assignments with an awareness of English Language Learners, and make each assignment's purpose and process as visible and deliberate as possible. These course materials are difficult to create even under the most amenable of residential circumstances.

Lack of resources: Resource shortage in MOOCs emerges in a number of ways related to writing. Where many universities have a rich Writing across the Curriculum Infrastructure, MOOC faculty may not have as much support for creating writing rubrics and assignments. Because so many elements of MOOC development and delivery are new (and time consuming) for MOOC faculty, they may not have time to spend thinking about how to integrate writing effectively, much less creating assignments. Students lack access to key writing-related resources such as writing center support, training in citation practices, how to avoid plagiarism, etc. Another resource aspect of resource shortage in MOOCs involves research. Although JSTOR is beginning to allow more access to its holdings [17], most research in a MOOC must be from open-access sources. This limits the extent of research MOOC learners can conduct.

5. ADVANTAGES OF INTEGRATING WRITING IN MOOCs

Despite the many complex challenges surrounding the effective integration of writing into MOOCs, the advantages for doing so make the prospect worthwhile.

Learning Gains. Writing is a high-impact learning mode, enabling students to synthesize, evaluate, and process course material on deeper levels. If MOOCs are intended to make education more accessible to larger numbers of people, writing is a methodology that will help people learn in greater strides and with deeper efficacy.

Massiveness of the MOOC Community. Although this can pose a challenge in terms of meeting students where they are, it is also an incredible opportunity. Writers in MOOCs have at their hands an audience of thousands. They are writing for publics, making their writing reach beyond the walled classroom. People from all over the world can give feedback and exchange and debate competing views. Writing in this context has the chance to be much more nuanced and reflective since the readership is so diverse and the stakes are potentially so high.

Responding. Often, when students write in school-based settings, they can adopt a counterproductive perception that they are only writing to please a teacher. The MOOC enables students to have the opportunity to receive feedback from real people beyond the teacher. While one can do this in a residential classroom as well, the MOOC has higher stakes in this regard because MOOC learners are likely not

to know their readers. This helps writing take on a real-world dimension; writers often (usually) do not know their readers.

Faculty Growth. MOOCs can help faculty grow as teachers in many ways. Faculty are even likely to grow as writers themselves by creating course materials for so many readers, needing to rely almost solely on written assignments rather than the in-class contextualization that can otherwise occur in residential classrooms. As faculty think deeply about the purpose of writing assignments, and the ways in which writing can help learners accomplish course learning outcomes, they can become more effective teachers in residential settings as well.

Cultivate growth as writers. Cultivating conversations about writing across a diverse range of learners and encouraging more people around the world to think about themselves as writers can have profound impact. Learners can gain confidence and skills at sharing their views, making their ideas heard; this will in turn create space for them to contribute and communicate as global citizens in ever more meaningful ways. Since many students move in and out of MOOCs, they have the chance to grow as writers even with a tiny bit of participation. Even if their participation amounts only to receiving weekly emails that discuss writing and outline the purpose of the week's writing activities, they have had more of a chance to think about themselves as writers than they otherwise would have.

6. CONCLUSIONS

MOOCs are still relatively new for higher education, and they are likely to shift and adapt over the next several years. Writing can play a vital role in MOOCs, helping MOOC learners reach their goals and engage with course material on more profound levels.

One of the best arguments for thinking more deliberately about the roles writing can play in MOOCs is that writing is already in MOOCs. It forms the basis for much of the communication and discussion of course material. MOOC faculty and students can benefit from more sustained attention to writing as a mode of learning.

However, more support and resources may be needed to integrate writing effectively into MOOCs. More research is also needed to understand more deeply what kinds of writing can or should be valued in MOOCs, depending on disciplinary context. One area of particular interest is how writing in MOOCs might work in blended formats, where faculty in residential courses supplement their courses with MOOC components. Other questions arise too, particularly in the area of cross-cultural interaction over writing: How can MOOCs fully appreciate and take advantage of the opportunity for cultural interchange?

Writing can be a powerful mode for learning; it can help people make a difference in the world. MOOCs offer an unprecedented opportunity to help learners around the world grow as writers and become more able to create and achieve their own ambitions and goals. Being able to critically read and understand others' arguments, effectively pose questions, respond to others, create arguments, and use evidence will go far in benefitting people in our growing digital and global era.

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